# Swarthmore 

College Bulletin 2011-2012
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This Bulletin contains policies and program descriptions as of July 15, 2011, and should be used solely as an informational guide. The College reserves the right to alter or amend at any time the policies or programs contained in the Bulletin. Students are responsible for informing themselves of current policies and meeting all relevant requirements. Up-to-date
information can be found at
www.swarthmore.edu/coursecatalog.

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## College Calendar

## 2011

Aug. 20-23
Aug. 23
Aug. 23-28
Aug. 25
Aug. 26

Aug. 27
Aug. 28
Aug. 29
Sept. 5

Sept. 23-24 Board of Managers meeting.
Oct. 1
Oct. 7
Oct. 17
Oct. 21-23
Oct. 31
Nov. 4

Nov. 7-17
Nov. 21-23
Nov. 23

Nov. 28
Dec. 1

Dec. 2-3
Dec. 5-6

Dec. 6

Dec. 9
Dec. 9-17

Dec. 16
Dec. 17

Sept. 9 Drop/add ends. Last day to delete a course from or add one to permanent registration.

## Fall Semester

International student orientation.
Residence halls open for new students.
Orientation and placement days.
Advising begins. All-adviser meeting in morning. Individual advising begins in afternoon.
Residence halls open for returning students.
Computer preregistration for first-year and transfer students only.
Registration follow-up meeting for students who need to make a change to their schedule.
Meal plan starts at dinner for returning students.
Classes and seminars begin.
Labor Day-classes in session.

Final examination schedule available online.
October break begins at end of last class or seminar.
October break ends at 8:30 a.m.
Garnet Homecoming and Family Weekend.
Schedule of courses and seminars for next semester available online.
Last day to declare CR/NC grading option. Last day to withdraw from a course and receive the grade notation "W."
Advising period.
Pre-enrollment for spring semester.
Pre-enrollment ends at 4 p.m.
Thanksgiving break begins at end of last class or seminar.
Thanksgiving break ends at 8:30 a.m.
All accounts must show a zero or positive balance to enroll or select a room for spring semester.
Board of Managers meeting.
Monday follows the "Friday" class schedule, replacing the Friday of Thanksgiving break. Tuesday follows the "Thursday" class schedule, replacing the Thursday of Thanksgiving break.
Classes end.
Lottery for spring housing.
Final examinations begin.
Note: Final examinations are not rescheduled to accommodate travel plans. If you must make travel arrangements before the examination schedule is published (by Oct. 1), do not expect to leave until after finals.
Seminars end.
Final examinations end at noon.
Residence halls close at 6 p.m. Meal plan ends at lunch.

## College Calendar

| 2012 | Spring Semester |
| :---: | :---: |
| Jan. 14 | Residence halls open at noon. |
| Jan. 15 | Meal plan starts at dinner. |
| Jan. 16 | Classes and seminars begin. |
|  | Martin Luther King Jr. Day-classes in session. |
| Jan. 27 | Drop/add ends. Last day to delete a course from or add one to permanent registration. |
| Feb. 17-18 | Board of Managers meeting. |
| March 2 | Spring break begins at end of last class or seminar. |
| March 12 | Spring break ends at 8:30 a.m. |
| March 23 | Last day to declare CR/NC grading option. Last day to withdraw from a course and receive the grade notation "W." |
| March 26 | Schedule of courses and seminars for next semester available online. |
| April 1 | All accounts must show a zero or positive balance for students to enroll and select a room for the fall semester. |
| April 2-12 | Advising period. |
| April 13-15 | Arts Weekend. |
| April 16-18 | Pre-enrollment for fall semester. |
| April 18 | Pre-enrollment ends at 4 p.m. |
| April 27 | Classes and seminars end. |
| May 3 | Final course and written honors examinations begin. |
| May 4-5 | Board of Managers annual meeting. |
| May 12 | Course examinations end. |
|  | Meal plan ends at dinner for all but seniors. |
| May 14 | Honors written examinations end. |
|  | Residence halls close to all but seniors at 8 a.m. (Non-seniors are expected to leave the College within 24 hours after their last examination.) |
| May 14-15 | Senior comprehensive examinations. |
| May 17-19 | Oral honors examinations. |
| May 26 | Baccalaureate. |
| May 27 | Commencement. |
| May 28 | Residence halls close to seniors at 9 a.m. |
| June 1-3 | Alumni Weekend. |

## College Calendar

## 2012

Aug. 25-28
Aug. 28
Aug. 28-Sept. 2
Aug. 30
Aug. 31

Sept. 1 Registration follow-up meeting for students who need to make a change to their schedule.
Sept. 2 Meal plan starts at dinner for returning students.
Sept. 3 Classes and seminars begin.
Labor Day-classes in session.
Sept. 14 Drop/add ends. Last day to delete a course from or add one to permanent registration.
Sept. 21-22
Oct. 1
Board of Managers meeting.
Final examination schedule available online.
Oct. 12
October break begins at end of last class or seminar.
Oct. 22
October break ends at 8:30 a.m.
Oct. 26-28
Nov. 5
Nov. 9 Last day to declare CR/NC grading option. Last day to withdraw from a course and receive the grade notation "W."
Nov. 12-21
Advising period.
Nov. 21
Nov. 26
Nov. 26-28
Thanksgiving break begins at end of last class or seminar.

Nov. 28
Dec. 1
Dec. 7-8
Dec. 10-11

Dec. 11

Dec. 14
Dec. 14-22

Dec. 21
Thanksgiving break ends at 8:30 a.m.
Pre-enrollment for spring semester.
Pre-enrollment ends at 4 p.m.
All accounts must show a zero or positive balance to enroll or select a room for spring semester.
Board of Managers meeting.
Monday follows the "Friday" class schedule, replacing the Friday of Thanksgiving break. Tuesday follows the "Thursday" class schedule, replacing the Thursday of Thanksgiving break.
Classes end.
Lottery for spring housing.
Final examinations begin.

Dec. 22 Final examinations end at noon.
Meal plan ends at lunch. Residence halls close at 6 p.m.

## College Calendar

## 2013 Spring Semester

| Jan. 19 | Residence halls open at noon. |
| :---: | :---: |
| Jan. 20 | Meal plan starts at dinner. |
| Jan. 21 | Classes and seminars begin. |
|  | Martin Luther King Jr. Day-classes in session. |
| Feb. 1 | Drop/add ends. Last day to delete a course from or add one to permanent registration. |
| Feb. 22-23 | Board of Managers meeting. |
| March 8 | Spring break begins at end of last class or seminar. |
| March 18 | Spring break ends at 8:30 a.m. |
| March 29 | Last day to declare CR/NC grading option. Last day to withdraw from a course and receive the grade notation "W." |
| April 1 | Schedule of courses and seminars for next semester available online. |
|  | All accounts must show a zero or positive balance for students to enroll and select a room for the fall semester. |
| April 8-18 | Advising period. |
| April 22-24 | Pre-enrollment for fall semester. |
| April 24 | Pre-enrollment ends at 4 p.m. |
| May 3 | Classes and seminars end. |
| May 3-4 | Board of Managers meeting. |
| May 9 | Final course and written honors examinations begin. |
| May 18 | Course examinations end. |
|  | Meal plan ends at dinner for all but seniors. |
| May 20 | Honors written examinations end. |
|  | Residence halls close to all but seniors at 8 a.m. (Non-seniors are expected to leave the College within 24 hours after their last examination.) |
| May 20-21 | Senior comprehensive examinations. |
| May 23-25 | Oral honors examinations. |
| June 1 | Baccalaureate. |
| June 2 | Commencement. |
| June 3 | Residence halls close to seniors at 9 a.m. |
| June 7-9 | Alumni Weekend. |

Swarthmore College, founded in 1864 by members of the Religious Society of Friends as a co-educational institution, occupies a campus of 425 acres of rolling wooded land in and adjacent to the Borough of Swarthmore in Delaware County, Pa . It is a small college by deliberate policy, with an enrollment of approximately 1,525 students. The Borough of Swarthmore is a residential suburb within half an hour's commuting distance of Philadelphia. College students are able to enjoy both the advantages of nearby rural settings and the opportunities offered by Philadelphia. The College's location also makes cooperation possible with three nearby institutions, Bryn Mawr and Haverford colleges and the University of Pennsylvania.

### 1.1 Objectives and Purposes

Swarthmore students are expected to prepare themselves for full, balanced lives as individuals and as responsible citizens through exacting intellectual study supplemented by a varied program of sports and other extracurricular activities. The purpose of Swarthmore College is to make its students more valuable human beings and more useful members of society. Although it shares this purpose with other educational institutions, each school, college, and university seeks to realize that purpose in its own way. Swarthmore seeks to help its students realize their full intellectual and personal potential combined with a deep sense of ethical and social concern.

### 1.2 Varieties of Educational Experience

Education is largely an individual matter, for no two students are exactly alike. The Swarthmore College curriculum is designed to give recognition to this fact and seeks to evoke the maximum effort and development from each student. The Swarthmore College Honors Program offers additional enriching and exciting intellectual experiences to students who choose to prepare for evaluation by examiners from other colleges and universities. Throughout the curriculum, options for independent study and interdisciplinary work offer opportunities for exploration and development over a wide range of individual goals. These opportunities typically include considerable flexibility of program choices from semester to semester, so that academic planning may be responsive to the emerging needs of students.

### 1.3 The Religious Tradition

Swarthmore College was founded by members of the Religious Society of Friends (the Quakers). Although it has been nonsectarian in
control since 1908 and Friends now compose a small minority of the student body, the faculty, and the administration, the College still values highly many of the principles of that society. Foremost among these principles is the individual's responsibility for seeking and applying truth and for testing whatever truth one believes one has found. As a way of life, Quakerism emphasizes hard work, simple living, and generous giving as well as personal integrity, social justice, and the peaceful settlement of disputes. The College does not seek to impose on its students this Quaker view of life or any other specific set of convictions about the nature of things and the duties of human beings. It does, however, encourage ethical and religious concern about such matters and continuing examination of any view that may be held regarding them.

### 1.4 Tradition and Change

A college draws strength from tradition and energy from the necessity of change. Its purposes and policies must respond to new conditions and new demands. By being open to change, Swarthmore tries to provide for its students, by means appropriate to the times, the standard of excellence it has sought to maintain from its founding.

The primary educational resources of any college are the quality of its faculty and the spirit of the institution. Financial as well as physical resources play an important supportive role.

### 2.1 The Endowment

The educational resources at Swarthmore College have been provided by gifts and bequests from many alumni, foundations, corporations, parents, and friends. In addition to unrestricted gifts for the operating budget, these donors have contributed funds for buildings, equipment, collections of art and literature, and permanently endowed professorships, scholarships, awards, book funds, and lectureships. Their gifts to Swarthmore have not only provided the physical plant but also have created an endowment fund of $\$ 1.25$ billion at market value on June 30, 20010. Swarthmore is ranked among the highest in the country in endowment per student. Income from the endowment during the academic year 20092010 contributed approximately $\$ 29,938$ to meet the total expense of educating each student and provided about 37 percent of the College's operating revenues.
The College's ability to continue to offer a high quality of education depends on continuing voluntary support. Swarthmore seeks additional gifts and bequests for its current operations, its permanent endowment, and its capital development programs to maintain and strengthen its resources. The vice president in charge of development will be pleased to provide information about various forms of gifts: bequests, outright gifts of cash or securities, real estate or other property, and deferred gifts through charitable remainder trusts and life-income contracts in which the donor reserves the right to the annual income during his or her lifetime.

### 2.2 Libraries

The library is an active participant in the instructional and research program of the College. The primary function of the library is to support the teaching mission of the College by acquiring and organizing collections in a variety of print, digital, and other formats and by instructing students in the effective use of the library and its collections. Although the library's collections are geared primarily toward undergraduate instruction, the scope, nature, and depth of student and faculty research require a greater quantity of source materials than is typically found in undergraduate libraries. Additional needs are met through interlibrary loan, document delivery, and other cooperative arrangements.

Swarthmore, Haverford, and Bryn Mawr colleges link their library collections through Tripod (their shared, online catalog). Tripod, as well as other network information sources, can be accessed online through the library's home page at www.swarthmore.edu/library. The TriCollege Library Consortium takes advantage of a long history of cooperation and a unified, online catalog to work toward building a researchquality collection from the combined holdings of these three strong liberal arts colleges. Reference service is often where research begins. Reference librarians guide patrons in formulating research strategies and in accessing the information and materials contained in the library's vast electronic and print collections. The library provides a considerable digital collection of electronic journals in all disciplines and of citation and full-text research databases that support access to historical, statistical, visual, and bibliographic information. The ever-growing amount of online resources has created a variety of new library services, including Live Help, an online "chat" reference service. The library also provides direct curricular support through extensive print and electronic reserve readings and honors collections.
Swarthmore College library holdings amount to approximately 900,000 volumes with some 17,000 volumes added each year. The College participates in the Federal and Pennsylvania Depository Library Program and selects those government documents most appropriate to the needs of the curriculum and the public and catalogs them in Tripod. The library also houses an extensive interdisciplinary audiovisual collection, including 11,000 videos more than 17,000 classical and jazz music recordings, and 1,400 spoken-word recordings of dramatic and poetic literature. The video collection includes classic U.S. and foreign films as well as educational, documentary, and experimental films.
The collections are housed in three libraries.
The Thomas B. and Jeannette L. McCabe Library is the center of the College library system and is home to the major portion of the collections, extensive public computing resources, a wide variety of reading and study areas, and a video classroom.
The Cornell Library of Science and
Engineering in the Science Center houses 60,000 volumes and serves the curricular and research needs of students and faculty in the sciences.
The Underhill Music and Dance Library contains 20,000 books on music and dance as well as the sound recordings mentioned earlier. It provides a wide variety of listening and viewing facilities, which overlook the Crum Woods. Small collections of relevant materials
are located in the Black Cultural Center and the Beit Midrash located in the Bond Lodges.

### 2.2.1 Special Library Collections

The College library contains certain special collections: the Private Press Collection, representing the work of more than 750 presses, an exemplary collection of "book arts" and artists' books; British Americana, accounts of British travelers in the United States; the works of English poets Wordsworth and Thomson bequeathed to the library by Edwin H . Wells; the works of Seamus Heaney, winner of the Nobel Prize for Literature, 1995; the W.H. Auden Collection commemorating the English poet who taught at Swarthmore in the mid1940s; and the Bathe Collection of the history of technology donated by Greville Bathe.
Within the McCabe Library building are two special libraries that enrich the academic life of the College:
The Friends Historical Library, founded in 1871 by Anson Lapham, is one of the outstanding collections in the United States of manuscripts, books, pamphlets, and pictures relating to the history of the Society of Friends. The library is a depository for records of Friends Meetings belonging to Baltimore, New York, Philadelphia, and other Yearly Meetings. More than 10,000 record books, dating from the 1670s until the present, have been deposited. Additional records are available on microfilm.
The collection includes materials on subjects of Quaker concern such as abolition, Indian rights, utopian reform, and the history of women's rights. Notable among the other holdings are the Whittier Collection (first editions and manuscripts of John Greenleaf Whittier, the Quaker poet), the Mott manuscripts (more than 500 letters of Lucretia Mott, antislavery and women's rights leader), and the Hicks manuscripts (more than 400 letters of Elias Hicks, a prominent Quaker minister). More than 43,000 volumes are in the library's collection of books and pamphlets by and about Friends.
More than 200 Quaker periodicals are currently received. The library also has an extensive collection of photographs of meetinghouses and pictures of representative Friends and Quaker activities as well as a number of oil paintings, including The Peaceable Kingdom by Edward Hicks. It is hoped that Friends and others will consider the advantages of giving to this library any books and family papers that may throw light on the history of the Society of Friends. Visit the website www.swarthmore.edu/fhl.xml. The Swarthmore College Peace Collection is of special interest to research students seeking records of the peace movement. The records of the Women's International League for Peace and Freedom and the personal papers of Jane Addams of Hull-House, Chicago, formed the
original nucleus of the Collection (1930). Over the years, other major collections have been added including the papers of Devere Allen, Emily Greene Balch, Julien Cornell, Homer Jack, A.J. Muste, Lawrence Scott, John Nevin Sayre, William Sollmann, E. Raymond Wilson, and others as well as the records of the American Peace Society, A Quaker Action Group, Center on Conscience and War, Central Committee for Conscientious Objectors, Fellowship of Reconciliation, Friends Committee on National Legislation, The Great Peace March, Lake Mohonk Conferences on International Arbitration, National Council for Prevention of War, SANE Inc., United for Peace and Justice, War Resisters League, Women Strike for Peace, World Conference of Religion for Peace, and many others. The Peace Collection serves as the official repository for the archives of many of these organizations. The Peace Collection also houses more than 12,000 books and pamphlets more than 3,000 periodical titles, and more than 9,000 linear feet of manuscripts. Four hundred periodicals are currently received from 22 countries. The comprehensive Guide to the Swarthmore College Peace Collection, published in 1981, and the Guide to Sources on Women in the Swarthmore College Peace Collection describe the archival holdings. See the website www.swarthmore.edu/library/peace.

### 2.3 Information Technology Services

Information Technology Services provides technology resources to support the instructional mission and the residential aspects of the College, and the services are available to all faculty, registered students, and College staff members.
The College provides a robust technology infrastructure. All classrooms are equipped with presentation systems. All campus buildings are connected by both wired and wireless networks. Telephone and email services are provided to all students, faculty, and staff members. Shared computers and printers are available for student use in residence halls, libraries and various public spaces around campus. Computer lab/classrooms are located in Trotter and the Science Center, plus there are department-based labs across campus. The Media Center in Beardsley gives faculty and students a place to try out new technology and create presentations and multimedia for their courses or extra-curricular activities. Music composition stations are available in the music library, and language study is supported by the facilities of the Language Resource Center in Kohlberg.

Software for academic use, such as SPSS, ArcGIS, and Mathematica, as well as software for multimedia development, is available on public computers. Some academic software is available for download by the College community and the College Bookstore sells a variety of software at reasonable prices.
Faculty, staff and students may seek computer assistance through the Help Desk by emailing help@swarthmore.edu.

### 2.4 Communications

The Communications Office coordinates strategic communications efforts at the College, particularly those relating to admissions, advancement, Swarthmore's web presence, and media relations. In collaboration with other College offices, the Communications Office leads the development and implementation of an overall web strategy for Swarthmore. The office also leads crisis communications efforts at the College, in close collaboration with a team of partners across campus.
The Communications Office maintains a set of standards for print and web publications, including a College design guide, a College style guide, and the appropriate use of the College logo. The office also manages any film requests that come into campus.

### 2.4.1 News and Information

News and Information (N\&I) is responsible for producing and/or maintaining content for key areas of the Swarthmore website, including the homepage, Admissions, Advancement, News, and Alumni Dashboards. N\&I also frequently works with clients across campus in the development of new or revised websites. Increasingly the office is responsible for generating or capturing video and audio content, often working closely with Media Services. N\&I maintains the Campus Calendar, Weekly Classifieds, and Swarthmore in the News.
N\&I also works with members of the College community to place stories about Swarthmore and its faculty and students in print and electronic media, responds to information requests, and works with reporters to find Swarthmore sources for expert commentary. N\&I works closely with Admissions and with Institutional Research to compile the narrative and facts for admissions guide books. N\&I also updates the College Catalog each year.

### 2.4.2 Publications

The Publications Office creates a variety of printed communications for the campus community. The quarterly Swarthmore College Bulletin is an award-winning alumni magazine sent to all alumni, parents, friends of the College, and members of the senior class. The
office also produces an annual engagement calendar, donor reports, and The Gathering, a faculty-staff newsletter. Members of the Publications Office staff provide editorial, photographic, graphic design, and printproduction services to administrative offices and academic departments across campus, either directly or in working with outside vendors to produce exceptional products.

### 2.5 Physical Facilities

When Swarthmore College opened in fall 1869, it consisted of one building-Parrish Hall-set on farmland and serving 199 students. Today, the College encompasses more than 40 buildings used by approximately 1,500 students on 425 acres.
The College provides an impressive range of modern facilities for students' intellectual growth, cultural enrichment, and physical and social development. At the same time, it maintains an intimate, pedestrian campus exemplifying the concept of academic study in an idyllic setting.

### 2.5.1 Intellectual Growth

Parrish Hall, the original College building, still lies at the heart of the campus with classroom buildings clustered around it. Parrish is the administrative and social center of the campus. Admissions, the Registrar's Office, the President's Office, and Dean's Office share space with the Financial Aid Office, Career Services, numerous student groups, and two floors of student residences. The second oldest building on campus, Trotter Hall, was renovated in 1997. Today, Trotter Hall respects the past but embraces modern technology and design, providing the space for the history, political science, and classics departments; the Center for Social and Policy Studies; programs in Latin American studies, peace and conflict studies, interpretation theory, gender and sexuality studies, black studies, and Asian studies; the Writing Center; and several classrooms and seminar rooms. At the center of the building is the Tarble Atrium, with student lounges on each floor. Views from this building overlook the Rose Garden to the south and the Nason Garden and Outdoor Classroom to the north.
Kohlberg Hall, completed in 1996, features spaces for use by the entire College community on the ground floor, including a lounge complete with a coffee bar and fireplace; the Scheuer Room, a popular place for lectures and gatherings; and the Cosby Courtyard, a dramatic outdoor space with stone seating walls around a lawn that doubles as an outdoor classroom. On the upper two floors are modern classrooms and intimate seminar rooms, a language resource center, and faculty offices.

Home to the Modern Languages and Literatures, Economics, and Sociology and Anthropology departments, Kohlberg Hall demonstrates that a new building with awardwinning architectural design can be integrated into an established campus.
Next door to Kohlberg lies the Lang Performing Arts Center, home to the English Literature and Theater departments and the programs in dance and film and media studies. In addition to two theaters and two dance studios, classrooms and offices are found on the second and third floors.
Hicks, Beardsley, and Pearson halls are clustered together on the north end of the academic campus, forming with Trotter Hall a quadrangle around the Nason Garden. Hicks is home to the Engineering Department and contains laboratories, with several equipped for computer-assisted and controlled experimentation. Beardsley, renovated in 1990, houses the Art Department and Information Technology Services. Pearson, renovated in 1998, is home to the Linguistics, Educational Studies, and Religion departments. Completing the cluster of north campus academic buildings is Papazian Hall, which houses the Psychology and Philosophy departments.
The Science Center, completed in 2004, physically links the departments of Biology, in Martin Hall, Chemistry and Biochemistry, Computer Science, Mathematics and Statistics, Physics and Astronomy, and the Cornell Science and Engineering Library to foster interaction and exchange among faculty and student scientists. The center offers the 80 -seat Cunniff Lecture Hall, a 120 -seat auditorium, and the Eldridge Commons area. The project was designed and constructed using criteria developed by the U.S. Green Building Council to produce a sustainable design providing opportunities for education about the environment and environmental responsibility. In 1999, the Martin Greenhouse was renovated to support a broader research program.
Lang Music Building, another award-winning building on campus, is home to the Music and Dance Department and the Underhill Library.
McCabe Library, the intellectual heart of campus, is the College's main library, and houses the national repository of the Society of Friends.
The Lang Center for Civic and Social Responsibility, at $3 \& 5$ Whittier Place, is an incubator for student-directed projects in civic engagement, public service, advocacy, and social action.
Sproul Observatory, with its 24-inch visual refracting telescope, was the center of fundamental research in multiple star systems. A 24-inch reflecting telescope on Papazian Hall
is used for solar and stellar spectroscopy. In 2009, a 24 -inch computerized telescope was installed in the Peter van de Kamp Observatory in the Science Center, providing state-of-the-art observing capabilities.
In the management, design, and construction of all physical facilities, the College recognizes the importance of employing environmentally sound practices and acknowledges its commitment to current and future societies. An example of Swarthmore's commitment to sustainability is the biostream bed, located between McCabe Library and Willets Hall and designed to filter runoff from upper-campus building roofs. More information is available at www.swarthmore.edu/sustainability.
Housed in Trotter Hall, the Center for Social and Policy Studies is an interdisciplinary applied research and policy initiative at the College. Established in 1972, the center undertakes and supports research addressing the complex, dynamic, and compelling needs of inner-city communities, particularly the interplay between poverty and community development in the neighboring community of Chester. In addition, the center supports POLS 70: Politics of Punishment and POLS 106: The Urban Underclass and Urban Policy.
For students, the center attempts to tie academic learning to real-world problem solving and provides a rich hands-on experience in the broad field of social and public policy. Through their research, education, outreach, and advocacy activities, students have an opportunity to put their convictions into practice as they work with residents in the Chester community. The center's faculty director is Associate Professor of Political Science Keith Reeves ' 88.

### 2.5.2 Cultural Enrichment

The Lang Music Building, opened in 1973, contains a concert hall which seats 425 while providing an expansive view into the Crum Woods. It also is home to the Daniel Underhill Music and Dance Library, classrooms, practice and rehearsal rooms, and an exhibition area. It is the central facility for the Music Department and for musical activities at the College.
Greatly enhancing performance venues, the Eugene M. and Theresa Lang Performing Arts Center (LPAC) opened in 1991. The building contains Pearson-Hall Theatre, with a seating capacity of 825 . The theater can be divided with a 40-ton movable soundproof wall, which is raised and lowered hydraulically. When the wall is raised, the space may be used simultaneously as a cinema seating more than 300 and a theater space of about equal seating capacity. The stage of the theater may also be transformed from its traditional configuration into a thrust stage.

The Frear Ensemble Theatre on the lower level of the LPAC is another, more intimate theater, a "black box" that serves as an experimental and instructional studio as well as the Patricia Wityk Boyer Dance Studio and the Troy Dance Lab. This building also provides an elegant facility for changing art exhibits, student art exhibitions, and a display of holdings of Swarthmore College's permanent art collection in its List Art Gallery.

### 2.5.3 Physical Development

The College maintains about 80 acres of playing fields around the academic heart of the campus to support a wide range of sports, including rugby, field hockey, lacrosse, soccer, softball and baseball. Track sports are supported by both an outdoor track around the Clothier Field and indoor track in the LambMiller Field House, which also provides indoor basketball courts. Next to the field house are the Squash Courts building and Ware Pool, with a 50 -meter pool. Twelve outdoor tennis courts are supplemented with the Mullan Tennis Center, which houses indoor tennis courts and a fitness pavilion. Ample open lawn areas, an integral part of the Swarthmore College campus, accommodate and inspire a range of informal and spontaneous physical activity from Frisbee throwing to water sliding.

### 2.5.4 Social Development

Residence hall rooms are assigned by a lottery. All students have private telephone and computer hookup capabilities in their rooms. All halls have common lounges for socializing, and Swarthmore's Sharples Dining Hall provides an impressive single dining space, ensuring that students have the opportunity to interact regularly at mealtimes. Small dining rooms within the dining hall are frequently used for special-interest groups such as language discussion groups.
Other student activity and organization space on campus includes the Parlors, a student lounge, and student activities offices in Parrish Hall; Tarble in Clothier, with a snack bar, game room, the College Bookstore, a large allcampus space used for dances and other events and Paces, a student coffeehouse; the Intercultural Center, with both private organization space and a large meeting room for collective events; the Black Cultural Center; Bond Hall, home to the religious advisers and religious organizations; the Kitao Gallery, a student-run art gallery; Olde Club, a party/concert venue; the Women's Resource Center; and two fraternity houses.

### 2.5.5 Scott Arboretum

The College property comprises 425 acres, including a large tract of woodland and the valley of Crum Creek. Much of this tract has
been developed as a horticultural and botanical collection of trees, shrubs, and herbaceous plants through the provisions of the Scott Arboretum, established in 1929 by Mrs. Arthur Hoyt Scott and Owen and Margaret Moon as a memorial to Arthur Hoyt Scott of the Class of 1895. The plant collections are designed both to afford examples of the better kinds of trees and shrubs that are hardy in the climate of eastern Pennsylvania and suitable for planting by the average gardener and to beautify the campus. All collections are labeled and recorded. Exceptionally fine displays include hollies, flowering cherries, crabapples, magnolias, tree peonies, lilacs, rhododendrons, azaleas, hydrangeas and witch hazels. Choice specimens from the collections are displayed in several specialty gardens including the Terry Shane Teaching Garden, the Theresa Lang Garden of Fragrance, the Dean Bond Rose Garden, the Isabelle Bennett Cosby ' 28 Courtyard, the Nason Garden and outdoor classroom, the Metasequoia Allée, the Harry Wood Courtyard Garden, and the West House Garden. Many interested donors have contributed generously to the collections, and the arboretum is funded primarily by outside grants and restricted endowment funds with a combined market value of $\$ 22.9$ million as of June 30, 2010. The arboretum conducts applied research on ornamental plants and serves as a test site for three plant evaluation programs: the Gold Medal Award of Garden Merit through the Pennsylvania Horticultural Society, the performance of hollies through the Holly Society of America, and the National Boxwood Trial Program.
The arboretum offers educational horticulture programs to the general public and Swarthmore students. These workshops, lectures, and classes are designed to cover many facets of the science/art called gardening. Tours are conducted throughout the year for College people and interested public groups. In 2009 the arboretum built the Wister Education Center and Greenhouse (5,200 square feet) to better fulfill its educational mission. This facility has been awarded Gold LEED certification (Leadership in Energy and Environmental Design).
Aiding the arboretum staff in all its efforts, are the Associates of the Scott Arboretum. This membership organization provides not only financial support but also assistance in carrying out the myriad operations that make up the arboretum's total program, such as plant propagation, public lectures, workshops, publications, and tours to other gardens. More than 100 Arboretum Assistants aid in campus maintenance on a regular basis by volunteering. Student memberships are available and the arboretum provides interesting and educational
job opportunities for students. The arboretum's newsletter, Hybrid, publicizes its activities and provides up-to-date information on seasonal gardening topics. Maps for self-guided tours and brochures of the arboretum plant collections are available at the Scott offices, (610) 328-8025, located in the Cunningham House.
The Scott Arboretum was accredited by the American Association of Museums in 1995 and re-accredited in 2006, signifying its professional standards of operation as a museum of living plants. For more information, visit www.scottarboretum.org and sign up for the "Garden Seeds Blog."

### 2.6 Special Funds and Lectureships

The Catherine G. '72 and Ernest B. Abbott '72 Partners in Ministry Endowment was created in recognition of the importance of a distinctive ecumenical program of spiritual nurture serving the entire Swarthmore College community. Income from the Abbott endowment is distributed to Partners in Ministry to help provide for the compensation of the religious adviser and supporting staff of the Swarthmore Protestant community.
The Mary Albertson Lectureship in Medieval Studies was established in 1987 with gifts from George Cuttino ' 35 and former students, colleagues, and friends. Mary Albertson joined the Swarthmore faculty in 1927 and served as chair of the History Department from 1942 until her retirement in 1963. She was responsible for expanding the history curriculum to include studies on Russia, the Far and Near East, Africa, and Latin America. Mary specialized in English medieval history. She died in May 1986.

The Jesse and Maria Aweida Endowment for the Support of Arabic Language Instruction was established in 2006 by Jesse and Maria Aweida, members of the Class of 1956.
The Barnard Fund was established in 1964 by two graduates of the College, Mr. and Mrs. Boyd T. Barnard of Rosemont, Pa. The fund has been augmented by the 50 -year class gifts from the classes of 1917 and 1919 and other friends. The income from the fund may be used for any activity that contributes to the advancement of music at the College. It has been used for concerts on the campus, for the purchase of vocal and orchestral scores and other musical literature, and to provide scholarships for students in the Music Department who show unusual promise as instrumentalists or vocalists.
The Peter B. Bart '54 Endowment was established in 2005 to support the Film and Media Studies Program at Swarthmore College.

The Albert H. Beekhuis Music Fund was created in 1989 by a generous bequest of Mr. Beekhuis, neighbor, friend, and patron of Swarthmore music. The fund supports the acquisition and maintenance of musical instruments and brings musical performers to the College.
The Bloom Discretionary Fund Endowment was established by Ira T. Wender ' 45 in honor of President Alfred H. Bloom. This fund is discretionary under the direction of the president.
The Al and Peggi Bloom Endowment for Financial Aid for International Students and for Faculty Support was established in 2005. This endowment aims to help prepare students to identify and advance common purpose in a global world by providing financial support to international students at Swarthmore, and by supporting relevant faculty efforts in any discipline or across disciplines.
The Alfred H. Bloom Jr. and Martha B. Bloom Memorial Visiting Scholar Fund is the gift of Frank Solomon Jr. '50 in honor of the parents of Alfred H. Bloom. It brings visiting scholars to campus at the discretion of the president.
The Patricia Boyer Music Fund was created in 1989. Income from the Boyer fund supports the Dance Program.
The Richard B. Brandt Fund was established in 1986 by Phillip J. Stone '62 in honor of Richard B. Brandt, a member of the Philosophy Department from 1937 to 1964. The fund supports visiting speakers chosen by the department.
Brest Family General Endowment was established in 2004 by Iris Lang Brest ' 61 , Paul Brest '62, Hilary Brest Meltzer '86, and Jeremy Brest ' 90 to further the objectives and purposes of Swarthmore College. The income of the Brest Endowment is for unrestricted use.
The Brown Family Travel Fund, established in 2011 by Vera Grant Brown ' 70 and Frank I. Brown '68, recognizes and honors the special contribution that parents and family members have played in helping their student prepare for college and come to Swarthmore. It provides support for families to travel to landmark events or programs involving their student that would not be possible otherwise due to cost of transportation and lodging. These might include Commencement exercises, athletic competitions, performing arts productions, academic presentations and the like. The use of the fund is under the direction of the Dean's Office.
The Phillip A. Bruno Fine Arts Endowment was created by Phillip A. Bruno in 1988. The fund supports the acquisition of artwork for the Swarthmore College collections.
The Barbara Weiss Cartwright Fund for Social Responsibility was created in 1993 by a gift
from Barbara W. Cartwright ' 37 and Dorwin P. Cartwright '37. The fund supports new or existing programs that encourage involvement in addressing societal problems through projects initiated by the College or created by current students. In addition, it will provide opportunities for faculty and students to participate in volunteer service projects linked to the academic program.
Wendy Susan Cheek ' 83 Memorial Fund for Gender and Sexuality Studies. Established in 1998 by Aimee Lee and William Francis Cheek, the fund supports student and/or programming needs of the Gender and Sexuality Studies Program, including the capstone seminar for honors and course students. The fund shall be spent at the direction of the gender and sexuality studies coordinator.
The Cilento Family General Endowment Fund was established in 2002 by Alexander P. Cilento ' 71 to support the general objectives of the College. The income is unrestricted.
The Cilento Family Information Technology Fund was established in 2002 by Alexander P. Cilento ' 71 as an expression of gratitude and appreciation for the Engineering Department at Swarthmore College. The fund supports teaching innovations in information science, with preference for computer science, engineering, and related disciplines. The Provost's Office administers the fund.
The Classics Endowment was established in 2005 and, in consultation with the Provost's Office, shall be used to support classics instruction directly.
The Richard W. Conner '49 Partners in Ministry Fund was created in spring 2000 by
Richard W. Conner '49 to establish a matching challenge grant program benefiting Partners in Ministry in recognition of the importance of an ecumenical program of spiritual nurture serving the diverse faith traditions of the entire Swarthmore College community.
The George R. Cooley Curatorship was established in 1986. The Cooley endowment supports the curatorship of the Swarthmore College Peace Collection.
The William J. Cooper Foundation provides funding for a varied program of lectures, exhibits, and concerts, which enriches the academic work and cultural experience of the College and the community. The foundation was established by William J. Cooper, a devoted friend of the College whose wife, Emma McIlvain Cooper, served as a member of the Board of Managers from 1882 to 1923. It provides annual funds that are used "in bringing to the College from time to time, eminent citizens of this and other countries who are leaders in statesmanship, education, the arts,
sciences, learned professions and business, in order that the faculty, students and the College community may be broadened by a closer acquaintance with matters of world [interest]." The Cooper Foundation Committee, composed of students, faculty members, and staff members, works with members of all campus constituencies to arrange lectures, exhibitions, and performances of College-wide interest as well as to bring to the College speakers of note who will remain in residence long enough to enter into the life of the community. In the past, some speakers have been invited with the understanding that their lectures would be published under the auspices of the foundation. This arrangement has produced 18 volumes.
The Bruce Cratsley '66 Memorial Fund was created in 1998 and supports lectures about photography and exhibitions.
The Carley Cunniff ' 72 Paul Hall Residence
Fund was established to honor this member of the Board of Managers who died in January 2005.

The Michael J. Durkan Memorial Fund was established by family and friends of Michael J. Durkan, librarian emeritus, to support library collections and to help bring Irish writers to campus.
The Elizabeth Pollard Fetter Chamber Music Fund, endowed by Frank W. Fetter '20, Robert Fetter '53, Thomas Fetter '56, and Ellen Fetter Gille in memory of Elizabeth Pollard Fetter '25, subsidizes the private instrumental lessons of outstanding student string players at the College. Interested applicants should write to the director of the Fetter Chamber Music program and should plan to audition at the beginning of each semester.
The James A. Field Jr. Lectureship was established by Thomas D. Jones Jr. '53 and Vera Lundy Jones '58 in memory of James Field, professor of history from 1947 to 1984, to support lectures by visiting scholars on the history of the United States.
The James A. Field Jr. Memorial Fund was established by family and friends of James A. Field Jr., Clothier Professor Emeritus of history, to support library collections.
The Tariq Q. Fischer Endowed Islamic Studies Fund was created in 2005 by Paul and Asma Fischer, parents of Tariq. Q. Fischer '08, in his memory, to support the development of an Islamic Studies Program.
The Swarthmore College Folk Dance Club Endowment was established in 2010. This fund supports activities of the Swarthmore College Folk Dance Club.
The Lee Frank Memorial Art Fund, endowed by the family and friends of Lee Frank '21, sponsors each year a special event in the Art

Department: a visiting lecturer or artist, a scholar or artist in residence, or a special exhibit.
The Gertrude S. Friedman Research Fund was established in 1992 to support travel and research of biology faculty members with preference to those studying in the area of physiology and related subspecialties. Grants are awarded at the discretion of the chair of the Biology Department.
The Garnet Athletics Endowment was created in 2002 by an anonymous donor to support the Athletics Program at Swarthmore College. The fund supports expenses associated with introducing prospective scholar-athletes to Swarthmore College, including travel costs and the production of publications promoting the Athletics Program at the College.
The Mary Josephine Good '70 Endowment was created in her memory by her father, Richard A. Good. The fund was created in 2004 and supports the Partners in Ministry program at Swarthmore College.
The David R. Goodrich '71 Endowment for Islamic Studies was established in 2003 to support the Islamic Studies Program at Swarthmore College. The Provost's Office administers the fund.
The Donald J. Gordon Art Fund was established in 1998 by a gift from his children and their spouses on the occasion of his 70th birthday and the 50th anniversary of his graduation from Swarthmore College. The fund supports visiting artists.
The Harry D. Gotwals Fund was established in 1997 in memory of the distinguished service of Harry D. Gotwals as vice president for development, alumni, and public relations from 1990 to 1997. The fund supports the professional development of members of the division.
The Merritt W. Hallowell '61 Career Services Fund was established in 2002 by Merritt Hallowell to support the College's career services program and initiatives, including but not limited to student career exploration, vocational counseling, identification of skills, interests, and values to develop an individual's personalized career options; electronic and print resources; alumni networking and mentoring; and extern opportunities. The Career Services Office administers the fund.
The Halpern Family Foundation Engineering Design Fund was established in 2007 by Michael Halpern '68 and Christine Grant '69. This fund supports work by students on interdisciplinary projects with socially relevant purposes, which include design engineering principles as well as aesthetics and client needs. The Hayward Family Fund was established by Priscilla Hayward Crago '53 in honor of her
parents, Sumner and Elizabeth Hayward, to receive designated life income gifts made by the donor since 1991 and to accommodate additional gifts anticipated over the donor's lifetime and from her estate. The income from the fund provides support for the faculty at Swarthmore College.
The Marjorie Heilman Visiting Artist Fund was established by M. Grant Heilman '41 in memory of Marjorie Heilman to stimulate interest in art, particularly the practice of art, on campus.
The James C. Hormel '55 Endowment for Public Policy and Social Change was established by James Hormel ' 55 to support faculty in the Political Science Department.
The James C. Hormel ' 55 Endowment for Student Services was established by James Hormel ' 55 to support staffing and programs related to student services and activities, including student involvement in volunteering and programs to encourage greater understanding of, sensitivity to, and incorporation into the great society of differences in culture, sexual orientation, or race.
The William I. Hull Fund was established in 1958 by Mrs. Hannah Clothier Hull, Class of 1891, in memory of her late husband. Dr. Hull was a professor of history and international law at Swarthmore College for 48 years. The fund enables the College to bring a noted lecturer on peace to the campus each year in memory of Dr. and Mrs. Hull, who were peace activists.
The David Kemp Endowment was created in 2006 by Giles ' 72 and Barbara Kemp and provides support for David Kemp Hall, which is named for Gil's grandfather.
The Kyle House Endowment was created by a gift from Elena '54 and Fred '54 Kyle and is used for the upkeep and expenses of a house on Whittier Place currently used as a residence hall.
The Jonathan R. Lax Fund, created by his bequest in 1996, supports an annual Lax Conference on Entrepreneurship and Economic Anthropology. Jonathan Lax ' 71 was class agent and a reunion leader. His parents, Stephen ' 41 and Frances Lax, and brothers Stephen (Gerry) Lax Jr. ' 74 and Andrew Lax ' 78 have been actively involved at the College.

## The Genevieve Ching-wen Lee '96 Memorial

 Fund was established in her memory by family and friends and recognizes the importance of mutual understanding and respect among the growing number of ethnic groups in our society. The fund supports an annual lecture by a prominent scholar of Asian American studies and/or an annual award to two students to assist in projects pertaining to Asian American studies.The List Gallery Exhibit Fund, established through the generosity of Mrs. Albert List, supports exhibits in the List Gallery of the Eugene M. and Theresa Lang Performing Arts Center.
The Lorax Fund for Environmental Sustainability was established in 2007 by a grant from the Schwab Charitable Fund as recommended by Naomi Zikmund-Fisher '91. The fund is used to support the activities that move Swarthmore College and its community toward a more environmentally sustainable future (e.g. the reduction or offsetting of carbon or other greenhouse gas emissions, innovative replacements of less than efficient technologies, systems, and devices, etc.). The fund is administered by the Office of Facilities and Services.
The Judy Lord Endowment was established in 2004 by anonymous donors who are friends of the College. The endowment memorializes Judy Lord's enthusiasm and community spirit and is a reward for hard work and contributions to Swarthmore College life. Earnings from the Judy Lord endowment are awarded to academic departmental administrative assistants with tenure of 10 or more years at the College. The Lovelace Family Endowment was established in 2004 to further the objectives and purposes of Swarthmore College. The income is unrestricted.
The Julia and Frank L. Lyman '43 Partners in Ministry Endowment was created in February 2000 in recognition of the importance of a distinctive ecumenical program of spiritual nurture serving the entire community of Swarthmore College. Income from this endowment will help provide for the compensation of the religious adviser and supporting staff of the Swarthmore Protestant Community.
The Isabel Gamble MacCaffrey '46 Library Endowment was established in 2010 by Wallace MacCaffrey in memory of his wife. The fund is used to support the library program.
The Lucy Bunzl Mallan '54 Faculty Leave Endowment was established in 2006 by Lucy Bunzl Mallan to recognize the importance of her Swarthmore College experience and classmates. This endowment will be used by the provost to support faculty leaves.
The Penelope Mason Endowment for Asian Studies was created via the estate of Penelope E. Mason '57. The fund supports courses taught in the departments of art, modern languages, economics, history, music and dance, political science, religion, and sociology/anthropology. The Chica Maynard '48 Cherry Border Fund was established in 2009 by the Class of ' 48 , friends and family in memory of Carolien "Chica" Powers Maynard '48 to honor her ties
and over a century of family ties to Swarthmore College. This fund supports maintenance, upkeep, and enhancements to the Cherry Border of the Scott Arboretum which was started in April 1931 with a gift from Mrs. Allen K. White, Class of 1894, in recognition of her daughter, Carolien White Powers '22 and the "whisper bench" which serves as a memorial to Carolien Powers '22. Uses for the income of this fund will be determined by the Scott Arboretum.
The Thomas B. McCabe Memorial Fund was established with gifts from alumni and the McCabe Family to support an annual lectureship that brings to campus each fall individuals with distinguished careers in fields such as public service, business, government, education, or medicine.
The James H. Miller '58 Partners in Ministry Endowment was created in recognition of the importance of a distinctive ecumenical program of spiritual nurture serving the entire Swarthmore College community. Income from the Miller endowment is distributed to Partners in Ministry to help provide for the compensation of the religious adviser and supporting staff of the Swarthmore Protestant community.
The Margaret W. and John M. Moore
Endowment was created in September 1999 via a life-income gift contract. Income provides research stipends for selected scholars using the resources of the Friends Historical Library and/or the Peace Collection at Swarthmore College.
The Paul Moses and Barbara Lubash Computer Science Fund was created to provide support for computer science students traveling to seminars and related events.
The Helen F. North Fund in Classics, established in 1996 by Susan Willis Ruff '60 and Charles F.C. Ruff ' 60 to honor the distinguished career of Helen F. North and her enduring impact on generations of Swarthmore students, is awarded to support the program of the Classics Department. At the discretion of the department, it shall be used to fund annually the Helen F. North Distinguished Lectureship in Classics and, as income permits, for a conference or symposium with visiting scholars; summer study of Greek or Latin or research in classics-related areas by students majoring in the field; or study in Greece or Italy in classics by a graduate of the department.
The Project Pericles Fund of the Board of Managers was created in 2005 to support student projects of significant dimensions. The endowment was contributed by the Board of Managers for administration by the Lang Center.

The Theodore and Elizabeth Pierson Friend Fund for Islamic Studies was created in 2005 and is used to support the Islamic Studies Program at Swarthmore College.
The Promise Fund, established anonymously by an alumnus on the occasion of his graduation, is administered by The Cooper Foundation Committee. Income from the Promise Fund brings guest speakers, artists, and performers in music, film, dance, and theater who show promise of distinguished achievement.
The Edgar and Herta Rosenblatt Fund was created in 1967 and supports the work of the faculty at Swarthmore College.
The Ruach Endowment was created in 2000 to support Hillel activities on campus.
The Richard L. Rubin Scholar Mentoring Fund was established by Richard Rubin, a professor of political science and public policy at the College, in 2003. This fund supports the mentoring program, which the Dean's Office administers.
The Bernie Saffran Lecture Endowment was established in 2007 by students, colleagues, and friends as a tribute to this beloved and esteemed member of the College faculty. This fund is administered by the Economics Department and supports expenses associated with bringing exceptional speakers to campus.
The Sager Fund of Swarthmore College was established in 1988 by alumnus Richard Sager '73, a leader in San Diego's gay community. To combat homophobia and related discrimination, the fund sponsors events that focus on concerns of the lesbian, bisexual, and gay communities and promotes curricular innovation in the field of lesbian and gay studies. The fund also sponsors an annual three-day symposium. The fund is administered by a committee of women and men from the student body, alumni, staff, faculty, and administration. In 2004, Richard Sager created an "internship" to provide funding for students in internships with nonprofit organizations whose primary missions address gay/lesbian/bisexual/transgender issues. The Lang Center for Civic and Social Responsibility administers the internship.
The Scheuer-Pierson Fund, established in 1978 by Walter and Marge Scheuer '48, supports the Economics Department.
The Science Center Endowment Fund was established in 2003 with a gift from Peter Weinberger of the Class of 1964. Income from this endowment will be used to support the operations and maintenance of the Science Center.
The Science Center Support Endowment was established by numerous donors to support the operation of the renovated Science Center and related academic programs.

Harold E. and Ruth Caldwell Snyder Premedical Endowment Fund was established in 1988 by Harold Cincy Snyder '29 in appreciation for the education he and his beloved wife, Ruth Caldwell Snyder '31, received at Swarthmore College. The fund was fully endowed through a bequest in 1992 and supports a visiting lecturer in the medical profession with a preference for practitioners who treat each patient as a whole person.
The Gil and Mary Roelofs Stott Concert Fund was established in 1997 on the 25th anniversary of the Lang Music Building. The fund was created as an expression of deep affection for the Stotts by Eugene M. Lang, Class of 1938, to recognize their special artistic talents and all that they have meant to the Swarthmore community. Each year, a new musical composition will be commissioned by the College to be performed at an annual Gil and Mary Roelofs Stott Concert at which the Gil and Mary Roelofs Stott Resident Student Artist will perform.
The Mary and Gilmore Stott Honors Philosophy Seminar Endowment was created in 1998 by William G. Stott ' 75 and by Christopher Niemczewski '74. The fund supports a seminar offered by the Philosophy Department. It was established in honor of the parents of William G. Stott ' 75 .

The Swarthmore Chapter of Sigma Xi Lecture Series brings eminent scientists to the campus under its auspices throughout the year. Local members present colloquia on their own research.
The Thatcher Fund provides individualized assistance to students with disabilities. The purpose of the fund is to enable such students to take full advantage of the academic and extracurricular life of the College and to make Swarthmore a desirable choice for prospective students with disabilities. The fund was established in 1997.
The Phoebe Anna Thorne Memorial Endowment was created by a Thorne family member in 1911. The endowment supports the faculty of Swarthmore College.
The Pat Trinder Endowment was established by alumni and friends of Patricia E. Trinder, a member of the career planning and placement office staff, to honor her many years of dedication and support to students. The endowment supports programs to advance career planning and placement at Swarthmore College. It specifically supports alumni participation in the recruiting, placement, and mentoring efforts for students.
The P. Linwood Urban Jr. Partners in Ministry Endowment was created in recognition of the importance of a distinctive ecumenical program of spiritual nurture serving the entire

## 2 Educational Resources

Swarthmore College community. Income from the Urban endowment is distributed to Partners in Ministry to help provide for the compensation of the religious adviser and supporting staff of the Swarthmore Protestant community.
The Benjamin West Lecture, made possible by gifts from members of the Class of 1905 and other friends of the College, is given annually on some phase of art. It is the outgrowth of the Benjamin West Society, which built up a collection of paintings, drawings, and prints, which are exhibited, as space permits, in the buildings on campus. The lecture was named for the American artist who was born in a house that stands on the campus and became president of the Royal Academy.
The Dan and Sidney West House Endowment was established in 2006 by Giles and Barbara Kemp to honor Vice President Dan C. West and his wife, Sidney Childs West. The income from this endowment will be used to support the maintenance, upkeep, and program expenses of the campus residence and the gardens of the vice president for development, alumni, and public relations, which also serves as guest quarters and an entertainment venue for campus visitors.
The Wister Memorial Endowment was established in 2000 by John C. and Gertrude Wister to support the Scott Arboretum.
Kenneth R. Wynn '74 Fund for Interdisciplinary Programs was created in 1998 to support interdisciplinary, language-based programs that embrace a more global view of language learning than traditional sources.
The Neil '80 and Beth Yelsey Endowment was established in 2004 to further the objectives and purposes of Swarthmore College. The income is unrestricted.
The Young Family Endowment was established in 2003 by James and Jacqueline Young, parents of Scott Young '06. The fund supports the Swarthmore College radio station, WSRN.

Inquiries concerning admission and applications should be addressed to the Dean of Admissions and Financial Aid, Swarthmore College, 500 College Avenue, Swarthmore PA 19081-1390 or admissions@swarthmore.edu. Office telephone: (610) 328-8300 or (800) 667-3110.

### 3.1 General Statement

In the selection of students, the College seeks those qualities of character, social responsibility, and intellectual capacity that it is primarily concerned to develop. It seeks them not in isolation but as essential elements of the whole personality of candidates for admission.
Selection is important and difficult. No simple formula will be effective. The task is to choose those who give promise of distinction in the quality of their personal lives, in service to the community, or in leadership in their chosen fields. Swarthmore College must choose its students on the basis of their academic achievement and commitment to intellectual inquiry as well as their individual future worth to society and of their collective contribution to the College.
It is the College's policy to have the student body represent not only different parts of the United States but also many foreign countries; public, independent, and religiously affiliated schools; and various economic, social, religious, ethnic, and racial backgrounds. The College is also concerned to include in each class the sons and daughters of alumni and members of the Society of Friends.
Admission to the first-year class is normally based on the satisfactory completion of a 4-year secondary school program. Under some circumstances, students who have virtually completed the normal 4-year program in 3 years will be considered for admission, provided they meet the competition of other candidates in general maturity as well as readiness for a rigorous academic program. Home-schooled students should make every effort to complete the application with information that is appropriate to their experience. It is useful to note that Swarthmore is looking for the same information about a candidate as is required from a student with more traditional secondary schooling. Students who have already completed a college degree, or higher, are not eligible for admission to Swarthmore College.
All applicants are selected on the following evidence:

1. Record in secondary school.
2. Recommendations from the school principal, headmaster, or guidance counselor, and from two academic teachers.
3. Standardized testing results including the SAT reasoning test with mandatory writing
section and two SAT subject tests, or the ACT with writing component.
4. Applicants considering a major in engineering are strongly encouraged to take the SAT Math level 2 subject test.
5. A brief statement about why the student is applying to Swarthmore, a brief essay on a meaningful activity or interest, and a longer essay (subject specified).
6. Cocurricular and extracurricular activities. Applicants must have satisfactory standing in school and standardized tests as well as strong intellectual interests. The College is also interested in strength of character, promise of growth, initiative, seriousness of purpose, distinction in personal and extracurricular interests, and a sense of social responsibility. The College values the diversity that varied interests and backgrounds can bring to the community.

### 3.2 Preparation

Swarthmore does not require a set plan of secondary school courses as preparation for its program. The election of specific subjects is left to the student and school advisers. In general, preparation should include the following:

1. Accurate and effective use of the English language in reading, writing, and speaking.
2. Comprehension and application of the principles of mathematics.
3. The strongest possible command of one or two foreign languages. The College encourages students to study at least one language for 4 years, if possible.
4. Substantial coursework in history and social studies; literature, art, and music; and mathematics and the sciences. Variations of choice and emphasis are acceptable, although some work in each of the three groups is recommended.
Those planning to major in engineering should present work in chemistry, physics, and 4 years of mathematics, including algebra, geometry, trigonometry, and calculus.

### 3.3 Applications and Examinations

Application to the College may be submitted through either the Regular Decision or one of the Early Decision plans. Applicants follow the same procedures, submit the same supporting materials, and are evaluated by the same criteria under each plan.
The Regular Decision plan is designed for those candidates who wish to keep open several different options for their undergraduate education throughout the admissions process. Applications under this plan will be accepted at
any time up to the Jan. 1 deadline, but the application should be submitted as early as possible to create a file for the candidate to which supporting material will be added up to the deadline.
The Early-Decision plans are designed for candidates who have thoroughly and thoughtfully investigated Swarthmore and other colleges and found Swarthmore to be an unequivocal first choice. On applying to Swarthmore College, Early-Decision candidates may not file an early-decision application at other colleges, but they may file early action/regular applications at other colleges with the understanding that these applications will be withdrawn upon admission to Swarthmore.
Any Early-Decision candidate not admitted will receive one of two determinations: a deferral of decision, which secures reconsideration for the candidate among the Regular-Decision candidates, or a denial of admission, which withdraws the application from further consideration. If one of these determinations is made, the applicant is free to apply to other institutions.
Application under any plan must be accompanied by a nonrefundable application fee of $\$ 60$ or fee waiver (which must be approved by the secondary school counselor). Timetables for the plans are the following:

## Fall Early Decision

Application deadline Nov. 15
Notification of candidate by Dec. 15

## Winter Early Decision

Application deadline Jan. 1
Notification of candidate by Feb. 15

## Regular Decision

Application deadline Jan. 1
Notification of candidate by April 1
Candidate reply date May 1
Under certain circumstances, admitted students may apply in writing to defer their admission for 1 year. These requests must be received by May 1 and approved in writing by the dean of admissions, and students must confirm their plans for the year by June 1. The dean of admissions may choose to review other requests on a case-by-case basis. Students granted deferment may neither apply to nor enroll at another degree-granting college/university program.
Swarthmore College places strong emphasis on academic achievement and personal character. An offer of admission to Swarthmore College is dependent on a student maintaining his or her standard of academic achievement before enrolling at the College. An offer of admission
is also dependent on a student's continued demonstration of character and high standards for personal conduct. Lapses in either category may be grounds for rescinding an offer of admission.
For U.S. citizens and permanent residents applying as first-year or transfer students, admission to Swarthmore is determined without regard to financial need. See information concerning financial aid.

### 3.4 Interview

An admissions interview with a representative of the College is a recommended part of the first-year application process. (Applicants for transfer are not interviewed.) Prospective firstyear applicants should take the initiative in arranging for this interview. On-campus interviews are available to rising seniors from June through mid-December. Students are encouraged to complete the interview before submitting an application to the College. Those who can reach Swarthmore with no more than a half-day's trip are urged to make an appointment to visit the College for this purpose. Other students may contact the Admissions Office in the fall of their senior year to request a meeting with an alumni representative in their own area. The deadline to request an alumni interview is Dec. 1.
Arrangements for on-campus or alumni interviews can be made by writing to the Admissions Office or by calling (610) 328-8300 or (800) 667-3110.

### 3.5 Advanced Placement

Enrolled first-year students with special credentials may be eligible during the first semester for advanced placement (placement into courses with prerequisites) and/or credit toward graduation from Swarthmore ( 32 credits are required). All decisions are made on a subject-by-subject basis by the registrar in consultation with individual Swarthmore departments. Such credit is available only for examinations taken before matriculation at Swarthmore. Typically, special credentials consist of Advanced Placement (AP) examinations of the College Entrance Examination Board, higher-level examinations of the International Baccalaureate, certain other foreign certifications (such as British A-Levels or the German Abitur), or courses taken at another college. Every effort is made to place students at the appropriate level, but no department is required to give credit for work done elsewhere. Credit is denied or revoked if a student chooses to take a course at Swarthmore that the Swarthmore department says essentially repeats the work covered by the credit.

Departmental AP-credit policies are posted on the registrar's website under "Policies." In some cases, students may qualify for advanced standing and may become juniors in their second year. To qualify for advanced standing, a student must do satisfactory work in the first semester, obtain 14 credits by the end of the first year, intend to complete the degree requirements in 3 years, and signify this intention when she or he applies for a major during the spring of the first year.
Those students who wish to have courses taken at another college considered for either advanced placement or credit must provide an official transcript from the institution attended as well as written work (papers, examinations); syllabi; and reading lists in order that the coursework may be evaluated by the department concerned. Such requests for credit must be made within the first year at Swarthmore. Departments may set additional requirements. For instance, students may be required to take a placement examination at Swarthmore to validate their previous work.

### 3.6 International Admissions

The College is deeply committed to a strong international presence on campus. The application process is the same as for U.S. citizens and permanent residents of the United States with the following exceptions:

1. Admission is not need-blind. Students must submit additional financial documentation to the Financial Aid Office. Applying for financial aid places the student in the most selective subgroup of the total application pool regardless of the parental contribution.
2. Demonstrated proficiency in English is required of those for whom English is not their first language. This may be in the form of a standardized test for non-native speakers of English, such as TOEFL or IELTS, or superior academic achievement in a school where English is the language of instruction. Although not required, an interview on campus or with a College admissions representative overseas is considered to be very helpful.
3. Required standardized tests (SAT reasoning test, ACT, and SAT subject tests) are waived for those who live in countries where such testing is unavailable. In countries where testing is available, applicants are strongly advised to make test arrangements early and to have scores reported directly to Swarthmore College by the appropriate application deadline.
4. It is the applicant's responsibility to guarantee the authenticity of all submitted credentials. This includes notarized translations of official documents and certified school transcripts signed by the appropriate school staff member.
5. The College does not accept transfer applications from foreign nationals who require financial aid.

### 3.7 Applications for Transfer

The College welcomes well-qualified transfer applicants. Applicants for transfer must have had an outstanding academic record in the institution attended and must present transcripts for both college and secondary school work, including an official statement indicating that the student is leaving the institution attended in good standing. Students who have completed the equivalent of two or more semesters of university-level work must apply for transfer admission. Admission status for students who have completed less than the equivalent of two semesters of university-level work will be decided on a case-by-case basis. Results of the SAT and ACT are optional for transfer applicants.
Four semesters of study at Swarthmore College constitute the minimum requirement for a degree, two of which must be those of the senior year. Applications for transfer must be filed by April 1 of the year in which entrance is desired. Swarthmore does not have a midyear transfer application process. Need-based financial assistance is available for transfer students who are U.S. citizens or permanent residents. Transfer applications are not accepted from international students who require financial aid.
Transfer applicants are notified of decisions on or before May 15.

### 4.1 Student Charges

Total charges for the 2011-2012 academic year (two semesters) are as follows:

| Tuition | $\$ 40,816$ |
| :--- | ---: |
| Room | $\$ 6,200$ |
| Board | $\$ 5,900$ |
| Student activities fee | $\$ 334$ |
|  | $\$ 53,250$ |

These are the annual charges billed by the College. Students and their parents, however, should plan for expenditures associated with books, travel, and other personal items. In addition, the College will bill for unpaid library fines, Worth Health Center fees, and other fees and fines not collected at the source.
Students engaged in independent projects away from the College for which regular academic credit is anticipated are expected to register in advance in the usual way and pay normal tuition. If the student is away from the College for a full semester, no charge for room and board will be made. However, if a student is away for only a part of a semester, the preceding charges may be made on a pro rata basis.
Students who have not satisfied their financial obligations will not be permitted to return to campus, attend any classes, live in campus housing, have a meal plan, register via add/drop (or any other method) for any classes, enroll for the following semester, participate in the room lottery, obtain a transcript, or be permitted to be graduated. Late fees of 1.5 percent per month will accrue on all past-due balances.
The regular College tuition covers the normal program of four courses per term as well as
variations of as many as five courses or as few as three courses. Students who elect to carry more than five courses incur a unit charge for the additional course $(\$ 5,102)$ or half-course $(\$ 2,551)$, although they may within the regular tuition vary their programs to average as many as five courses in the two semesters of any academic year. College policy does not permit programs of fewer than three courses for degree candidates in their first eight semesters of enrollment.

### 4.1.1 Study Abroad

Students who wish to receive Swarthmore credit for study abroad must, for the semester or year abroad, pay the full Swarthmore charges (excluding the student activities fee). Financial aid is normally applicable to study abroad, with the approval of the Off-Campus Study Office. Students contemplating study abroad should begin working with the Off-Campus Study Office well in advance for academic and administrative planning.

### 4.2 Payment Policy

Semester bills are mailed in July and December. Payment for the first semester is due by Aug. 1, 2011, and for the second semester by Jan. 9, 2012. A 1.5 percent late fee will be assessed monthly on payments received after the due date. Many parents have indicated a preference to pay College charges on a monthly basis rather than in two installments. For this reason, Swarthmore offers a monthly payment plan, which provides for payment in installments without interest charges. Information on the plan is mailed to all parents in April.

### 4.3 Withdrawal Policy

Charges for tuition and fees will be reduced for students who withdraw for reasons approved by the dean before or during a semester. Reductions in charges will be made in the following ways:

| For Students Who Withdraw | Tuition and Fees Reduced | Board Reduced |  |
| :--- | :--- | :--- | :--- |
| Before start of classes | To $\$ 0$ | To $\$ 0$ | Room Reduced |
| During first 2 weeks of classes | To $\$ 200$ | To $\$ 100$ | To $\$ 500$ |
| During week 3 | By 90 percent | By 90 percent | To $\$ 500$ |
| During week 4 | By 80 percent | By 80 percent | To $\$ 500$ |
| During week 5 | By 70 percent | By 70 percent | To $\$ 500$ |
| During week 6 | By 60 percent | By 60 percent | To $\$ 500$ |
| During week 7 | By 50 percent | By 50 percent | To $\$ 500$ |
| During week 8 | By 40 percent | By 40 percent | To $\$ 500$ |
| During week 9 and beyond | No further reduction on tuition, fees, board, or rooms |  |  |

4.3.1 Withdrawal From Study Abroad

If a student elects to withdraw from an OffCampus Study program abroad the student also assumes financial responsibility for the expenses that the College has either paid out or obligated on behalf of the student.
Unrecoverable expenses may include, but are not limited to the payment of tuition, room and board, and travel allowances. The student must repay any unrecoverable expenses and any travel and/or meal and/or lodgings allowance that have been advanced, before he or she will be permitted to re-enroll at the College, receive an official transcript, or be graduated from the College. Financial aid will not be available for this purpose of covering these costs. Once the obligated and unrecoverable amounts have been met by the student, College charges will be reduced in a manner consistent with the charge reduction/withdrawal policy for tuition, room, and board set forth in section 4.3.

### 4.4 Housing Fines

Any time a student selects a room in the lottery that they do not use, the minimum fine is $\$ 100$. Other fines follow:

### 4.4.1 Fall Semester

If a student selects a room in the lottery and

1. Chooses to live off campus and is still enrolled, they will be assessed:
a. A $\$ 500$ penalty unless everyone in the space notifies the Residential Life Office by June 1 that they will not be occupying the room. If everyone does notify the office, the fine will be $\$ 100$ each.
b. A $\$ 500$ penalty for each person moving off campus when notice is given between June 1 and the 8 th week of classes.
c. No room refund when notice is given after the 8th week.
2. Takes a leave of absence and notifies the

Dean's Office, they will be assessed:
a. A $\$ 100$ penalty if notice is given by

Aug. 1.
b. A $\$ 500$ penalty if notice is given between

Aug. 1 and the 8th week of classes.
c. No room refund after the 8 th week.

### 4.4.2 Spring Semester

If a student selects a room in the December lottery or already has a room from fall semester and

1. Chooses to live off campus and is still enrolled, they will be assessed:
a. A $\$ 250$ penalty unless everyone in the unit leaves this space and notifies the Residential Life Office by Dec. 1.
b. A $\$ 500$ penalty each if notice is given between Dec. 1 and the 8th week of classes.
c. No room refund if notice is received after the 8th week.
2. Takes a leave of absence and notifies the Dean's Office, they will be assessed:
a. No penalty if notice is given by Dec. 1 .
b. A $\$ 100$ penalty if notice is given between Dec. 1 and Jan. 5.
c. A $\$ 500$ penalty if notice is given between Jan. 5 and the 8th week of classes.
d. No room refund after the 8th week.

### 4.5 Inquiries

All correspondence regarding payment of student charges should be addressed to Linda Weindel, student accounts manager, or phone (610) 328-8396.

To make a Swarthmore education available to qualified students, the College designated in excess of \$29 million for Swarthmore scholarships for the coming year. About 53 percent of our student body receives scholarship assistance through Swarthmore on the basis of demonstrated financial need. To meet the needs of our students, the average aid award for 2010-2011 was $\$ 36,540$. A total of 70 percent of our students will share more than $\$ 36$ million in scholarships, loans, and work opportunities during the 2011-2012 academic year.
Although admission and financial aid decisions are made separately, they are made at the same time. A prospective student should apply for Swarthmore aid and outside assistance when applying for admission to Swarthmore. Instructions for filing an aid application are included in the admissions application instruction booklet or can be found at www.swarthmore.edu/financialaid. Financial assistance will be offered if a family does not have the capacity to meet college costs without our help. The amount a family is expected to contribute is determined by weighing the family's income and assets against such demands as taxes, living expenses, medical expenses, siblings' undergraduate tuition expenses, and so forth. Family contributions also include a $\$ 2,000$ to $\$ 2,500$ summer earnings contribution from students, as well as a portion of the student's personal savings and assets.
For 2011-2012, the College charges, which include tuition, room, board, and a student activity fee, will be $\$ 53,250$. This activity fee covers not only the usual student serviceshealth center, library, and laboratory fees, for example-but also admission to all social, cultural, and athletic events on campus. The total budget figure against which aid is computed is $\$ 55,530$. This allows for an estimated $\$ 1,150$ for books and supplies and $\$ 1,130$ for personal expenses. A transportation allowance is added to the budget for those who live in the United States but more than 100 miles from the College. It is this larger total that we use when determining a student's need for our help.
Although our financial aid awards are loan-free, students and parents remain welcome to borrow to help pay the family's share of Swarthmore expenses (see section 5.2).
In keeping with our policy of basing financial aid on demonstrated need, the College reviews each student's family financial situation annually. Students who would like to be considered for our support for the next year must submit a new financial aid application each spring. A student's aid is not withdrawn unless financial need is no longer demonstrated. Assistance is available only during a normal-
length undergraduate program (eight semesters) and only if a student enrolls full-time each semester, earns four credits each semester, and makes satisfactory academic progress. These factors also apply in our consideration of a sibling's undergraduate educational expenses. Students who choose to live off campus will not receive Swarthmore Scholarship or Supplemental Educational Opportunity Grants in excess of their college bills. However, the cost of living off campus will be recognized in the calculation of a student's financial need, and other outside sources of aid may be used to help meet off-campus living expenses once the college bill is satisfied.
The College has, by action of our Board of Managers, reaffirmed its need-blind admission policy and the related practice of meeting the demonstrated financial need of all enrolled students. Although, eligibility for federal aid funds is limited to those who are able to complete and to submit the Statement of Registration Compliance, additional funds have been made available for those who are unable to accept need-based federal aid because they have not registered with the U.S. Selective Service.
U.S. citizens and permanent residents who have not previously received financial aid may become eligible and may apply to receive aid if their financial situations have changed. A student who marries may continue to apply for aid, though parents are still expected to contribute to the student's education.
Financial support for foreign national students is limited and must be requested during the admission application process. New aid applications from foreign nationals cannot be considered after admission.
Answers to most financial aid questions are available at www.swarthmore.edu/financialaid.

### 5.1 Scholarships

For the academic year 2011-2012, the College will award more than $\$ 29$ million in Swarthmore Scholarship funds. About one-half of that sum will be provided through the generosity of alumni and friends by special gifts and the scholarships listed in section 5.4. Students do not apply for a specific College scholarship; the College decides who is to receive restricted endowed scholarships, and others are helped from general scholarship funds. Although the qualifying criteria for awarding most endowed scholarships remain general, some donors have established explicit guidelines that closely mirror the interests of the individual for whom the scholarship is named. Financial need, however, is a requirement for all college scholarships except the regional McCabe Scholarship. Federal Pell Grants and federal Supplemental Educational

Opportunity Grants are also available to eligible students.

### 5.2 Loan Funds

Although our aid awards are now loan-free, students may choose to borrow instead of working or to help ease the family's burden. First-year students may borrow up to $\$ 5,500$; sophomores may borrow $\$ 6,500$, and juniors and seniors may borrow up to $\$ 7,500$.
The federal Direct Stafford Loan is a long-term, low-interest educational loan. Eligibility for a federal Direct Stafford Loan is determined by the College, using federal guidelines. Family income, family size, asset strength, and number of children in college, etc., form the basis for the determination of your federal eligibility.
Parents who wish to borrow might consider the federal Direct PLUS Loan. Up to $\$ 53,250$ per year is available at 7.9 percent interest, and repayment may be made over a 10 -year period. For more information about these loan programs or other financial options read our financial aid brochure, or go to our website at www.swarthmore.edu/financialaid.

### 5.3 Student Employment

Student employment on the Swarthmore campus is coordinated by the Student Employment Office, which is under student direction. Campus jobs are available in such areas as our libraries, Information Technology Services, the student-run coffeehouse, most academic and administrative offices, and many other places on campus. Our students manage, give tours, tutor, write, coordinate, and provide support throughout the campus. Students apply for campus positions when they arrive in the fall. On-campus hourly rates of pay run from $\$ 8.39$ to $\$ 8.99$. Students receiving financial aid are usually offered the opportunity to earn up to $\$ 1,800$ during the academic year, and are given hiring priority, but there are many jobs available for non-aided students who wish to work on campus. Students are encouraged to keep a moderate work schedule-no more than about 7 or 8 hours weekly-so that academic performance is not compromised. About 1,200 of the 1,400 students on campus choose to work.
The Student Employment Office also publicizes local off-campus and temporary employment opportunities.
For those who wish to work off campus and who qualify for the federal Work-Study Program, off-campus positions in public or private nonprofit agencies may be arranged through our Financial Aid Office-if funding is sufficient.

### 5.4 Scholarship Funds

All students who demonstrate financial need are offered scholarship aid, some of which is drawn from the following named funds. However, students should not worry if they do not fit the specific restrictions listed because their scholarships will instead be drawn from other sources not listed here. By completing the aid application process, a student will be considered for the following funds. No separate application is needed.
(Financial need is a requirement for all scholarships except the regional McCabe Scholarships. No separate application is needed.)
The Catherine G. '72 and Ernest B. '72 Abbott Scholarship, established in 1999 by Catherine and Ernest Abbott, is awarded to a first-year student who shows great promise. This renewable scholarship is for a man or woman who demonstrates financial need and academic excellence.
The Frank and Alice Adelberg Scholarship was established by Stephen M. Harnik ' 75 in 2010 in his capacity as executor of their charitable estate. The Adelbergs were Holocaust survivors who believed deeply in Jewish causes which promoted peaceful international discourse and who dedicated their benefactions to such endeavors. The scholarship is awarded to students on the basis of academic merit and financial need and is renewable. Preference will be given to students who have an interest in human rights, conflict resolution, and the promotion of peace and understanding.
The Lisa P. Albert '81 Scholarship, established in 1983 by Lisa Albert and her mother, Stella Saltonstall, is awarded to a young man or woman on the basis of scholarship and financial need, with preference given to a student with a demonstrated interest in the humanities.
The George I. Alden Scholarship, established in 1989 as a memorial by the Alden Trust with matching funds from several individual donors, is awarded on the basis of academic merit and financial need with preference given to a student from New England studying in the sciences or engineering.
The Vivian B. Allen Foundation, established in 1969, provides scholarship aid to enable foreign students to attend Swarthmore College as part of the foundation's interest in the international exchange of students.
The Susan W. Almy '68 Scholarship was established by this alumna in 2003. The fund supports financial aid for needy students at Swarthmore College, with preference given to students interested in international careers, especially in developing nations.

The Alumni Council Scholarship, established in 2000 by the Alumni Council of Swarthmore College, is awarded based on academic merit and financial need and is renewable.
The Alumni Scholarship is awarded to students on the basis of financial need. Established in 1991, it is funded through alumni gifts and bequests to encourage donors who cannot fund a fully endowed named scholarship.
The John R. '53 and Joyce B. '55 Ambruster Scholarship was created in 2001. The scholarship is awarded on the basis of academic merit and financial need.
The Janice R. Anderson '42 Scholarship, established in 2006, is awarded on the basis of academic merit and financial need.
The Smitha Arekapudi '99 Scholarship was established in 2006 by Drs. Bapu and Vijayalakshmi Arekapudi. This renewable scholarship is awarded on the basis of academic merit and financial need. Preference is given to a premed student, with a background in the humanities and social sciences, who plans to become a doctor and care for patients. Preference is also given to students who show commitment to socially responsible citizenship, with demonstrated qualities of exceptional character, intellectual curiosity, and leadership. The Evenor Armington Scholarship, created in 1980 in recognition of the long-standing and affectionate connection between the Armington family and Swarthmore College, is given each year to a worthy student with financial need.
The Paul '62 and Catherine '60 Armington Endowed Scholarship was established in 2005. The scholarship is awarded on the basis of academic merit and financial need and is renewable. Preference will be given to students who have plans to or are currently studying in Africa.
The Barclay G. Atkinson Scholarship and Rebecca M. Atkinson Scholarship were established in 1892 by Rebecca M. Atkinson and are now part of the general scholarship fund.
The Frank and Marie Aydelotte Scholarship, established in 1946 by family, friends, and alumni, is awarded to a new student who shows promise of distinguished intellectual attainment based on sound character and personality. The award is made in honor of Frank Aydelotte, president of the College from 1921 to 1940 and originator of the Honors Program at
Swarthmore, and Marie Osgood Aydelotte, his wife.
The David Baltimore '60 Scholarship was established by an anonymous donor in 2000. This renewable scholarship is awarded with preference given to a junior or senior majoring in biology or chemistry.

The Norman Barasch Scholarship was established in 2006 by Richard Barasch ' 75 in honor of his father. This renewable scholarship is awarded on the basis of academic merit and financial need.
The Philip and Roslyn Barbash, M.D., Scholarship was endowed in 1990 as a memorial by their daughter and son-in-law, Babette B. Weksler, M.D., '58 and Marc E. Weksler, M.D., '58. This renewable scholarship is awarded on the basis of academic merit and financial need. Preference is given to women with an interest in the sciences and, in particular, in the environment.
The Charles F. Barber Scholarship was established in 2009 by Charles F. Barber, a member of the Board of Managers from 1967 to 1974, in memory of his wife of 62 years, Lois LaCroix Barber. Lois and Charles raised four children, including Robin Barber '74. The scholarship is awarded to students on the basis of academic merit and financial need and is renewable.
The W. Herman Barcus '27 Scholarship, established in his memory in 1982 by his widow, Kate, and his employer, Sun Oil, is awarded to a student with financial need.
The Philip H. Barley '66 Memorial Scholarship was established in 1968 in memory of Philip H. Barley by his family and friends and the Class of 1966 , which he served as president. The scholarship provides financial assistance for a junior or senior who has demonstrated outstanding leadership qualities at Swarthmore. The Franklin E. Barr Jr. '48 Scholarship was established in 1984 by Betty Barr to honor her husband's memory and is awarded to a firstyear student who has broad academic and extracurricular interests and shows promise of developing these abilities for the betterment of society. This scholarship, based on financial need, is renewable for three years.
The Peter B. Bart '54 Scholarship, established in 2005, is awarded to deserving students.
The H. Albert Beekhuis Scholarship in engineering is awarded on the basis of academic merit and financial need to a firstyear student and is renewable through the senior year as long as that student retains a major in engineering. This scholarship was endowed in 1989 through the generous bequest of Dr. Beekhuis, neighbor, friend, and successful chemical engineer.
The Patty Y. and A.J. Bekavac Scholarship. Established in 1997 by their daughter, Nancy Y. Bekavac '69, the scholarship is awarded on the basis of financial need, with preference given to students from western Pennsylvania.
The Margaret Fraser Bell '53 Scholarship, created in 2000 in her memory by her husband, Monroe Bell, is awarded each year to a junior
on the basis of academic merit and financial need, with preference given to a student majoring in Russian.
The Sherry F. Bellamy '74 scholarship was established in 2003 by Sherry Bellamy. This renewable scholarship is awarded on the basis of academic merit and financial need.
The Belville Scholarship was established in 1882 by Catharine Reading Belville, Class of 1919. Honoring Robert Chambers Belville and Margaret Klein Belville, the scholarship is awarded annually to an incoming student of particular promise.
The Brand and Frances Blanshard Scholarship, established in 1987 by a former student to honor the memory of this philosophy professor and his wife, is given to a deserving student with high academic promise.

## The Al and Peggi Bloom Endowment for

 Advancing Swarthmore's Global Reach was established in 2005. This endowment supports international student financial aid and supports faculty effort in any discipline or across disciplines that enhances the global reach of the college curriculum.The Blough and Locksley Family Scholarship, established in 2003 by Stephen Blough '79 and Sally Locksley '79, is awarded on the basis of academic merit and financial need. The scholarship is renewable.
The Jeanne Cotten Blum '40 Scholarship, established in 2003 by Jeanne Cotten Blum, is awarded on the basis of academic merit and financial need. The scholarship is renewable.
The Frank '36 and Benita Blumenthal Scholarship was established in 2006 by Frank Blumenthal. This renewable scholarship is awarded on the basis of academic merit and financial need.
The Curtis Bok Scholarship was established in 1964, the College's centennial year, in honor of the late Philadelphia attorney, author, and jurist, who was a Quaker and honorary alumnus of Swarthmore. The renewable scholarship is assigned annually to a junior or senior whose qualities of mind and character indicate a potential for humanitarian service such as Curtis Bok himself rendered and would have wished to develop in young people. Students in any field of study, and from any part of this country or from abroad, are eligible.
The Winifred Cammack Bond '43 Scholarship was established by Winifred Cammack Bond and her husband, George Cline Bond '42, to be awarded to a first-year student who is the first member of his or her family to attend college, with a high school record showing strong academic, athletic, and leadership abilities.
The Book and Key Scholarship was established in 1965 by members of Book and Key, a men's
secret honorary society, when the society was dissolved. The scholarship is awarded to a member of the senior class.
The Anne C. Booth '32 Endowed Scholarship was established in 2006 by this alumna who wanted students to be able to share the special educational experience she enjoyed, regardless of financial need. Although Anne died in 2006, her memory lives on through this scholarship. The Frank R. Borchert Jr. '58 and Thomas K. Glennan Jr. '57 Scholarship was established in 2002 by T. Keith '82 and Kathryn P. '82 Glennan in honor and memory of their uncle and father who, from their days as fraternity brothers at Swarthmore, became lifelong friends and brothers-in-law. They shared a common commitment to educational excellence, and each devoted his professional life to this cause. The renewable scholarship is awarded on the basis of academic merit and financial need.
The Edward S. Bower '42 Memorial Scholarship, established in 1958 by Mr. and Mrs. Ward T. Bower in memory of their son, is awarded annually to a student who ranks high in scholarship, character, and personality.
The George '38 and Josephine Clarke '41 Braden Scholarship was established in 1999 by their children in honor of George and in memory of Josephine. The renewable scholarship is awarded to a student with demonstrated need for financial assistance, with preference for a child of immigrant parents or guardians.
The William A. Bradford Jr. '66 Scholarship was established in 2000 by William Bradford. The renewable scholarship provides financial assistance to a student who shows great promise and is based on academic merit and financial need.
The Carol Paxson Brainerd '26 Scholarship, established in 2001, is awarded on the basis of financial need and academic merit.
The Susan Goldman Brandes '76 Memorial Scholarship was established in 2008 by her husband, Lee Brandes. The renewable scholarship is awarded to students on the basis of academic merit and financial need. Preference is given to students majoring in chemistry.
The Daniel Walter Brenner '74 Memorial Scholarship, established in 1979 by family and friends in memory of Daniel W. Brenner, is awarded to a senior majoring in biology who is distinguished for scholarship and has an interest in plant ecology, wildlife preservation, or animal behavior research. The recipient is chosen with the approval of the biology faculty. The Leon Willard Briggs ' 17 Scholarship, established in 1979 with a bequest from Ina Carey Diller in honor of her husband, is
awarded to a worthy student with financial need.
The John S. Brod '34 Scholarship, established in 1984 with gifts from this chemistry major and his employer, Procter \& Gamble, is awarded to a deserving student on the basis of academic merit and financial need.
The John G. Brokaw Scholarship was established in 2005 by Lawrence Jean Richardson ' 78 and Jacqueline Brokaw Richardson '80. It is awarded on the basis of academic merit and financial need.
The Robert C. Brooks Scholarship was established in 1964 by several of his former students as a memorial to Professor Brooks, who taught political science at Swarthmore from 1912 to 1941. The scholarship is awarded to students on the basis of academic merit and financial need.
The Edna Pownall Buffington, Class of 1898, Scholarship was established by a bequest from Albert Buffington, Class of 1896, during 1964, the College's centennial year. This scholarship honors a graduate and a longtime resident of Swarthmore and is awarded on the basis of financial need.
The Bushnell Family Scholarship was established in 2005 by the Bushnell family: father Douglas, daughter Rebecca Bushnell '74, and brothers Michael and David, in honor of wife and mother, Peggy Meeker ' 45 . The renewable scholarship is awarded on the basis of academic merit and financial need.
The Malcolm Campbell '44 Unitarian Scholarship, established by Malcolm Campbell on the occasion of his 50th reunion, is awarded to a student who is an active Unitarian Universalist with financial need and a strong academic record. The scholarship is renewable.
The Centennial Scholarship, established in 1964 with gifts from many donors to the Centennial Campaign, is awarded on the basis of financial need.
The Chang/Hawley '58 Scholarship, established in 2003, is named for Rosalind Chang Whitehead and John K. Hawley. Their son, Charles Loy Hawley '85, is also an alumnus. The scholarship is awarded on the basis of financial need and academic merit.
The Chi Omega Scholarship, established by the sorority and the Swarthmore Chapter of Gamma Alpha, provides an award to a student annually on the basis of academic merit and financial need.
The Elinor Jones Clapp '46 Scholarship was established in 2003. The renewable scholarship is awarded on the basis of academic merit and financial need with preference given to students who are U.S. citizens residing abroad.

The William '17 and Eleanor Stabler '18
Clarke Scholarships, established in 1985 in their honor by W. Marshall ' 47 and Cornelia Clarke '46 Schmidt, are awarded to two worthy first-year students with financial need. Preference for these renewable scholarships is accorded to members of the Society of Friends.
The Class of 1913 Scholarship, established on the occasion of the class's 50 th reunion, is awarded to a student who has demonstrated financial need.
The Class of 1914 Scholarship, established in honor of the class's 50th reunion, is awarded to a student who has demonstrated financial need.
The Class of 1915 Scholarship, established in 1940, is awarded to a student with financial need.
The Class of 1917 Scholarship is awarded to a student who has demonstrated financial need.
The Class of 1925 Scholarship, created on the occasion of the class's 50th reunion, is awarded on the basis of academic merit and financial need.
The Class of 1930 Scholarship was endowed on the occasion of the class's 60th reunion. The renewable scholarship is awarded alternately to a woman or a man on the basis of sound character and academic achievement, with preference given to those who exercise leadership in athletics and community service.
The Class of 1932 Scholarship was established on the occasion of the class's 70th reunion. This renewable scholarship is awarded on the basis of academic merit and financial need.
The Class of 1938 Harriet and William Carroll Scholarship was established on the occasion of the class's 65 th reunion by their classmates and members of their family in honor of the Carrolls' long-standing service to the College. The renewable scholarship is awarded on the basis of academic merit and financial need.
The Class of 1939 Scholarship was established at the 50th reunion of the class in fond memory of Frank Aydelotte, president of the College from 1921 to 1940, and his wife, Marie Aydelotte. The renewable scholarship is awarded to a worthy student with financial need.
The Class of 1941 Scholarship was created in celebration of the 50th reunion of the class. The renewable scholarship is awarded on the basis of academic merit and financial need.
The Class of 1943 Scholarship, established to honor the 50th reunion of that class, is awarded to a student in the sophomore class on the basis of sound character and academic achievement, with preference given to those participating in athletics and community service. The scholarship is renewable through the senior year.

The Class of 1946 Scholarship was established on the occasion of the class's 50th reunion in recognition of the Swarthmore tradition that so influenced its members.
The Class of 1949 Scholarship was established in 1999 in celebration of the class's 50th reunion. The renewable scholarship is awarded on the basis of academic merit and financial need.
The Class of 1950 Scholarship, established on the occasion of the class's 50th reunion, is awarded to one or more deserving students. It is renewable.
The Class of 1952 Evans H. Burn Memorial Scholarship, established on the occasion of the class's 50th reunion in memory of the class's longtime president, is awarded on the basis of academic merit and financial need. It is renewable.
The Class of 1954 Scholarship, established on the occasion of the class's 50th reunion, is awarded on the basis of academic merit and financial need. It is renewable.
The Class of 1956 Scholarship, established on the occasion of the class's 25 th reunion, is awarded on the basis of academic merit and financial need.
The Class of 1957 Gilmore Stott Memorial Scholarship, established on the occasion of the class's 50th reunion, is in memory of Dean Gilmore Stott, who died in 2005. A beloved College professor and dean for 55 years who played the viola in the College orchestra, taught ethics, and counseled thousands of students; he was widely admired for his intelligence, judicial manner, modesty, gentleness, and consideration of others. This renewable scholarship is awarded, on the basis of academic merit and financial need, to a student who shares some of Dean Stott's wonderful characteristics.
The Class of 1960 Scholarship was created in honor of the 50th reunion of the class. This renewable scholarship shall be awarded to students on the basis of academic merit and financial need.
The Class of 1963 Scholarship, awarded on the basis of academic merit and financial need, is renewable through the senior year. The scholarship was created in honor of the class's 25th reunion.
The Class of 1964 Scholarship, established in honor of their 50th reunion, is renewable and awarded to students on the basis of academic merit and financial need.
The Class of 1969 Scholarship was established at the 25th reunion of the class in honor of the contributions made by Courtney Smith, president of Swarthmore College from 1953 to 1969. The scholarship was given with bittersweet memories of the campus turmoil of
the 1960s and with confidence in the power of open discussion and reconciliation. The renewable scholarship is awarded on the basis of academic merit and financial need.
The Cochran Memorial Scholarship, established in 1979 in memory of the Cochran family by the estate of Marie A. Cochran, is awarded annually to a student who has demonstrated financial need.
The David L. '77 and Rhonda R. '76 Cohen Scholarship, established in 2004, is awarded on the basis of academic merit and financial need.
The Sarah A. Cole '34 Scholarship, founded in 1953 by her parents to celebrate her life and memory, is awarded to deserving students on the basis of academic merit.
The Charles A. Collins, Class of 1912, Scholarship, established in 1974, is awarded every year to a deserving student in need of financial assistance, in accordance with the donor's will. Charles Collins, a New Jersey farmer, was active in local Quaker affairs and served as a trustee of the Philadelphia Yearly Meeting.
The N. Harvey Collisson '22 Scholarship, established in 1965 by his family and the Olin Mathieson Charitable Trust in memory of N. Harvey Collisson, is awarded to a first-year student. Selection places emphasis on character, personality, and ability.
The Marcia Perry Ruddick Cook '27
Scholarship is awarded to a junior on the basis of merit and need, with preference given to an English literature major. The renewable scholarship was endowed in 1987 by J. Perry Ruddick in memory of his mother.
The Edward Hanes Cooley ' 43 Endowed Scholarship, established in 2005, is awarded on the basis of academic merit and financial need, with a preference for a student majoring in engineering.
The Helen Ridgway Cooley, Class of 1907, Endowed Scholarship, established in 2005, is awarded on the basis of academic merit and financial need, with a preference for a female student majoring in music.
The Stephanie Cooley '70 Scholarship was established in loving memory by her parents in 1984 and is awarded on the basis of financial need, with preference for a student from Greece or a student with an interest in the study of classics.
The David S. Cowden '42 Scholarship was established in 1977 by David Cowden, who taught English literature at Swarthmore from 1949 until his death in 1983. The scholarship is awarded on the basis of financial need.
The Mark W. Crandall '80 International Scholarship was established in 2004. The renewable scholarship is awarded on the basis
of academic merit and financial need, with a preference for international students.
The John '41 and Barbara Crowley Endowed Scholarship was established in 2006 by the Crowleys as a symbol of their long-standing affection for and commitment to the College. The renewable scholarship is awarded on the basis of academic merit and financial need.
The Crum Meadow Scholarship was created by an anonymous donor in 2001. The renewable scholarship is awarded on the basis of academic merit and financial need.
The Ellsworth F. Curtin '16 Memorial Scholarship was established in 1982 by Margaretta Cope Curtin '18 in memory of her husband, with preference for engineering majors.
The Marion L. Dannenberg Scholarship, established in 1978, is awarded to a first-year student with financial need who ranks high in personality, character, and scholarship. This endowment is in memory of Mrs. Dannenberg, who was the mother, grandmother, and greatgrandmother of seven students who attended Swarthmore.
The Anna Janney DeArmond '32 Scholarship was established by bequest from her estate in 2008. The renewable scholarship is awarded on the basis of academic merit and financial need. Preference is given to a female upper-class student interested in a teaching career at the high school or college level, majoring or expressing an interest in literature in the English language or the history of countries in which the language of literature is ordinarily English.
The Edith Thatcher '50 and C. Russell '47 de Burlo Scholarship is awarded alternately to students who intend to major either in engineering or the humanities. The renewable scholarship, established in 1986 as the gift of Edith and Russell de Burlo, is awarded on the basis of financial need and academic merit.
The Kenneth William Defontes Jr., Class of 1972, Scholarship was established in 2006 to support a deserving student who expresses interest in pursuing a major in engineering or the physical sciences. This renewable scholarship is awarded on the basis of academic merit and financial need and may be given to a first-year student.
The Delta Gamma Scholarship, created by the sorority, is awarded to a student who has demonstrated academic merit and financial need.
The William Diebold, Class of 1906, William Diebold Jr., Class of 1937, and John T. Diebold, Class of 1949, Endowed Scholarship was established in 2004 by John T. Diebold in honor of the Diebold family. The scholarship is awarded on the basis of academic merit and
financial need, with a preference for students studying and performing research in Europe.
The Edward L. Dobbins '39 Memorial Scholarship was established by Hope J. Dobbins in 1997 in memory of her husband. The Dobbins scholarship is awarded to a worthy student who demonstrates a commitment to the betterment of society through involvement in community or environmental activism. Preference for the renewable scholarship is given to residents of Berkshire County, Mass.
The Patrick A. Dolan Scholarship was established by Patrick D. Dolan '83 in 2004. The renewable scholarship is awarded on the basis of academic merit and financial need to a first-year student who shows great promise.
The Francis W. D'Olier, Class of 1907, Scholarship, created in 1964 in memory of Francis W. D'Olier, is awarded to a first-year student. Selection for the renewable scholarship focuses on character, personality, and ability.
The William Dorsey Scholarship was established in 1906 through the estate of Elizabeth Dorsey, a member of the Board of Managers from 1868 to 1870, in memory of her father, who served on the Board of Managers from 1862 to 1865 and from 1867 to 1874 . The scholarship is awarded on the basis of financial need.
The Agnes B. Doty Memorial Scholarship was established in 2000 by her daughter, Christine M. Doty ' 70 . The renewable scholarship is awarded each year, with a preference given to students majoring in Asian studies.
The Marcel Dubien Endowed Scholarship was established in 2007 by Jacques Joussot-Dubien ' 49 to honor his father. This renewable scholarship is awarded on the basis of academic merit and financial need. Preference is given to students from Europe who are not U.S. citizens. The Faith '51 and Ross '50 Eckler Scholarship was established in 2002 by A. Ross and Faith Woodward Eckler. The renewable scholarship is awarded on the basis of academic merit and financial need, with preference given to a man or woman with a commitment to community service.
The Marjorie Vandeusen '38 and J. Earle '36 Edwards Scholarship was established by an anonymous donor in 2000. The renewable scholarship is awarded with preference given to a junior or senior who has demonstrated a commitment to socially responsible citizenship, with a special interest in peace and conflict studies.
The Maurice G. Eldridge '61 Scholarship was created by an anonymous donor in recognition of outstanding administrators at Swarthmore College. The Eldridge Scholarship was established in 1999 to honor Maurice G.

Eldridge, vice president of college and community relations and executive assistant to the president. The renewable scholarship is awarded to a student with merit and need who has demonstrated a commitment to socially responsible citizenship, with a preference for a student from the Washington, D.C., public school system, especially from either the Banneker Academic High School, Duke Ellington School of the Arts, or the Bell Multicultural School.
The George Ellsler, Class of 1890, Scholarship, created in 1943 by a bequest from Mary Ellsler, is awarded to a student who has demonstrated financial need.
The Robert K. Enders Scholarship, established by his friends and former students to honor Dr. Robert K. Enders, a member of the College faculty from 1932 to 1970, is awarded annually to a worthy student with an interest in the study of biological problems in a natural environment.
The J. Horace Ervien, Class of 1903, Scholarship, created in 1979 with gifts from J. Horace Ervien and his wife, is awarded to students demonstrating academic merit and financial need.
The European Alumni Scholarship was established in 2006 by gifts from Antoinette Graefin zu Eltz '01, Jacques Joussot-Dubien '49, and other European alumni. This scholarship is awarded on the basis of academic merit and financial need. Preference is for students from Europe who are not U.S. citizens. The Howard S., Class of 1903, and Gertrude P. Evans Scholarship provides scholarships for worthy students with financial need. Howard Evans majored in engineering at Swarthmore and was a native of the village of Swarthmore.
The Philip Evans '48 Scholarship was established in fond memory of Philip Evans by his friend Jerome Kohlberg '46 and seeks to expand the diversity of the Swarthmore community by bringing to campus students who are outstanding in leadership, intellectual curiosity, community service, and athletic participation. The scholarship, awarded to members of the first-year class and renewable annually, provides a summer-opportunity grant as well as internship, mentoring, networking, and alumni opportunities.
The Michael S. Fedak '82 Scholarship was established in 2003. The renewable scholarship is awarded on the basis of academic merit and financial need with preference given to students from New Jersey majoring in economics or mathematics.
The Samuel and Gretchen Vogel '56 Feldman Scholarship was established in 1992 by Gretchen Vogel Feldman and her husband, Samuel. The renewable scholarship, awarded
on the basis of financial need, is given to a student interested in pursuing a teaching career.
The Samuel M. and Gretchen Vogel '56 Feldman Scholarship II was established in 2000. The renewable scholarship, awarded on the basis of financial need, is given to a student interested in pursuing a teaching career after graduating from Swarthmore College.
The Martin Fleisher ' 80 and Mark Risk '78 Scholarship, established in 2005, is awarded on the basis of academic merit and financial need.
The Eleanor Flexner '30 Scholarship, established in 1989, is awarded to a deserving student on the basis of academic merit and financial need, with preference given to a student majoring in English literature. The Margaret Mccain Ford '43 Scholarship was established in 2006 in her memory by her husband, Thomas Ford, and their children. This renewable scholarship is awarded on the basis of academic merit and financial need.
The Norma Patz Fox '82 and Clifford Fox Scholarship was established in 2006 by Clifford and Norma Patz Fox. This renewable scholarship is awarded on the basis of academic merit and financial need.
The Caroline W. Frame Scholarship was established in 1885 by a bequest from her grandfather, Samuel Willets. The funds, now part of the general scholarship fund, are awarded on the basis of academic merit and financial need.
The David W. Fraser Scholarship. This endowed scholarship was established in 1991 by the Board of Managers and friends of David Fraser in honor of his service as president of Swarthmore College from 1982 to 1991. This scholarship is awarded to one student enrolled in an approved program of academic study outside the boundaries of the United States. Preference is given to students studying in Asian, Middle Eastern, and African countries.
The Marianne Durand Frey '57 Scholarship, established by Marianne Durand Frey in 2002, reflects the donor's gratitude for scholarship aid received during her attendance at Swarthmore. This renewable scholarship is awarded based on academic merit and financial need to a woman who has attended a public high school.
The Theodore and Elizabeth Friend Scholarship was established in 1981 and was announced during the closing ceremony for The Program for Swarthmore as an expression of respect and appreciation by board members and others who have been associated with them in the service of Swarthmore College. The scholarship honors this former president of Swarthmore, who served from 1973 to 1982, and his wife. It is awarded each year on the basis of financial need to a worthy student.

The Theodore Friend and Elizabeth Pierson Friend Scholarship was established by him in 2005 and is awarded on the basis of academic merit and financial need, with a preference for a student from an Islamic country or a student engaged in Islamic Studies.
The Toge and Mitsu Fujihira Scholarship was created in 2000 by their son, Donald Fujihira '69. The renewable scholarship is awarded to a man or woman who shows great promise and assumes both financial need and academic excellence. Preference is given to students of Asian descent.
The John and Gail Gaustad Scholarship was established by friends and students of the Gaustads to honor their many years of service to the College. In 1984, John Gaustad, the Edward Hicks Magill Professor of Astronomy, and his wife, Gail, started the practice of welcoming international students into their home during periods when the dorms were closed. Over the years, they were hosts to about 120 students with many becoming close and lasting friends. This renewable scholarship, expressing appreciation for the Gaustads' generosity and dedication, is awarded annually to a promising student who demonstrates financial need and academic excellence.
The Martha Salzmann Gay '79 Scholarship was created in 2000 by Martha S. Gay. The renewable scholarship assumes both academic excellence and financial need and is awarded to a first-year student who shows great promise.
The David Gelber ' 63 and Kyoko Inouye Scholarship, established in 2004, is awarded on the basis of academic merit and financial need, with a first preference for students from New York or New Jersey majoring in history and a second preference for humanities majors.
The Jeffrey L. Gertler '74 Memorial
Scholarship was established in 2005 by an anonymous donor. The renewable scholarship is awarded on the basis of academic merit and financial need.
The Joseph E. Gillingham Scholarship was established by a bequest from prominent Philadelphia merchant Joseph E. Gillingham, who died in 1907. The scholarship is awarded to a deserving student on the basis of academic merit and financial need.
The Allis Dale and John E. '59 Gillmor and Jordan and Sarah Gillmor '92 Hymowitz Scholarship was established in 2008 by this family on the occasion of John's 50th reunion. The scholarship is awarded on the basis of academic merit and financial need to a firstyear student who shows great promise.
The Joyce Mertz Gilmore '51 Scholarship, awarded to an entering first-year student, is renewable. The recipient is chosen on the basis of mental vigor, concern for human welfare,
and the potential to contribute to the College and the community outside. The award was established in 1976 by Harold Mertz '26 in memory of his daughter, Joyce Mertz Gilmore.
The Barbara Entenberg Gimbel '39
Scholarship was endowed in 1980 in memory of Barbara Entenberg Gimbel by her husband, Dr. Nicholas S. Gimbel. The scholarship is awarded on the basis of need to a worthy student, with preference for a black candidate. The Chloe and Raoul Glant Scholarship was established in 2005 by their family to honor their zeal for lifelong learning and passion for greater understanding of the issues facing today's world. The scholarship is awarded based on need and academic achievement, with a preference for a foreign or American student who demonstrates intellectual and personal integrity and a strong commitment to the public good.
The Barbara Nugent Glouchevitch Scholarship was established in 2004 by Michel Glouchevitch ' 77 in memory of his mother, a 1948 Bryn Mawr graduate. Barbara had close ties to Swarthmore and lived her abbreviated life enthusiastically pursuing career, family, intellectual, and sports activities. This scholarship is awarded on the basis of merit and need to students showing distinction in academics, leadership, and extracurricular activities.
The Marcia and John D. Goldman '71 Scholarship was created in 1992 and is awarded on the basis of need to a student with a strong academic record and leadership qualities. Preference is given to students from northern California.
The Berda Goldsmith Scholarship, established in 1991 in memory of Mrs. Goldsmith, is a need-based scholarship awarded annually to a music major, beginning in his or her junior year. Mrs. Goldsmith was a music lover and patroness of the Settlement Music School. Preference will be given to a student who has attended the Settlement Music School and shows an interest and proficiency in playing the piano.
The Kermit Gordon '38 Scholarship was created by an anonymous donor in 2000. This renewable scholarship is awarded on the basis of need, merit, and an interest in public policy.
The Cynthia Norris Graae '62 Scholarship was created by an anonymous donor in 2007 in recognition of an alumna whose dedicated service to the College included serving on Alumni Council and the Board of Managers. The renewable scholarship is awarded on the basis of financial need.
The Neil R. Grabois '57 Scholarship was created by an anonymous donor in 2001. The scholarship is awarded on the basis of academic
merit and financial need, with preference for students from urban public high schools who wish to study engineering or science.
The Sarah Maurer Graham '77 Scholarship was established in 2003 by Sarah's husband, Robert B. Graham, after her passing to honor her curiosity, achievements, and passion for Swarthmore. The renewable scholarship is awarded on the basis of academic merit and financial need with preference given to students interested in classical studies.
The Edward F. Green '40 Scholarship, established in 1999 by a bequest from this alumnus, is awarded on the basis of academic merit and financial need.
The Walter W. Green Scholarship and the White Open Scholarships Mr. and Mrs. Daniel S. White, Class of 1875, on the occasion of the class's 50th reunion, established three scholarships in the names of Howard White Jr., Serena B. White, and Walter W. Green. They are awarded annually on the basis of financial need and are tenable for four consecutive years. The James E. Gregory ' 85 Scholarship, established in 2005, is awarded on the basis of academic merit and financial need. Preference is for music majors or students who study or perform music.
The Mary Lippincott Griscom, Class of 1901, Scholarship was established in 1969 by Mary Griscom and her daughter, Mary Griscom Colegrove ' 42 , to provide financial aid on the basis of academic merit and financial need. The scholarship honors Mary L. Griscom, who served on the Board of Managers from 1916 to 1967.

The Robert G. Grossman '53 and Ellin Grossman Endowed Scholarship, created in 2005, is awarded on the basis of academic merit and financial need, with a preference for biology or history majors.
The Pauline and Joseph Guss Endowed Scholarship was established in 2003 by Giles
'72 and Barbara Guss Kemp. The scholarship is awarded on the basis of financial need and academic merit, with preference for students from Nebraska or, as a second consideration, students from the Midwest.
The Lucinda Buchanan Thomas '34 and Joseph H. '37 Hafkenschiel Scholarship was established as a memorial to Lucinda Thomas in 1989 by her husband and sons, Joseph III '68; B.A. Thomas '69; Mark C. '72; and John Proctor '75. Lucinda's father, B.A. Thomas, M.D., graduated with the Class of 1899 . This scholarship is awarded to a junior and is renewable, based on need. Preference is given to students who have demonstrated proficiency in water sports or have shown talent in studio arts and who have been outstanding in service to the College.

The Mason Haire '37 Scholarship was established in 1986 by his wife, Vivian, in honor of this alumnus, a distinguished psychologist and former member of the Swarthmore College faculty. The renewable scholarship is awarded to a first-year student with financial need who is distinguished for intellectual promise and leadership.
The Nicole Alfandre Halbreiner ' 82 Scholarship, established in 2005, is awarded on the basis of academic merit and financial need.
The Margaret Johnson Hall '41 Scholarship for the Performing Arts was established in 1991 by Margaret Johnson Hall. The scholarship provides financial assistance based on academic merit and financial need, with preference for students intending to pursue a career in music or dance.
The Merritt W. Hallowell '61 Scholarships were established in 2005 by a bequest from Merritt Hallowell, a loyal and generous alumnus with a sincere interest in helping students. These renewable scholarships are awarded on the basis of academic merit and financial need.
The Helene and Mark '71 Hankin Scholarship was established in 2002 by the Hankins in memory of Mark Hankin's father, Perch P. Hankin. The renewable scholarship is awarded on the basis of academic merit and financial need.
The John W. '60 and Ann E. Harbeson Scholarship, established by the Harbesons in 2004, is awarded on the basis of academic merit and financial need to a first-year student, renewable through the senior year. Preference is given to a deserving international student, reflecting the donors' active involvement, careers, and interests.
The Edith Ogden Harrison Memorial Scholarship was created in 2004 by her daughter, Armason Harrison '35. The renewable scholarship is awarded to a first-year student, with a preference for children of members of the Religious Society of Friends or to Native American students.
The Hartnett Engineering Scholarship was established in 2009 by Thomas ' 94 and Rachel Hartnett. The renewable scholarship is awarded on the basis of academic merit and financial need, with preference for an engineering student who shows great promise.
The William Randolph Hearst Scholarship for Minority Students, established in 1988 by the Hearst Foundation Inc., provides financial assistance to minority students with financial need.
The Bernard B. and Phyllis N. Helfand Scholarship was established by their daughter, Margaret Helfand '69, in 2003 to honor their encouragement of nontraditional educational
pathways. The renewable scholarship is awarded on the basis of academic merit and financial need, with preference given to students interested in both art and science and a commitment to improving their communities through their work.
The J. Philip Herrmann Scholarship was established in 1983 by Katharine F. Herrmann '14 and Margaret Herrmann Ball '24 in honor of their father. The renewable scholarship is awarded to a deserving student on the basis of academic merit and financial need.
The E. Dyson and Carol Hogeland '38 Herting Scholarship was created in 1999 by Eugene M. Lang '38. The renewable scholarship is awarded with preference given to a junior or senior woman majoring in political science who plans to attend law school.
The A. Price Heusner '32 Scholarship, established in 1976 by his wife, Helen, is awarded to a student on the basis of academic merit and financial need.
The Rachel W. Hillborn Scholarship was established in 1945 by Anne Hillborn Philips, Class of 1892, in memory of her mother, Rachel W. Hillborn, who served on the Board of Managers from 1887 to 1913. The scholarship is awarded to a junior or senior, with preference for a student who is a member of the Religious Society of Friends or who is involved in international service.
The Stephen B. Hitchner Jr. '67 Scholarship was established in 1990 by the Board of Managers in memory of Stephen B. Hitchner Jr. with gratitude for his strong leadership of the Student Life Committee and his previous service to the College. Recipients of this needbased, renewable scholarship are selected from the junior class for their interest in a career in the public or nonprofit sectors.
The Betty Stern Hoffenberg ' 43 Scholarship, established in 1987 in honor of this alumna, is awarded to a junior or senior with academic merit and financial need who shows unusual promise, character, and intellectual strength. Strong preference is given to a student majoring in history.
The Hadassah M. L. Holcombe Scholarship, created by a bequest from this member of the Board of Managers who served from 1938 until her death in 1978, is awarded to a deserving student on the basis of academic merit and financial need, with preference given to a member of the Religious Society of Friends. The Hollenberg-Sher Scholarship was created in 1998 by Norman Sher '52. The renewable scholarship is awarded to a first-year student. The Carl R. Horten '47 Scholarship was created in 1985 by the Ingersoll-Rand Company on the occasion of his retirement. Preference is given
to students planning to major in engineering or prelaw.
The Doris K. Hourihan Scholarship was established in 2006 by Jenny Hourihan Bailin ' 80 in memory of her mother, Doris K. Hourihan. This renewable scholarship is awarded on the basis of academic merit and financial need.
The Everett L. Hunt Scholarship, endowed in 1973 as a reunion gift by the Class of 1937, honors this beloved emeritus professor and dean and provides an unrestricted scholarship awarded annually by the College.
The Betty P. Hunter '48 Scholarship was created in 1977. Betty P. Hunter, one of the first black students to attend Swarthmore College, established this fund by a bequest to provide scholarship aid to needy students.
The Richard M. Hurd ' 48 Scholarship was created in 2000 by this alumnus who served on the Board of Managers for almost two decades and his wife, Patricia. The renewable scholarship is awarded with preference given to a student majoring in engineering.
The William Y. Inouye ' 44 Scholarship was established in loving memory by his family, friends, and colleagues in recognition of his life of service as a physician. The renewable scholarship is awarded to a worthy junior premedical student with need.
The Aaron B. Ivins Scholarship was established with an annuity given in 1928 by Emma Ivins Gower and is awarded to a deserving student on the basis of academic merit and financial need.
The William and Florence Ivins Scholarship, created in 1993 by a bequest from Barbara Ivins ' 35 , is awarded to a student who has demonstrated financial need.
The George B. Jackson '21 Scholarship was endowed in 1986 by Eugene M. Lang '38 in honor of the man who guided him to Swarthmore. The scholarship is awarded on the basis of financial need and academic merit, with preference given to a student from the New York metropolitan area.
The Howard M. '20 and Elsa P. '22 Jenkins Scholarship in engineering provides financial assistance to a promising sophomore or junior with need who is interested in pursuing a career in engineering. It was created in 1993 by the gift of Elsa Palmer Jenkins, Swarthmore's first woman graduate in engineering.
The George K. and Sallie K. Johnson Scholarship, established in 1928 by a bequest from Sallie Kaign Johnson, is awarded to students with financial need. Sallie Johnson was the mother of Howard Cooper Johnson, Class of 1896.

The Howard Cooper Johnson, Class of 1896, Scholarship, established in 1944 by this alumnus who served on the Board of Managers from 1901 to 1952, is awarded with preference given to a member of the Religious Society of Friends.
The Edmund A. Jones Memorial Scholarship was created in 1965, awarding a grant each year to a graduate of Swarthmore High School and, since 1983, to a graduate of Strath Haven High School. In 2004, this four-year, renewable scholarship was designated with preference for graduates of Strath Haven High School, Delaware County high schools, or Pennsylvania high schools, respectively. Edmund A. Jones was the son of Adalyn Purdy Jones '40, and Edmund Jones '39, longtime residents of Swarthmore.
The Benjamin Kalkstein '72 Scholarship, established by his family in 2002, is awarded to a first-year student on the basis of merit and need and is renewable. Preference is given to students with an interest in environmental studies.
The Kappa Alpha Theta Scholarship, established through the generosity of the members and friends of the sorority at Swarthmore College, is awarded on the basis of academic merit and financial need.
The Kappa Kappa Gamma Scholarship, created by the sorority, is awarded to a first-year student and is renewable.
The Jennie Keith Scholarship was created by an anonymous donor in recognition of outstanding administrators at Swarthmore College. The Keith Scholarship was established in 2000 to honor Jennie Keith, professor of anthropology, who served as provost from 1992 to 2001. The scholarship is awarded to a student who shares the donor's and Jennie Keith's commitment to the use of intellectual excellence in the service of positive social change.
The Michael and Elizabeth Lavin ' 87 Kelley Scholarship was established in 2004. The renewable scholarship is awarded on the basis of academic merit and financial need.
The Alexander Kemp Endowed Scholarship was established in 2001 by Giles Kemp ' 72 and Barbara Guss Kemp. The renewable scholarship is awarded on the basis of financial need and academic merit.
The Kennedy Scholarship is given in honor of the parents and with thanks to the children of Christopher '54 and Jane '55 Kennedy. The renewable scholarship, created in 1985, is awarded on the basis of financial need and academic merit.
The Clark Kerr '32 Scholarship was created by an anonymous donor in 2000. The scholarship is awarded with preference given to a student entering his or her senior year, who meets the
model described by President Aydelotte of the all-around student with strong interests in academic achievement, athletics, and interests in debating and other aspects of student life and community service.
The Florence and Melville Kershaw Scholarship was endowed in 1987 in their honor by their son Thomas A. Kershaw '60. The renewable scholarship is awarded to a firstyear student on the basis of financial need and academic merit, with preference given to those intending to major in engineering.
The Naomi Kies '62 Scholarship was created in 2006 in her memory by her family and friends. Naomi Kies devoted herself to community service, pursuing practical idealism and seeking peaceful solutions to political and social problems. This renewable scholarship is awarded on the basis of academic merit and financial need. Preference is given to international students.
The Joseph W. '44 and Elizabeth Blackburn '44 Kimmel Scholarship was established in 2003 by their son, James B. Kimmel '70. The renewable scholarship is awarded on the basis of academic merit and financial need, with preference given to students from the Delaware Valley area, including eastern Pennsylvania, southern New Jersey, and Delaware.
The William H. Kistler '43 Scholarship was endowed in 1986 in his memory by his wife, Suzanne ' 44 , his friends, and former classmates. The scholarship is awarded to a needy and deserving student majoring in engineering or economics.
The Barbara L. '86 and Salem D. Shuchman ' 84 scholarship, created in 2000, is awarded to a junior or senior who intends to enter the teaching profession. The recipient is chosen by the Financial Aid Office in consultation with the faculty of the Educational Studies Department at Swarthmore College.
The Floyd C. and Virginia Burger '39 Knight Endowed Scholarship, established by a bequest in 2006, is awarded on the basis of academic merit and financial need.
The Paul '46 and Mary Jane Kopsch Scholarship, established in 1982 through a gift of Paul J. Kopsch, is renewable and awarded each year to a junior premedical student(s) with financial need.
The Jessie Stevenson Kovalenko Scholarship, established in 1944 by Michel Kovalenko in memory of his wife, is awarded on the basis of academic merit and financial need.
The Walter W. Krider, Class of 1909, Memorial Scholarship was established by his wife, Anna
Hetzell Mulford Krider, and daughter, Elizabeth
Krider Snowden '36, in 1959. The Krider scholarship is awarded to a student who ranks
high in scholarship, character, and personality and has financial need.
The Kyle Scholarship, established in 1993 by Elena Sogan Kyle '54, Frederick W. Kyle '54, and Robert B. Kyle Jr. '52, is awarded in the junior or senior year to a student who has shown leadership capability, made significant contributions to the life of the College, and demonstrated the need for financial assistance.
The John Lafore, Class of 1895, Scholarship, established in 1956 by his son Laurence Lafore ' 38 and his daughter Eleanor Lafore Gilbert, is awarded to a deserving student on the basis of academic merit and financial need.
The Laurence Lafore '38 Scholarship was established in his memory in 1986 by family, friends, classmates, and former students. Professor Lafore, author of numerous books and essays, taught history at Swarthmore from 1945 until 1969. This renewable scholarship is awarded to a student showing unusual promise. The Robert E., Class of 1903, Elizabeth, Class of 1903, and Walter, Class of 1939, Lamb Scholarship was established in 2000 by Walter Lamb, who served on the Board of Managers from 1977 to 2002. The scholarship is awarded on the basis of academic merit and financial need.
The Barbara Lang Scholarship is awarded to a student in the junior class whose major is in the arts, preferably in music, who ranks high in scholarship and has financial need. This renewable scholarship was established in 1984 by Eugene M. Lang ' 38 in honor of his sister.
The Eugene M. Lang '38 Opportunity Grants are awarded each year to as many as six sophomore students who are selected by a special committee on the basis of distinguished academic and extracurricular achievement and demonstrable interest in social change. Stipends are based on financial need and take the form of full grants up to the amount of total college charges. Each Lang Scholar is also eligible for summer or academic-year community service support while an undergraduate. Projects, which must be approved in advance by a faculty committee, are expected to facilitate social change in a significant way. The program is made possible by a gift of Eugene M. Lang.
The Ida and Daniel Lang Scholarship, established in 1964 by their son, Eugene M. Lang '38, provides financial assistance for a young man or woman who ranks high in scholarship, character, and personality. The Eleanor B. and Edward M. '30 Lapham, Jr. Scholarship, established in 1996 by Eleanor to honor her husband's memory, is awarded to a first-year student on the basis of academic merit and financial need. The scholarship is renewable for his or her years of study at Swarthmore.

The E. Hibberd Lawrence Scholarship honors the memory of a student who attended the Swarthmore Preparatory School from 1881 to 1882 and is awarded on the basis of financial need.
The Frances Reiner and Stephen Girard '41 Lax Scholarship was established in 1989 with preference for minority or foreign students who show academic merit and financial need. This scholarship has been endowed by the family of Stephen Girard Lax, who was chairman of the Board of Managers of Swarthmore College from 1971 to 1976.
The Stephen Girard Lax '41 Scholarship was established in 1977 by family, friends, and business associates of Stephen Lax. The scholarship is awarded on the basis of financial need every two years to a student entering the junior year who shows academic distinction, leadership qualities, and a definite interest in a career in business.
The Alfred and Harolyn Lazarus Scholarship was established in 2008 by their son, Lewis H. Lazarus '78, in honor of his parents' boundless curiosity, great respect for intellectual excellence, high moral character, and service to others. The scholarship is awarded to students on the basis of academic promise and financial need. The renewable scholarship is given with preference for students intending to practice medicine or majoring in history.
The Dorrie '44 and Henry '45 Leader Family Scholarship was established in 2001 in recognition of their many family members who attended Swarthmore College including their children, Martha ' 71 and Elizabeth '73. The scholarship is awarded on the basis of academic merit and financial need.
The Thomas L. Leedom Scholarship was established in 1905 by Hannah A. Leedom in memory of her husband, who always had a deep interest in the success of the College. It is awarded to a deserving student on the basis of academic merit and financial need.
The Raphael Lemkin Endowed Scholarship was established in 2005 by John ' 77 and Ann ' 77 Montgomery to honor Raphael Lemkin, a Holocaust survivor who invented the word "genocide" and drafted the Genocide Convention of the United Nations, adopted in 1948. The scholarship is awarded with preference for "upstanders" or students who demonstrate interest in human rights, especially anti-genocide work.
The Gerry and Marguerite Lenfest Scholarship was established in 2008. The renewable scholarship is awarded to students on the basis of academic merit and financial need.
The Walter H. Leser '49 Memorial Scholarship was established by his wife, Martha E. Leser, in 2002. The renewable scholarship is awarded on
the basis of academic merit and financial need with preference for students majoring in mathematics.
The Carl M. Levin '56 Scholarship was created by an anonymous donor in 2000. The renewable scholarship is awarded to a student with merit and need who has overcome obstacles, with a preference for Michigan public high school graduates.
The Beryl and Leonard Levine Scholarship was established by their daughter, Susan Brauna Levine '78, in 2005 and is awarded on the basis of academic merit and financial need.
The Wilma A. Lewis '78 Scholarship was established in 2006 by Wilma A. Lewis. This scholarship is awarded on the basis of academic merit and financial need.
The Lewis-Bill Scholarship was established in 2009 by Robert J. Reynolds, father of Sarah Reynolds '09, to honor his wife, Lucinda M. Lewis '70, and her parents, Robert B. '35 and Margaret Bill ' 38 Lewis. It is awarded to students on the basis of academic merit and financial need.
The Scott B. Lilly Scholarship, endowed by Jacob T. Schless of the Class of 1914 and offered for the first time in 1950, is awarded annually in honor of a former distinguished professor of engineering. Students who plan to major in engineering are given preference.
The Sarah E. Lippincott Scholarship, established in 1918 by Katherine Lippincott Holden in memory of her mother, is awarded to a deserving student on the basis of financial need.
The Lloyd Family Scholarship was established in 2000 by May Brown Lloyd '27, G. Stephen Lloyd '57, and Anne Lloyd '87. The renewable scholarship is awarded with preference given to a student who shows great promise.
The Lloyd-Jones Family Scholarship is the gift of Donald ' 52 and Beverly Miller '52 LloydJones and their children Anne '79; Susan '84; Donald '86; and Susan's husband, Bob Dickinson '83. Established in 1990, the renewable scholarship is awarded on the basis of academic merit and financial need.
The Amy Chase Loftin '29 Scholarship was established in 1998. The renewable scholarship is awarded to a sophomore, with preference given to Native Americans and African Americans.
The Joan Longer '78 Scholarship was created as a memorial in 1989 by her family, classmates, and friends, to honor Joan's personal courage, high ideals, good humor, and grace. The renewable scholarship is awarded on the basis of merit and need.
The Mary T. Longstreth Scholarship was established in 1938 by Rebecca C. Longstreth
in memory of her mother, who served on the Board of Managers from 1872 to 1887. The scholarship is awarded to a deserving student on the basis of financial need.
The David Laurent Low Memorial Scholarship was established in 1981 by Martin L. Low '40; his wife, Alice; Andy Low '73; and Kathy Low in memory of their son and brother. It is awarded to a man or woman who shows the great promise that David himself did. The award assumes both need and academic excellence and places emphasis, in order, on qualities of leadership and character or outstanding and unusual promise. The renewable scholarship is awarded to a first-year student.
The Lyman Scholarship was established by Frank L. Lyman Jr. '43 and his wife, Julia, on the occasion of his 50th reunion in 1993. The renewable scholarship is awarded on the basis of financial need to a student who is a member of the Religious Society of Friends or whose parents are members of the Religious Society of Friends.
The Leland S. MacPhail Jr. '39 Scholarship, given by Major League Baseball in 1986 in recognition of 48 years of dedicated service by Leland S. MacPhail Jr., is awarded annually to a deserving student on the basis of need and merit.
The Magill Walk Scholarship was established in 2010 by an anonymous donor. The scholarship shall be awarded to students on the basis of academic merit and financial need and is renewable.
The David Mailloux Endowed Scholarship was established in 2005 by his loving parents to celebrate David's life and memory. The renewable scholarship is awarded on the basis of academic merit and financial need.
The Clara B. Marshall Scholarship was established in 1982 by the estate of Dr. Clara Marshall. Clara Marshall was a Philadelphiaarea physician and educator from a prominent Quaker family whose leadership as dean of the Women's Medical College led to greatly expanded and improved facilities and course offerings at that institution. The scholarship is awarded to a deserving student on the basis of academic merit and financial need.
The Edward Martin Scholarship, established by a bequest from Edward Martin, a professor of biological sciences at the College, is awarded to a junior or senior with preference for a biology major or premedical student.
The Jacob and Rae Mattuck Scholarship, created in 2009 by Arthur P. Mattuck ' 51 in honor of his parents, is renewable and awarded to students based on academic merit and financial need with preference for majors in the
sciences, mathematics, statistics, computer science, engineering, music, or the arts.
The Franz H. Mautner Scholarship honors the memory of this Professor Emeritus of German and is awarded to a student who has demonstrated financial need.
The Thomas B. McCabe '15 Awards, established in 1952 by Thomas B. McCabe, are awarded to entering students. Regional McCabe Scholarships are awarded to a few students from the Delmarva Peninsula and from southeastern Pennsylvania (Chester, Montgomery, and Delaware counties). These awards provide a minimum annual scholarship of full tuition or a maximum to cover tuition, fees, room, and board, depending on need. The National McCabe Scholarships are awarded to a few students based on financial need. In making selections for all McCabe Scholarships, the committee places emphasis on ability, character, personality, and service to school and community.
The Charlotte Goette ' 20 and Wallace M. McCurdy Scholarship is awarded to a first-year student on the basis of financial need and academic merit. The renewable scholarship was endowed by Charlotte McCurdy in 1986.
The Cornelia Dashiell and Dino Enea Petech
'35 McCurdy, M.D., Family Scholarship was endowed by Cornelia and Dino E.P. McCurdy, M.D. The scholarship is awarded each year to a well-rounded student with need who demonstrates academic and extracurricular interests based upon sound character and healthy personality traits, with preference given to graduates of George School.
The Dorothy Shoemaker '29 and Hugh '30 McDiarmid Scholarship is awarded to a firstyear man or woman on the basis of academic merit and financial need. Established in 1987, the renewable scholarship is the gift of the McDiarmid family in commemoration of their close association with Swarthmore College.
The Helen Osler McKendree '23 Scholarship, created in 1998 by the estate of Helen's brother, E. Morgan Osler, is awarded to a junior majoring in a foreign language or languages.
The Sarah Meade McKitterick Scholarship was established in 2006 by Katherine Burt Anderson ' 49 to honor the memory of her daughter. This renewable scholarship is awarded on the basis of academic merit and financial need.
The Donald R. McMinn '86, Robert '57, and Tamzin MacDonald '58 McMinn scholarship was created in 2004 and is awarded on the basis of academic merit and financial need, with preference for students planning a career in business.
The Margaret S. Meeker '45 Scholarship was established in 2005 by Douglas F. Bushnell, Rebecca W. Bushnell '74, and John D. Toner
'73 in memory of Peggy Meeker, wife and mother, who was full of love and life and who was so happy during her years at Swarthmore College. The renewable scholarship is awarded on the basis of academic merit and financial need.
The Norman Meinkoth Scholarship was established in 1988 by his friends and former students to honor Dr. Norman A. Meinkoth, a member of the College faculty from 1947 to 1978 who died in 1987. This scholarship serves as a memorial and is awarded annually to a worthy student with an interest in the study of biological problems in a natural environment. The Alison Joanna Meloy '94 Memorial Scholarship was established in 2006 by her mother and stepfather, Alice and Robert Deal. The scholarship celebrates Alison's love of Swarthmore College and recognizes that some of her happiest years were spent there. The renewable scholarship is awarded on the basis of academic merit and financial need, with a preference for female students majoring in political science.
The Peter Mertz '57 Scholarship is awarded to an entering first-year student outstanding in mental and physical vigor, who shows promise of using these talents for the good of the College community and of the larger community outside. The renewable scholarship was established in 1955 by Harold '26, LuEsther, and Joyce '51 Mertz in Peter's memory.
The Mari Michener Scholarship provides financial support to four students on the basis of academic merit and financial need. The scholarship is the gift of James Michener '29 and honors his wife.
The Bruce and Florence Miller Scholarship was established in 2006 by their son, Grant Miller ' 65 , to honor his parents' lifetime commitment to education and underserved communities. The renewable scholarship is awarded on the basis of academic merit and financial need. Preference is given to students with sensitivity toward diverse underserved communities.
The James E. Miller Scholarship, established by a bequest from Arabella M. Miller in 1924, is awarded to a deserving student on the basis of financial need.
The James H. Miller '58 Scholarship will be established with a gift from the estate of James H. Miller and awarded on the basis of academic merit and financial need.
The Hajime Mitarai Scholarship, established in 1995 by Eugene M. Lang '38 in memory of his close friend and the father of Tsuyoshi Mitarai '98, is awarded to students with financial need. Preference is given to students with international backgrounds.

The Margaret Moore Scholarship, established in 1974 by an anonymous donor, provides scholarships to foreign students, with a preference given to students of South Asian origin. This scholarship honors a Quaker teacher who spent a lifetime of teaching and public service in western India with the people she loved until her death in 1962.
The Kathryn L. Morgan Scholarship was established by an anonymous donor in 2000. The renewable scholarship was created in recognition of Professor Morgan's distinguished teaching and scholarly contributions to the life of the College. Preference is given to students with an interest in black studies.
The Robert ' 67 and Joan Murray Scholarship was created in 2004 and is awarded on the basis of academic merit and financial need.
The Thomas W. Nash '74 Scholarship was established in 2006. This renewable scholarship is awarded on the basis of academic merit and financial need.
The Florence Eising Naumburg Scholarship was named in 1975 in honor of the mother of an alumna of the Class of 1943. The scholarship is awarded to a student whose past performance gives evidence of intellectual attainment, leadership, and character and who shows potential for future intellectual growth, creativity, and scholarship and for being a contributor to the College and, ultimately, to society.
The Albert and Christine Nehamas Scholarship was established in 2004 by Alexander Nehamas '67 and Susan Glimcher in loving memory of Alexander's parents, who strove to provide a sound education for their son. The scholarship is awarded on the basis of academic merit and financial need, with preference for students from Greece or from other foreign countries.
The Thomas S. '30 and Marian Hamming '30
Nicely Scholarship was established in 1987 and is awarded to a first-year student with need who shows promise of academic achievement, fine character, and athletic ability. Preference is given to a person who has been on the varsity tennis, squash, golf, or swimming teams in high school or preparatory school.
The Mary McCusker Niemczewski Scholarship was established in 2005 by Christopher M. Niemczewski ' 74 to honor his mother and is awarded on the basis of academic merit and financial need.
The John H. Nixon '35 Scholarship was established in 1983 by John H. Nixon to assist Third World students, especially those who plan to return to their country of origin.
The Donald E. Noble Scholarship was established in 2002 by the Donald E. and Alice M. Noble Charitable Foundation. The
renewable scholarship is awarded on the basis of academic merit and financial need.
The Helen North Scholarship was established in 2002 by Maureen Cavanaugh ' 75 and Christopher Plum ' 75 in honor of Helen F. North, who, at the time of her retirement from Swarthmore in 1991, was the Centennial Professor of Classics and had been a member of the College faculty for 43 years. Author, traveler, lecturer, and beloved friend, Helen North has always been committed to teaching in a culturally diverse educational community. The scholarship is awarded on the basis of academic merit and financial need.
The Northwest Scholarship was established in 1990 by Constance Gayl Pious '53 to offer financial aid to students from the northwestern United States.
The Edward L. Noyes '31 Scholarship was endowed in 1987 in his memory by his wife, Jean Walton Noyes '32; his three sons; and his many friends. The scholarship is available to an incoming first-year student, with preference given to those from the Southwest, especially Texas. The renewable scholarship is awarded on the basis of financial need and academic merit to students with broad interests.
The Nancy Triggs Ohland '55 Scholarship was established in her memory in 2006 by her husband, Theodor C. Ohland, and children Karen J. Ohland '83, Matthew W. Ohland '89, and Erik D. Ohland. The scholarship is awarded on the basis of academic merit and financial need, with preference given to a student with a strong record of community service.
The Howard Osborn Scholarship, established by a bequest in 1970 to honor the memory of his parents, Viola L. and Frank Osborn, is awarded to a deserving student on the basis of academic merit and financial need.
The Mark L. Osterweil '94 Memorial Scholarship was established by his family and friends. Mark was an ardent student of European and American history, with a special interest in the economic, intellectual, political, and social relationships and connections between the United States and other countries, peoples, and cultures. Preference in awarding the scholarship is given to American or foreign students whose studies of history are consistent with Mark's wide-ranging interests.
The Martin Ostwald Scholarship was established in 2005 by Christopher Plum ' 75 in memory of his beloved wife, Maureen Cavanaugh '75. The scholarship is named in honor of Martin Ostwald, the Swarthmore classics professor who had a tremendous lifelong impact on Maureen's development as a classics and legal scholar. It is awarded on the basis of academic merit and financial need, with
a preference for classics students, particularly those studying ancient history or philosophy. The Page-Pixton Scholarship for Study Abroad, established in 2003, is awarded yearly on the basis of financial need to rising juniors or seniors who seek through study abroad experience to prepare themselves to become effective leaders of a more inclusive, generous, and peaceful world.
The Harriet W. Paiste Scholarship was established by a bequest in 1900 to assist those whose limited means would exclude them from enjoying the advantages of an education at this college.
The Rogers Palmer '26 Scholarship, established in 1973, is awarded to a deserving student on the basis of academic merit and financial need.
The Susanna Haines Parry, Class of 1908 and Beulah Haines Parry, Class of 1909
Scholarship, established by a bequest in 1979, is awarded to a deserving student on the basis of academic merit and financial need.
The Tory Parsons '63 Scholarship was established in 1991 in his memory by a member of the Class of 1964 to provide scholarship aid to students with demonstrated need.
The Sibella Clark Pedder '64 Endowment was established in 2005 to enable American students through study abroad to develop deeper understanding of, and improved facility with, a global world. The income from the fund is awarded only to students who qualify for financial aid on the basis of their financial need.
The J. Roland Pennock '27 Scholarships were established in 1973 by Ann and Guerin Todd '38 in honor of J. Roland Pennock, Richter Professor Emeritus of Political Science. Income from this endowment is to be used to award four scholarships on the basis of merit and need, preferably to one scholar in each class.
The T.H. Dudley Perkins, Class of 1906, Scholarship was established in 1920 by his wife, Alice Sullivan Perkins 1904, and other family members and friends to honor the memory of one who died in the service of his country in 1918. The scholarship is awarded to a deserving student on the basis of academic merit and financial need.
The Perry Family Scholarship was created in 2006. Four generations of the Perry family have attended Swarthmore College. At Swarthmore, the Perrys pursued diverse academic paths and participated in team sports. After graduation, they became educators, physicians, and scientists. The Perry Family Scholarship is awarded with preference for a well-rounded premedical student who demonstrates strong academic achievement along with an interest in student life and community service. The scholarship, which may be renewed, is awarded to a student entering his or her junior year.

The Winnifred Poland Pierce '45 Scholarship was established in 1988. This renewable scholarship is awarded on the basis of academic merit and financial need. Preference is given to students who are the first generation in their families to attend college.
The Cornelia Chapman '26 and Nicholas $O$. Pittenger Scholarship, established in 1961 by their family, is awarded to an incoming firstyear student who ranks high in scholarship, character, and personality and needs financial assistance. Cornelia, an honors graduate, was active in alumni activities and served on the Alumni Council from 1945 to 1949. Nicholas ("Pitt") was the controller of the College for 22 years.
The Frances Hughes Pitts Scholarship was established in 2003 by George R. Pitts ' 72 in honor and memory of his mother. The renewable scholarship is awarded on the basis of academic merit and financial need with a preference given to students with an interest in the sciences.
The Rebecca Kemp and Richard Pogir Scholarship was established in 2009 on the occasion of their marriage as a gift from the bride's parents, Barbara Guss Kemp and Giles Kemp '72. This renewable scholarship is awarded on the basis of academic merit and financial need. Preference is given to a student from South Africa or Africa or with an academic interest in these areas.
The Anthony Beekman Pool '59 Scholarship, established by his family and friends in 1958, is awarded to an incoming first-year man of promise and intellectual curiosity. It is given in memory of Tony Pool, who died of pneumonia in his senior year.
The Ramon L. Posel Scholarship was established in 2005. The scholarship is awarded on the basis of academic merit and financial need.
The Richard '36 and Helen Shilcock '36 Post Scholarship was established in 1995 by Helen Shilcock Post, Bill ' 61 and Suzanne Rekate ' 65 Post, Carl ' 66 and Margery Post ' 67 Abbott, Barbara Post Walton, Betsy Post Falconi, Richard W. '90 and Jennifer Austrian '90 Post, and their families. The renewable scholarship is awarded to a well-rounded first-year student who demonstrates academic merit, financial need, and an interest in athletic endeavors. The Elizabeth Carver Preston, Class of 1934, Memorial Scholarship was established in 2001 by the family of Elizabeth "Beth" Preston in recognition of her devotion to Swarthmore College. For Beth, who was a scholarship student, Swarthmore College opened a new world, stimulating her intellectually and introducing her to lifelong friends, including her husband. Her commitment to the College
continued after graduation with years of participation in College events and service as an alumna, including several terms on the Board of Managers. Her heartfelt enthusiasm about Swarthmore encouraged numerous young people to consider the College for themselves. In this scholarship, Beth's spirit lives on by enabling others to experience the college life she so cherished. The Preston Scholarship is renewable and awarded on the basis of demonstrated financial need.
The Mary Coates Preston Scholarship, established in 1942 by a bequest from Elizabeth Coates, is awarded to a deserving student on the basis of academic merit and financial need.
The David L. Price '31 Scholarship, established in 1975 by a bequest from this alumnus, is awarded to a deserving student on the basis of academic merit and financial need.
The Henry L. Price Jr., M.D., '44 Scholarship was established in 1994 by Hal and Meme Price. The renewable scholarship, awarded on the basis of merit and need, is given to a student who has declared the intention to choose a major in the Division of Natural Sciences other than engineering. This scholarship is in memory of Dr. Price's parents, Sara Millechamps Anderson and Henry Locher Price.
The Robert Pyle, Class of 1897, Scholarship was established in 1964 by Margery Pyle, Class of 1900, and Ellen Pyle Groff, Class of 1892, in memory of their brother who served for many years on the Board of Managers.
The Martin S. and Katherine D. Quigley Scholarship was established in 2000 by their son, Kevin F. F. Quigley '74, in honor of his parents' steady commitment to family, lifetime learning, and international understanding. The renewable scholarship is awarded each year on the basis of academic merit and financial need. Preference is given to outstanding international students attending Swarthmore.
The Jed S. Rakoff '64 Scholarship was created by an anonymous donor in 2005, in recognition of the benefits of an independent judiciary. The renewable scholarship is awarded on the basis of academic merit and financial need, with preference for students who have demonstrated an interest in public affairs.
The Raruey-Chandra and Niyomsit
Scholarships were established in 1980 by Renoo Suvarnsit '47 in memory of his parents. They are awarded in alternate years: the Raruey-Chandra Scholarship to a woman for her senior year and the Niyomsit Scholarship to a man for his senior year, to a student of high academic standing and real need for financial aid. Preference is given to a candidate who has divorced or deceased parents.
The George G. and Helen Gaskill '18 Rathje Scholarship, established by a bequest in 1985,
is awarded to a deserving student on the basis of academic merit and financial need. Helen was a writer and a college drama teacher. Her husband was a professor of German.
The Reader's Digest Foundation Endowed Scholarship, created in 1959, is awarded to a deserving student on the basis of academic merit and financial need.
The Mark E. Reeves Scholarship was established in 1905, when Caroline E. Reeves of Richmond, Ind., gave to Swarthmore College the sum of $\$ 5,000$ for the purpose of founding a scholarship in memory of her husband who "was one of the first subscribers to the College and always had a deep interest in its success." The fund is part of the general scholarship fund.
The Fred C. and Jessie M. Reynolds Scholarship, established in 1984 by a bequest from Jean Reynolds '32, is awarded to a deserving student on the basis of academic merit and financial need.
The Lily Tily Richards '29 Scholarship was established in 1963 by Peirce L. Richards Jr. ' 27 in memory of his wife, who was active in Swarthmore alumni activities. This scholarship is awarded to a deserving student on the basis of academic merit and financial need.
The Adele Mills Riley ' 37 Memorial Scholarship, established in 1964 by her husband, John R. Riley, is awarded to a deserving student on the basis of academic merit and financial need.
The Lewis M. Robbins '40 Scholarship was established by Lewis M. Robbins in 2002. The renewable scholarship is awarded on the basis of academic merit and financial need.
The Michael J. Robbins Living Memorial Endowed Scholarship was established anonymously in 2007 to celebrate the memory of Michael J. Robbins and to recognize the important role scholarships play in assisting talented students with substantial financial need to receive a Swarthmore College education. This renewable scholarship is awarded on the basis of academic merit and financial need. The Byron T. Roberts, Class of 1912, Scholarship, endowed in 1973 by his family in memory of Byron T. Roberts, is awarded annually to an incoming student and is renewable.
The Louis N. Robinson, Class of 1905, Scholarship was established in 1964 during the College's centennial year by the family and friends of Louis N. Robinson. Mr. Robinson was for many years a member of the Swarthmore College faculty and founder of the Economics Discussion Group. A member of the junior or senior class who has demonstrated interest and ability in the study of economics is chosen for this award.

The Edwin P. Rome '37 Scholarship provides financial assistance to worthy students with financial need. The scholarship was established in 1987 in memory of Edwin P. Rome by his wife, Rita Rome, and The William Penn Foundation, on whose board he served. The Matthew Rosen '73 Scholarship was established in 2004 and is awarded on the basis of academic merit and financial need.
The Alexis Rosenberg Scholarship, established in 1983 by The Alexis Rosenberg Foundation, now the Alexis Rosenberg Fund of the Greenfield Foundation, provides aid for a firstyear student. The scholarship is awarded annually to a worthy student who could not attend the College without such assistance.
The Girard Bliss Ruddick '27 Scholarship was established in 1987 by J. Perry Ruddick in memory of his father. The renewable scholarship is awarded to a junior on the basis of academic merit and financial need, with preference given to an economics major.
The Charles F. C. Ruff '60 District of Columbia Scholarship memorializes distinguished alumnus Charles F. C. Ruff, who died in 2000. Preference is given to students with financial need who live in the District of Columbia.
The Edith A. Runge '38 Scholarship, created in 1971 by a bequest from her estate, is awarded to a deserving student on the basis of academic merit and financial need. A professor, Edith Runge chaired the German Department at Mount Holyoke College at the time of her death.
The David Barker Rushmore, Class of 1894, Scholarship, established in 1974 in honor of David Barker Rushmore by his niece Dorothea Rushmore Egan '24, is awarded annually to a worthy student who plans to major in engineering or economics.
The Carl E. Russo'79 Business Scholarship was established in 2000 and financially supports rising sophomores, juniors, and seniors with a strong and expanding interest in business and entrepreneurship. The renewable scholarship is awarded on the basis of financial need and academic merit.
The Bernard Saffran Legacy Scholarship honors Bernie Saffran's contribution to making Swarthmore a place to pursue academic passions without forgetting an obligation to strive for a better world. Established in 2008, the scholarship is awarded on the basis of academic merit and financial need, with preference given to students with an interest in economics, political science, or philosophy. The Professor Bernard "Bernie" Saffran Scholarship was created in 2005 by students, colleagues, and friends in honor and memory of Bernie Saffran, distinguished economist, gifted teacher, international mentor, raconteur, and
treasured member of the Swarthmore College faculty from 1967 to 2004. The renewable scholarship is awarded on the basis of academic merit and financial need, with preference given to economics majors with an interest in public policy.
The William B. Sailer '82 Scholarship was created in 2004 and is awarded on the basis of academic merit and financial need.
The Richard B. Saltzman ' 77 Scholarship was established in 2006 by Richard B. Saltzman. This renewable scholarship is awarded on the basis of academic merit and financial need. The Amelia Emhardt Sands '31 Scholarship, created in 1995 by a bequest from her estate, is awarded to a student who has demonstrated financial need.
The Katharine Scherman '38 Scholarship is awarded to a student with a primary interest in the arts and the humanities who has special talents in these fields. Students with other special interests, however, will not be excluded from consideration. Established in 1963 by her husband, the renewable scholarship honors Katharine Scherman.
The Peter '57 and David '58 Schickele Scholarship was established by an anonymous donor in 2000. Named for Peter and in memory of his brother, David, it is awarded on the basis of academic merit and financial need.
Preference is given to students from the Native American community in the plains, desert, and mountain states west of the Mississippi River.
The Schmidt/Lyman Scholarship, established in 2005 , is awarded on the basis of academic merit and financial need. The scholarship is renewable.
The Walter Ludwig Schnaring Scholarship was established in 1998 by a gift from the estate of Helen Hillborn Schnaring, in memory of her husband. This renewable scholarship is unrestricted.
The Schneck Family Scholarship was established in 2001 by Jennifer Schneck ' 83. The renewable scholarship is awarded on the basis of academic merit and financial need.
The Howard A. Schneiderman '48 Scholarship, established in 1991 by his family, is awarded to a first-year student and is renewable. Preference is given to students with an interest in the biological sciences.
The Schoenbaum Family Scholarship was established in 2003 by Stephen B. Schoenbaum '62. It is awarded on the basis of academic merit and financial need and is renewable. Preference is given to first-generation college students.
The Gustavo R. Schwed '84 and Lucy E. Harrington '85 Scholarship was established in 2006 by Gus Schwed and Lucy Harrington. The
renewable scholarship is awarded on the basis of academic merit and financial need. Preference is given to economically disadvantaged students who represent the first generation in their families to attend college.
The William G. and Mary N. Serrill Honors Scholarship, created in 1931 through a gift from William's estate, is awarded to a deserving student on the basis of financial need.
The Clinton G. Shafer '51 Scholarship, established in 1964 by his family, is awarded to a deserving student on the basis of academic merit and financial need, with preference given to engineering and physical science majors.
The Joe '25 and Terry Shane Scholarship was created in 1986 in honor of Joe Shane, who was vice president of Swarthmore College's Alumni, Development, and Public Relations from 1950 to 1972, and his wife, Terry, who assisted him in countless ways in serving the College. The renewable scholarship was established by their son, Larry Shane '56, and his wife, Marty Porter Shane ' 57 , in remembrance of Joe and Terry's warm friendship with generations of Swarthmore alumni. This award is made to a first-year student on the basis of academic merit and financial need.
The Roy J. '70 and Linda G. Shanker Scholarship was established in 2006. This renewable scholarship is awarded on the basis of academic merit and financial need.
The Leonard Shapiro Scholarship was established in 2004 by his son, Robin Marc Shapiro '78. The award assumes both academic excellence and financial need and is awarded to a first-year student who shows great promise. Preference for this renewable scholarship is given to a student who is the first generation of his or her family to attend a college or university in the United States.
The Felice K. Shea '43 Scholarship was established in 2004 by an anonymous donor and honors the Honorable Felice K. Shea, who has dedicated her life to issues of justice and public service throughout her 25 years on the bench and her work with the Legal Aid Society of New York. The renewable scholarship is awarded on the basis of academic merit and financial need with preference for a student looking toward a career in public service.
The Philip Shen and Sylvia Lo Shen Scholarship was established in 2006 by an anonymous donor to honor the parents of the donor's classmate, Kairos Shen '87. This renewable scholarship is awarded on the basis of academic merit and financial need. Preference is given to Chinese students who are not U.S. citizens and students interested in religious studies.

The Florence Creer Shepard '26 Scholarship, established in 1988 by her husband, is awarded on the basis of high scholastic attainment, character, and personality.
The Caroline Shero '39 Endowed Scholarship, established on the occasion of her retirement from Swarthmore College in 1982, is awarded to a student who has demonstrated financial need.
The Annie Shoemaker Scholarship was created in 1899 and honors the memory of a member of the Board of Managers who served from 1876 to 1883 and 1891 to 1903 . The scholarship is awarded to a student on the basis of financial need.
The Sarah W. Shreiner Scholarship, given in 1965 in loving memory by her daughter, Leah S. Leeds ' 27 , is awarded to a deserving student on the basis of academic merit and financial need. Leah created the scholarship because she was "able to finish at Swarthmore due to someone's kindness in making money available" when her father fell ill and her family suffered extreme financial hardship.
The William C. '47 and Barbara Tipping '50 Sieck Scholarship was established in 1979 by the Siecks and is awarded annually to a student showing distinction in academics, leadership qualities, and extracurricular activities and who indicates an interest in a career in business.
The Gary J. Simon '79 Scholarship was established in 2002. The renewable scholarship is awarded on the basis of academic merit and financial need.
The Walter Frederick Sims, Class of 1897, Scholarship, established in 1975 by a gift from the estate of Florence Sims, is awarded to a deserving student on the basis of academic merit and financial need.
The Daniel M. Singer '51 Endowed Scholarship was established in 2005 by Maxine Frank Singer ' 52 in honor of her husband. This renewable scholarship is awarded on the basis of academic merit and financial need.
The Rose and Simon Siskin Scholarship was established in 2004 in loving memory by their family to provide financial aid on the basis of academic merit and financial need.
The Virginia L. '40 and Robert C. Sites Scholarship, established in 2003 by a bequest from Virginia Sites, is awarded to a deserving student on the basis of academic merit and financial need.
The Connie L. Baxter Scholarship was established by Eugene M. Lang '38 in 2010 in honor of Connie L. Baxter, in recognition of her extraordinary dedication as a member of the Swarthmore College staff. The scholarship shall be awarded to students on the basis of academic merit and financial need and is renewable.

Preference will be given to students who transfer to Swarthmore from a community college, or to students with an interest in classics or theater.
The Nancy Baxter Skallerup Scholarship was established in 1982 by her husband and children. The renewable scholarship is awarded to a first-year student with financial need.
The Ann Brownell Sloane '60 Scholarship was established in 2002 by Ann Brownell Sloane. Preference is given to a student majoring in history.
The William W. Slocum '43 Scholarship was established in 1981 and is awarded to a deserving student on the basis of academic merit and financial need.
The Courtney C. Smith Scholarship, established in 1987 by the Smith family and members of the Class of 1957, is for students who best exemplify the characteristics of Swarthmore's ninth president: intellect and intellectual courage, natural dignity, humane purpose, and capacity for leadership. Normally, the award is made to a member of the first-year class on the basis of merit and need. Recipients of this renewable scholarship gain access to a special file in the Friends Historical Library left by the scholarship's creator, the Class of 1957, inviting them to perpetuate the memory of this individual's 16 years of stewardship of the College's affairs and his tragic death in its service.
The W.W. Smith Charitable Trust provides scholarships to qualifying students from the five surrounding counties in the Philadelphia area. The Smith Charitable Trust has contributed significant annual funds (as opposed to endowed funds) to Swarthmore student scholarships over many years.
The Elizabeth Thorn Snipes Scholarship was established in 2004 by Jim Snipes '75. The renewable scholarship is awarded on the basis of academic merit and financial need, with preference given to students majoring in religion or philosophy.
The Harold E. '29 and Ruth Calwell Snyder Premedical Scholarship, the gift of Harold E. Snyder in 1992, provides support up to full tuition and fees for junior or senior premedical students and is awarded on the basis of academic merit and financial need.
The Cindy Solomon Memorial Scholarship was created in 1979 by her parents, Mary and Frank Solomon, Jr. '50. It is awarded with preference given to a young woman in need of financial assistance who has a special talent in poetry or other creative and imaginative fields.
The Frank Solomon Memorial Scholarship was created in 1955 by family, friends, and the Joseph \& Feiss Company Charity Fund. The
renewable scholarship is awarded on the basis of academic merit and financial need.
The Frank Solomon Jr. '50 Scholarship was established in 2004. The scholarship is awarded on the basis of academic merit and financial need.
The Helen Solomon Scholarship was given in 1988 in her memory by her son, Frank Solomon Jr. '50. The renewable scholarship is awarded to a first-year student on the basis of merit and need.
The Babette S. Spiegel '33 Scholarship, given by her family in 1972 in memory of Babette S. Spiegel, is awarded to a student showing very great promise as a creative writer (in any literary form) who has need of financial assistance. The English Department assists in the selection.
The William T. '51 and Patricia E. Spock Scholarship was established in 2000 by Thomas E. '78 and Linda M. Spock. This renewable scholarship is awarded with preference given to a man or woman majoring in mathematics or the fine arts.
The Harry E. Sprogell '32 Scholarship, established in 1981 in memory of Harry E. Sprogell ' 32 in honor of his class's 50th reunion, is awarded to a junior or senior with financial need who has a special interest in law or music.
The Mary L. Sproul, Class of 1907, Scholarship was established by a bequest in 1949 from this alumna, cousin of former Pennsylvania governor, William Sproul. The scholarship is awarded to a deserving student on the basis of academic merit and financial need.
The Helen E. W. Squier Scholarship, created in 1892, provides financial aid to a student with need.
The Helen G. Stafford '30 Scholarship, established by a bequest from the estate of her sister, Anna R. Stafford, is awarded to a deserving student on the basis of financial need.
The C. V. Starr Scholarship, established in 1988 by The Starr Foundation as a memorial to its founder, provides scholarship assistance on the basis of academic merit and financial need.
The David Parks Steelman Scholarship, established in his memory in 1990 by C. William '63 and Linda G. Steelman, is awarded annually to a deserving male or female student on the basis of academic merit and financial need, with preference given to someone showing a strong interest in athletics. The Stella Steiner Scholarship was established in 1990 by Lisa A. Steiner '54 in honor of her mother. The renewable scholarship is awarded to a first-year student on the basis of academic merit and financial need.

The Anne C. Stephens and Janaki Ramaswamy Scholarship was established in 2006 by Christianna Strohbeck ' 80 and Ramaswamy Murari. The renewable scholarship is awarded on the basis of academic merit and financial need. Preference is given to students who demonstrate a commitment to teaching or counseling to develop the human and intellectual potential of others.
The Morris and Pearl Donn Sternlight Scholarship, established by their son, Peter D. Sternlight ' 48 , in 2005, is awarded on the basis of academic merit and financial need.
The Thomas D. '87 and Kathleen B. '87
Stoddard Scholarship was established in 2004. This gift of restricted endowment funds is awarded on the basis of academic merit and financial need.
The Clarence K. Streit Scholarship, established in 1975, is awarded to a student entering the junior or senior year and majoring in history. Preference is given to persons, outstanding in initiative and scholarship, who demonstrate a particular interest in early American history. This scholarship honors Clarence K. Streit, author of Union Now: A Proposal for an Atlantic Federal Union of the Free, whose seminal ideas were made public in three Cooper Foundation lectures at Swarthmore.
The Francis Holmes Strozier '57 Memorial Scholarship, created in 1956 by his parents following his death, is awarded to a deserving student on the basis of academic merit and financial need.
The Joseph T. Sullivan Scholarship, established by a bequest in 1922, is awarded to a deserving student on the basis of academic merit and financial need.
The Solon E. Summerfield Endowed Scholarship, established in 1991 by the Summerfield Foundation, is awarded on the basis of academic merit and financial need with a preference for students from the Midwest. The Swarthmore College Asian Scholarship was established in 2003 by Ahna Dewan '96, Terence Graham '94, Bruce Wook Han '86, George Hui ' 75 , Min Lee ' 00 , Thomas Lee ' 73 , Benjamin Su '96, Mark Tong '99, Quoc T. Trang '93, Stephanie Wang '99, and Michael Yu ' 88 . The scholarship is awarded on the basis of financial need and academic excellence (or potential for academic excellence) to
Swarthmore College students of Asian ancestry (excluding U.S. nationals).
The Katharine Bennett Tappen, Class of 1931, Memorial Scholarship was established in 1979 by her sister, a member of the Class of 1928, and is awarded to a first-year student. The scholarship is renewable for four years at the discretion of the College. Preference is given to a resident of the Delmarva Peninsula.

The Newton E. Tarble, Class of 1913, Award, established in 1961 by Newton E. Tarble, is granted to a first-year man who gives promise of leadership, ranks high in scholarship, character, and personality, and resides west of the Mississippi River or south of Springfield, Ill.
The Julia Fishback Terrell '45 Scholarship was established in 2004 by Burnham Terrell ' 45 in honor and memory of Julia Terrell. The renewable scholarship is awarded on the basis of academic merit and financial need with a preference given to students with potential for service to the College.
The John S. Thayer Endowed Scholarship was established by a bequest from this friend of the College in 2007. The renewable scholarship is awarded on the basis of academic merit and financial need.

## The Phoebe Anna Thorne Memorial

 Scholarship was established by a Thorne family member in 1911. Preference is given to members of the New York Quarterly Meeting of the Religious Society of Friends. The scholarship is renewable.The Titus Scholarship was established by a bequest from Georgiana Titus, Class of 1898, and is awarded to a deserving student on the basis of academic merit and financial need.
The David Todd '38 Scholarship was established in 2004 in his memory by his daughter, Rebecca Todd Lehmann '64, and her husband, Scott K. Lehmann '64. The scholarship is awarded on the basis of academic merit and financial need with preference for a student in the natural sciences.
The Jean Goldman Todd and Alden Todd '39
Endowed Scholarship was established in 2002 by writer and editor Alden Todd. The late Jean Goldman Todd was a research biologist specializing in tissue culture. The renewable scholarship is awarded on the basis of academic merit and financial need with preference given to students concentrating in the life sciences.
The Patricia Trinder Scholarship, awarded on the basis of academic merit and financial need, is renewable. This scholarship was created in 2006 to honor the memory of Pat Trinder, recruitment manager and assistant director of career services (1988-2003) and secretary to the chairman of athletics (1979-1988). Pat's long career at the College was dedicated to reaching out, serving, supporting, encouraging, and being a friend to students as they navigated life at Swarthmore. She is remembered for her compassion, her larger-than-life personality, and her warmth toward others. The donors to this scholarship hope it will be awarded to a student who exemplifies this spirit.

The Audrey Friedman Troy Scholarship, established in 1964 by her husband, Melvin B. Troy '48, is awarded to a first-year man or woman. Prime consideration for this renewable scholarship is given to the ability of the prospective scholar to profit from a Swarthmore education and to be a contributor to the College and, ultimately, to society.
The Jane Hausman and Geoffrey M. B. '75 Troy Scholarship, established in 1999, is awarded annually to a deserving student on the basis of academic merit and financial need, with preference given to art history majors.
The Robert C. '36 and Sue Thomas '35 Turner Scholarship, established in 1987, is awarded to a deserving student on the basis of academic merit and financial need.

## The Daniel Underhill Scholarship was

 established by a bequest from Edward Clarkson Wilson, Class of 1891, and a gift by Daniel Underhill, Jr. Class of 1894. The scholarship is named for Daniel Underhill and also recognizes Underhill's father's 31-year tenure on the Board of Managers. The scholarship is awarded to a deserving student on the basis of financial need.The Vaughan-Berry Scholarship was established in 1963 by Harold S. Berry ' 28 and Elizabeth Vaughan Berry ' 28 through their estate plans to provide financial assistance to needy students.
The William Hilles Ward, Class of 1915 , Scholarship was established in 1967 by family members in memory of this alumnus who served on seven committees during his years on the Board of Managers. It is awarded to a deserving student on the basis of academic merit and financial need with preference for a science major.
The Gertrude S. Weaver '38 Scholarship was endowed in her memory by her longtime friend and companion Anna Janney de Armond '32. The scholarship, renewable in the senior year, is awarded each year to a woman student planning a career in teaching, with preference given to a student who is majoring or has a special interest in German or Chinese language, literature, history, or European history.
The Ellen V. Weissman '72 Scholarship was created in 2000 . The renewable scholarship is awarded annually on the basis of academic merit and financial need.
The Stanley and Corinne Weithorn Scholarship was established in 1981. The renewable scholarship is awarded with preference given to a student who has expressed a serious interest in the area of social justice and civil rights.
The Suzanne P. Welsh Scholarship was created in 2000 by an anonymous donor in recognition of outstanding administrators at Swarthmore College. The Welsh fund was established in honor of Suzanne P. Welsh, who joined the

College staff in 1983 and became its treasurer in 1989 and vice president for finance and treasurer in 2002. The renewable scholarship is awarded on the basis of academic merit and financial need.
The David '51 and Anita '51 Wesson Scholarship was established on the occasion of their 50th reunion in honor of their parents, Eleanor and Castro Dabrohua and Marion and Philip Wesson. The renewable scholarship is awarded to a first-year student on the basis of academic merit and financial need. Preference is given to a student who is the first in his or her family to attend college.
The Dan and Sidney West Scholarship was established in 2003 by an anonymous donor to reflect the appreciation, respect, and affection that the Swarthmore College community holds for the Wests and to honor their significant accomplishments at institutional, community, and personal levels. In 2007, Dan and Sidney added funds to this endowment. The renewable scholarship is awarded on the basis of financial need and academic merit, with a preference for students from Arkansas, Oklahoma, or Texas. The Westbury Quarterly Meeting Scholarship was created in 1874, when the Westbury Quarterly Meeting, N.Y., turned over to Swarthmore College a fund of $\$ 5,000$, called the Educational Fund belonging to the Westbury Quarterly Meeting. The scholarship is awarded to students with financial need.
The Deborah F. Wharton Scholarship was created in 1875 and honors the mother of Joseph Wharton, who served on the Board of Managers from 1883 to 1907. The scholarship is awarded to a deserving student on the basis of financial need.
The White Family Scholarship, established in 1972, provides financial aid for a deserving student. A preference is given to students with an interest in business, economics, or engineering.
The Widdicombe Family Scholarship was established in 2006 by Stacey "Toby" Widdicombe III '74, Gerard C. Widdicombe, and Elizabeth A. Widdicombe in honor of their parents. This renewable scholarship is awarded on the basis of academic merit and financial need.
The Frederick J. Wiest Jr. '37 and Elizabeth S. Wiest ' 38 Scholarship was established in 2006 and is awarded on the basis of academic merit and financial need.
The Rachel Leigh Wightman Scholarship was created in 2000 by Colin W. ' 82 and Anne Bauman ' 82 Wightman in memory of their daughter. The renewable scholarship is awarded to a gentle person whose quiet, unrelenting love of learning inspires similar passion in those
around them. The scholarship is awarded on the basis of need to a worthy student.
The Erik Joseph Wilk '90 Scholarship, established in 2005, is awarded on the basis of academic merit and financial need with a preference for someone who embraces, and has a sensitivity for and acceptance of diversity, including other cultures and sexual orientations. The Samuel Willets Scholarship was created in 1885 to honor a member of the original committee to solicit funds for "The Establishment of Swarthmore College" who also served on the Board of Managers from 1862 to 1883. The scholarship is awarded to a deserving student on the basis of financial need. The I.V. Williamson Scholarship, established in 1885 by a gift from the sale of property by this Philadelphia merchant and philanthropist, is awarded to a deserving student on the basis of academic merit and financial need.
The Edward Clarkson Wilson and Elizabeth T. Wilson Scholarship, established in 1948 to honor the former principal of the Baltimore Friends School and his wife, is awarded to a deserving student on the basis of financial need.
The Elmer L. Winkler '52 Scholarship, established in 1980 by this alumnus, is awarded annually to a deserving student on the basis of academic merit and financial need.
The Ned Winpenny '74 Memorial Scholarship was established in 2000 by an anonymous donor. The renewable scholarship is awarded on the basis of academic merit and financial need.
The Robert Wolf '39 Scholarship was endowed in his memory by his sisters, Ruth Wolf Page '42 and Ethel Wolf Boyer ' 41 . The renewable scholarship is awarded each year on the basis of need and merit to a junior or senior majoring in chemistry or biology.
The Letitia M. Wolverton, Class of 1913 , Scholarship, given by a bequest in 1983 from Letitia M. Wolverton, provides scholarships for members of the junior and senior classes who have proved to be capable students and have need for financial assistance to complete their education at Swarthmore College.
The Mary Wood Scholarship, created through a bequest in 1898 from this Media, Pa., resident, is awarded to a deserving student on the basis of financial need.
The Roselynd Atherholt Wood '23 Scholarship, established in 1983 by this alumna, is awarded to a deserving student on the basis of academic merit and financial need.
The Thomas Woodnutt Scholarship was established in 1905 by Hannah H. Woodnutt, then a member of the Board of Managers, in memory of her husband, who had from the
beginning taken a great interest in Swarthmore College.
The Frances '28 and John '30 Worth Scholarship was established by Frances Ramsey Worth in 1993. The renewable scholarship is awarded to a first-year student with strong academic credentials and financial need.
The David Wright '65 Scholarship was established in 2005 and is awarded on the basis of academic merit and financial need.
The Elizabeth Cox Wright Endowed Scholarship was established in 2006 by Pamela Taylor Wetzels ' 52 to honor an outstanding, beloved teacher known for instilling a love of Shakespeare in her students and holding poetry seminars in her home. Elizabeth Cox Wright came to Swarthmore College as an instructor of English in 1930 and retired as a professor emerita of English in 1964. She died in 1973. This renewable scholarship is awarded on the basis of academic merit and financial need.
The Harrison M. Wright Scholarship was created in 1993 by friends, colleagues, and former students of Harrison M. Wright, Isaac H. Clothier Professor of History and International Relations, on the occasion of his retirement from the College. The scholarship supports a student who will study in Africa.
The Michael M. and Zelma K. Wynn Scholarship, established in 1983 by Kenneth R. Wynn ' 74 in honor of his mother and father, is awarded annually to a student on the basis of need and merit.
The Richard A. Yanowitch '81 Scholarship, established in 2002, reflects the donor's encouragement of student interest in international relations and cross-cultural development. The renewable scholarship is awarded on the basis of academic merit and financial need, with preference given to African Americans and other minority groups. It is hoped that during his or her time at the College, the Yanowitch scholar will study history, languages, and international cultures.
The Paul Ylvisaker H'78 Scholarship was established in 2008 by a member of the Class of 1952 to honor an articulate, inspiring, and charismatic faculty member who taught political science from 1948 to 1955. In 1978, Paul Ylvisaker returned to Swarthmore to receive an honorary degree, which recognized his contributions as a champion of cities and the urban underclass as a planner, government official, foundation executive, and educator. This scholarship is awarded to students on the basis of academic merit and financial need.

### 6.1 The Residential College Community

Swarthmore College seeks to help its students realize their fullest intellectual and personal potential combined with a deep sense of ethical and social concern. The purpose of Swarthmore College is to make its students more valuable human beings and more useful members of society. The College is committed to student learning in and out of the classroom and thus supports the personal and leadership development of students through extracurricular activities.

### 6.1.1 Student Rights, Responsibilities, and Code of Conduct

Students are expected to familiarize themselves with the policies and rules concerning their conduct. The Student Handbook provides information about academic freedom and responsibility; ethical use of the library and other educational resources; standard citation practices; the information technology acceptable use policy; and the policies and procedures that guide the process when academic misconduct is suspected.

### 6.2 Residential Life

Swarthmore is primarily a residential college, conducted on the assumption that the close association of students and instructors is an important element in education. Most students live in college residence halls. New students are required to live in the residence halls.

### 6.2.1 Housing

Seventeen residence halls, ranging in capacity from 8 to 214 students, offer a diversity of housing styles. Several of the residence halls are a 5 to 15 -minute walk to the center of campus. Swarthmore's residence halls are Alice Paul; Dana; David Kemp (the gift of Giles Kemp ' 72 and Barbara Guss Kemp, in honor of Giles' grandfather); Hallowell; Kyle House (named in honor of Fred and Elena Kyle '55); Lodges; Mary Lyon; Mertz Hall (the gift of Harold and Esther Mertz); Palmer; Pittenger; Roberts; the upper floors in the wings of Parrish Hall; Strath Haven; Wharton Hall (named in honor of its donor, Joseph Wharton, a one-time president of the Board of Managers); Willets Hall (made possible largely by a bequest from Phebe Seaman and named in honor of her mother and aunts); Woolman House; Worth Hall (the gift of William P. and J. Sharples Worth, as a memorial to their parents).
A mixture of classes lives in each residence hall. About 90 percent of residence hall areas are designated as coeducational housing either by floor, section, or entire building. The remaining areas are single-sex housing.

Although single-sex options are offered, they are not guaranteed. Students should not expect to live in single-sex housing for all four years. In these single-sex sections, students may determine their own visitation hours up to and including 24-hour visitation.
First-year students are assigned to rooms by the deans. Efforts are made to follow the preferences indicated and to accommodate special needs, such as documented disabilities. After the first year students choose their rooms in an order determined by lot or by invoking special options-among these are block housing, allowing friends to apply as a group for a section of a particular hall. There is also the opportunity to reside at neighboring Bryn Mawr and Haverford colleges in a crosscampus housing exchange that proceeds on a matched one-for-one basis. First- and secondyear students typically reside with roommates, whereas juniors and seniors may select single rooms. All students are expected to occupy the rooms to which they are assigned or which they have selected through the regular room choosing process unless authorized by the deans to move.
New students are required to live in College housing for their first two semesters. After their first year at the College, students are permitted to live in non-College housing.
Resident assistants, selected from the junior and senior classes, are assigned to each of the residence halls. These leaders help create activities for students, serve as support advisers to their hallmates, and help enforce College rules for the comfort and safety of the residents.
Residence halls remain open during October,
Thanksgiving, and spring breaks but are closed to student occupancy during winter vacation.
No meals are served during October and spring breaks.
Guests- Friends of Swarthmore students are welcome to visit campus. If a guest of a student will be staying in a residence hall overnight, the resident assistant must be notified, and all roommates must agree to allow the guest to stay. A guest is not permitted to stay in a residence hall more than four nights each term. Residence halls are designed for our student population, and as such children and adults should not be overnight guests. Requests for exceptions must be made to the director of residential life.
Student hosts are responsible for the conduct of their guests on campus and will be held accountable for any violation of the code of conduct or other rules of the College committed by a guest.
More detailed housing rules and regulations are found in the Student Handbook, and on the
housing website:
www.swarthmore.edu/housing.

### 6.2.2 Storage and Insurance

Storage areas are provided in most residence halls; a limited-access storage room is available for valuables.
The insurance program for the College is designed to provide protection for College property and does not include the property of students or others. Students and their parents are strongly urged to review their insurance program in order to be sure that coverage is extended to include personal effects while at college.

### 6.2.3 Dining

All students living in campus housing must participate in one of the College's three meal plans. Students living off campus may subscribe to the meal plans, or they may purchase a debit card or a five-meal plan from the Dining Services office in Sharples. The debit card may be purchased in any amount and renewed at any time. The five-meal plan allows access to Sharples for five lunches per week at a rate discounted from the cash entry fee.
Swarthmore's Dining Services oversees the main dining facility in Sharples Dining Hall, Essie Mae's Snack Bar, the Kohlberg coffee bar, the Science Center coffee bar, and the Mary Lyon's Breakfast Room.
Sharples Dining Hall is open Monday through Friday, 7:30 a.m. to 7:15 p.m.; Saturday, 7:30 a.m. to 6:30 p.m.; and Sunday, 10 a.m. to 6:30 p.m. Unlimited servings are permitted, but takeout is not. Although a sincere effort is made to meet the dietary needs of all students, not all special requirements can be accommodated. Kosher meals are not available in the dining hall.
Essie Mae's Snack Bar, the Kohlberg coffee bar, and the Science Center coffee bar are cash operations. Students may use their meal equivalency at Essie Mae's. Points are accepted at all three locations.
Mary Lyon's Breakfast Room serves a hot breakfast on Saturday and Sunday, which is prepared by students. Mary Lyon's residents and guests may use regular meal credit to partake in the weekend breakfast.
Swarthmore students may obtain passes to eat at the Bryn Mawr and Haverford college dining halls. Students may also arrange to have raw ingredients packed for cook-outs and special meals as a substitute for meals. Please see the dining hall staff for details.
Students eating in all college dining locations must present their college picture identification card for meal credit or points. These policies are in effect to protect each student's personal meal plan account.

### 6.2.4 Parking

Parking is very limited on Swarthmore's campus. Students must have the permission of the Car Authorization Committee to park on campus and should apply each spring term for the following academic year. Students who live off-campus in the Swarthmore Borough can secure street parking through Borough Hall, and are not generally eligible for campus parking spots. First-year students are not permitted to bring cars to campus.

### 6.3 Health

### 6.3.1 Worth Health Center (WHC)

The WHC services are available 24 hours a day, 7 days a week when the College is in session. The center, a gift of the Worth family in memory of William Penn Worth and Caroline Hallowell, houses the Health Service's outpatient treatment facilities, offices of the Counseling and Psychological Services (CAPS) staff, and rooms for students who require nonhospital level infirmary care.

### 6.3.2 Student Health Services

The WHC team includes nurses, nurse practitioners, a nutritionist, internists, and an adolescent medicine physician. The physicians are contracted through Crozer-Chester Medical Center (CCMC). We also contract with a masseuse who charges on a fee-for-service basis. The WHC staff members are willing to coordinate care with personal health care providers, when given permission by the student. In addition, if a student is admitted to the CCMC, WHC staff members and physicians are willing to coordinate care with the hospital providers.
Students may make appointments with health care providers at scheduled times during the week. When school is in session, a registered nurse will interview and evaluate the health needs of the sick student. Through this easy access to care students are given important health information, scheduled to see a health care provider or treated and released based on the level of illness or injury.
WHC maintains a small dispensary of commonly used prescription medications. Students who need prescription medications may purchase them through their insurance or through WHC at a reduced rate. WHC has arranged delivery services from a local pharmacy for students who are unable to access them otherwise. Similarly, laboratory services are provided at low cost or billed through the student's insurance.
We respect a student's right to confidentiality, do not share personal information about a student but encourage a student to speak with
parents when his/her care becomes more complicated.
In supporting the College's mission, the WHC is highly committed to providing comprehensive and clinically exceptional care to students. We invite student and parent feedback as part of our review and assessment processes.
For more detailed information and forms, especially those for new students, visit www.swarthmore.edu/health.

### 6.3.3 Counseling and Psychological Services (CAPS)

Services for students include counseling and psychotherapy, after-hours emergency-on-call availability, consultation regarding the use of psychiatric drugs in conjunction with ongoing psychotherapy, psychological testing, and educational talks and workshops. Counseling and Psychological Services (CAPS) participates in training resident assistants and student academic mentors as well as other student support groups and provides consultation to staff, faculty, and parents.
CAPS comprises a diverse group of psychological, social work, and psychiatric professionals. The director and staff collectively provide regular appointment times Monday through Friday. Students may be referred to outside mental health practitioners at their request or when long-term or highly specialized services are needed. CAPS main office is located in the Worth Health Center, North Wing.
Treatment at CAPS is conducted within a policy of strict confidentiality. Where there may be a significant question of imminent threat to someone's life or safety, CAPS reserves the right to break confidentiality in order to ensure safety.
Requests for service may be made in person or by phone (x8059) between $8: 30 \mathrm{a} . \mathrm{m}$. and 4:30 p.m., Monday through Friday. In the event of an after-hours emergency, contact the Health Center (x8058) or Public Safety (x8333).
For more detailed information about CAPS, visit the website at
www.swarthmore.edu/caps.xml.

### 6.3.4 Health Insurance

Students may consult the medical facilities of the College when ill or injured in athletic activities or otherwise, free of charge. The College cannot assume financial responsibility for medical, surgical, or psychological expenses incurred when seeking or referred for care elsewhere. Students and their families are responsible for medical expenses incurred while students are enrolled at the College including medication costs vaccine costs and lab fees.

Students who have no insurance or inadequate insurance coverage must enroll in the College health plan offered to all students. If your insurance status changes, notify student health services immediately. Enrollment to the College health plan must be done within 31 days of the loss of other coverage. Students receiving financial aid may have a portion of the premium cost defrayed. The College provides supplemental health insurance for students who are actively participating in intercollegiate and club sports. For further information, please consult the Medical Administrator/Insurance Coordinator (health@swarthmore.edu). All athletes with questions related to sports injuries should contact Marie Mancini
(mmancin1@swarthmore.edu).

### 6.4 Campus Safety

The Public Safety Department office is located in the Benjamin West House. The department provides round-the-clock uniformed patrol of the campus buildings and grounds by professionally trained patrol officers who can assist students in a variety of ways from emergency response to general advice on crime prevention. Students are encouraged to call the department at 610-328-8281 any time they feel Public Safety can be of assistance. All emergencies should be reported by contacting the department's emergency telephone line 610-328-8333. Any crime or suspected crime should be reported immediately to the Public Safety Department.
Swarthmore College's Annual Crime and Fire Safety Report is written to comply with the (Pa.) College and University Security Information Act: 24 P.S., Sec. 2502-3©, the federal Jeanne Clery Disclosure of Campus Security Policy and Campus Crime Statistics Act, and the Campus Fire Safety Right to Know Act. This annual report includes statistics for the previous 3 years concerning reported crimes that occurred on campus, in certain off-campus buildings owned or controlled by Swarthmore College, and on public property within or immediately adjacent to and accessible from the campus. The report also includes institutional policies concerning campus security, such as policies concerning alcohol and drug use, crime prevention, the reporting of crimes, sexual assault, and other matters. The College's Fire Safety Report contains a variety of fire safety related information in addition to campus fire statistics for the most recent three calendar years. To obtain a full copy of this document, or to discuss any questions or concerns, contact Owen Redgrave, director of public safety.

### 6.5 Cocurricular Opportunities

### 6.5.1 Student Government

The Student Council is the chief body of student government and exists to serve and represent the students of Swarthmore College. Its 11 members are elected semiannually. The powers and responsibilities of the Student Council are (1) the administration of the Student Activities Account; (2) the appointment of students to those committees within the College community upon which student representatives are to serve; (3) the oversight of those students of those committees; (4) the administration of student organizations; (5) the operation of just elections; (6) the execution of referendums; (7) the representation of the student body to the faculty, staff, and administration, and to outside groups, as deemed appropriate; and (8) the formulation of rules needed to exercise these powers and to fulfill these responsibilities. The Student Council provides a forum for student opinion and is willing to hear and, when judged appropriate, act upon the ideas, grievances, or proposals of any Swarthmore student.
The Student Budget Committee allocates and administers the Student Activity Fund. The Social Affairs Committee allocates funds to all campus events, maintains a balanced social calendar, and is responsible for organizing formals and various other activities that are designed to appeal to a variety of interests and are open to all students free of charge.
Service on College Committees is determined by the Appointments Committee of Student Council which selects qualified student representatives.

### 6.5.2 The Arts

Creative arts activities take place in conjunction with the departments of art, English, music and dance, and theater. There are also many student groups that organize creative activities. Professional performers and artists are brought to campus regularly, both to perform/exhibit and to offer master classes. Campus facilities include practice and performance spaces available for student use.

### 6.5.3 Athletics/Physical Activities

Swarthmore's athletic program is varied, offering every student the opportunity to participate in a wide range of sports, including intercollegiate, club, and intramural teams.

### 6.5.4 Publications and Media

The Phoenix, the weekly student newspaper; the Halcyon, the College yearbook; The Daily Gazette, a Web based news service; and WSRN, the campus radio station, are completely student-run organizations. War News Radio is a combined curricular and student run activity. The campus New Media

Center supports student initiatives in video and web formats. Several other student publications include literary magazines and newsletters. For more information, contact the student publications coordinator.

### 6.5.5 Service and Activism

Service and activism activities are an integral part of the lives of many students, faculty, and staff members. The Lang Center for Civic and Social Responsibility (see 6.6.5) coordinates and supports many of these endeavors, though there are also many independent projects in operation on the campus and in the local community.

### 6.5.6 Student Organizations

Students are encouraged to get involved in extracurricular activities at Swarthmore. More than 100 clubs and organizations span a broad range of interests such as community service; athletics; political action; and religious, cultural, and social activities. If there isn't a club or organization that meets a student's interest, he or she may form one with the guidance of Student Council.

### 6.6 Student Centers

### 6.6.1 Black Cultural Center

The Black Cultural Center (BCC), located in the Caroline Hadley Robinson House, provides a library, classroom, computer room, TV lounge, kitchen, all-purpose room, a living room/gallery, two study rooms, and administrative offices. The BCC offers programming, activities, and resources designed to stimulate and sustain the cultural, intellectual and social growth of Swarthmore's black students, their organizations and community. Further, the BCC functions as a catalyst for change and support to the College's effort to achieve pluralism. The BCC's programs are open to all members of the College community. The BCC is guided by Assistant Dean Karlene Burrell-McRae, with the assistance of a committee of black students, faculty, and administrators.

### 6.6.2 Fraternities

There are two fraternities at Swarthmore: Delta Upsilon, affiliated with a national organization, and Phi Omicron Psi, a local association. Although they receive no College or student activity funds, the fraternities supplement social life. They rent lodges on campus but have no residential or eating facilities. In recent years, about 6 percent of male students have decided to affiliate with one of the fraternities. Tom Elverson ' 75 serves as an adviser to the fraternities.

### 6.6.3 Intercultural Center

The Intercultural Center (IC) is a multipurpose center located in Tarble in Clothier, devoted to developing greater awareness of Asian American, Latino/Hispanic, gay/lesbian/bisexual, and Native American contributions to Swarthmore College as well as the broader society. The IC provides a supportive environment where students are welcome to discuss and understand the educational, political, and social concerns that affect them. The IC fosters the education of its members and the wider community about cultural, ethnic, class, gender, and sexual orientation differences. Through co-sponsoring programs and building alliances with the administration, other campus groups and departments, the IC increases diversity and respect for differences at all levels of campus life. The IC contains a resource center, small meeting rooms, and a large gathering room. The Resource Center will include Asian American, Hispanic/Latino/a, Native American and queer books, journals, films, videos, scholarships, academic resources, and alumni outreach information such as the alumni database, alumni mentor program, and alumni speaker series. The IC center and its programs are coordinated by Director Rafael Zapata, with support from student interns.

### 6.6.4 Interfaith Center

Religious advisers are located in the Interfaith Center in Bond Hall and currently consist of Jewish, Catholic, and Protestant professionals. The advisers and the Interfaith Center provide members of the Swarthmore community opportunities and resources, in an atmosphere free from the dynamics of persuasion, in which they can explore a variety of spiritual, ethical, and moral meanings; pursue religious and cultural identities; and engage in interfaith education and dialogue. The center comprises offices, a large common worship room, and a private meditation room.
Student groups of many faiths also exist for the purpose of studying religious texts, participating in community service projects, and exploring common concerns of religious faith, spirituality, and culture.
Various services are available on campus, and area religious communities welcome Swarthmore students.

### 6.6.5 Eugene M. Lang Center for Civic and Social Responsibility

The Lang Center, located at 3-5 Whittier Place, is a hub for activities that support Swarthmore's mission to "help students realize their fullest intellectual and personal potential combined with a deep sense of ethical and social concern." The center supports the College's commitment to social responsibility by
providing administrative, financial, logistical, and programming support for a wide range of opportunities to help make connections between the College and communities beyond, both local and global. Its five-person staff works with individual students, student groups, faculty, staff, and community partners. The Lang Center includes a resource room with extensive information about opportunities for service, advocacy, activism, social entrepreneurship, policy, and research, and coordinates the following programs:
Student-led service and activist groups-Many student-led groups use Lang Center facilities and also receive guidance from Lang Center staff. These groups are active in the areas of education, and educational reform; employment; public health; environmental justice; peace and conflict resolution; racial justice; and economic development.
The Swarthmore Foundation-A small philanthropic body formed by Swarthmore College in 1987 with endowments from alumni, foundations, and others, the Swarthmore Foundation supports students, graduating seniors, staff, and faculty involvement in community service and social action. Applications for grants are accepted three times during the academic year.
Summer Social Action Awards (S2A2)-These internships enable students to participate in summer community service and social action experiences on a full-time basis for up to 10 weeks by providing living expenses and summer earnings. Lang Center staff provides guidance to support students to find S2A2 sites that are congruent with their interests.
Lang Opportunity Scholarships-These are awarded to up to six students during first semester of their sophomore year. The scholarship includes a guaranteed summer internship and the opportunity to apply for a substantial grant that supports implementation of a major project. Lang Center staff work closely with Lang Opportunity scholars as they develop and carry out their projects.
Project Pericles Fund-Eugene M. Lang '38 and the Board of Managers of Swarthmore College created the Project Pericles Fund in 2005 to support groups of Swarthmore students who propose and implement social and civic action projects that are substantial in scope and length.
Courses and community-The Lang Center offers grants to faculty members who wish to add or revise courses in ways that connect content with communities outside the College. The grants may be used for summer stipends or to cover the cost of a course replacement to permit a course reduction for the faculty member.

The Eugene M. Lang Visiting Professorship for Issues of Social Change-The professorship was endowed in 1981 by Eugene M. Lang '38 to bring to the College an outstanding social scientist, political leader, or other suitably qualified person who has achieved professional or occupational prominence for sustained engagement with issues, causes, and programs directly concerned with social justice, civil liberties, human rights, or democracy.

### 6.6.6 Tarble Social Center

The Tarble Social Center in Clothier Memorial Hall was provided through the generosity of Newton E. Tarble of the Class of 1913 and his widow, Louise A. Tarble. The facility includes a snack bar, the College Bookstore, Paces (a student-run café and party space), an allcampus space, meeting rooms, a game room, the Swarthmore College Computer Society media lounge and the offices of the Student Budget Committee, the Social Affairs Committee (SAC), Debate Society, and Rattech.

### 6.6.7 Women's Resource Center

The Women's Resource Center (WRC) is located in a lodge on the west side of campus; it is open to all women on campus. It is organized and run by a student board of directors to bring together women of the community with multiple interests and concerns. The resources of the center include a library, kitchen, various meeting spaces, computer, and phone. The WRC also sponsors events throughout the year that are open to any member of the College community.

### 6.7 Student Advising

### 6.7.1 Class Deans

The Dean's Office oversees the advising system. The deans are available to all students for advice on any academic or personal matter. A Class Dean is assigned to each class, but students may approach any dean for help.

### 6.7.2 Academic Advising

Each first-year student is assigned to a faculty member or administrator who acts as the student's academic adviser. When students are accepted by a major, normally at the end of the sophomore year, the advising responsibility shifts to the chair, or chair's designate, of the student's major department. Requests for a change of adviser in the first two years will be freely granted subject only to equity in the number of advisees assigned to individual advisers.

### 6.7.3 Academic Support

Academic support can be accessed through the Office of the Associate Dean for Academic

Affairs, through the Office for Disability Services, through academic departments (peer mentors, clinics, and review sessions), through the Writing Center (Writing Associates), and in dormitories (Student Academic Mentors).
Tutors can be arranged through departments or through the Office of the Associate Dean for Academic Affairs. No fees are required for any of these services.
Student Academic Mentors (SAMs) are upper class students specially selected and trained to work with students on the development of skills necessary for academic success including time management, organization, study strategies and reading techniques. All residence halls with first-year students are assigned a SAM to serve as a resource for its residents.
Writing Associates (WAs) are students who have been specially trained to assist their peers with all stages of the writing process. WAs are assigned on a regular basis to selected courses, and they are located in the Writing Center in Trotter Hall. All students have access to the Writing Center as needed and can receive help on a drop-in basis.

### 6.7.4 Health Sciences Office (Premed Advising)

The staff of the Health Sciences Office is available to students and alumni considering a career in medicine, dentistry, veterinary medicine or other health professions. The Health Sciences Adviser counsels students throughout their undergraduate years and beyond, and assists them in the process of application for graduate training. Swarthmore graduates are represented at 55 medical schools in 22 states in the U.S., including such top schools as Harvard, Yale, Columbia, Penn, Stanford, Johns Hopkins, and many fine state universities. In addition, Swarthmore graduates are currently attending Cornell, Tufts, Virginia, Maryland and University of California-Davis veterinary schools and Penn, Temple and University of Connecticut dental schools. The College's acceptance rate is substantially higher than the national acceptance rate.
While many students planning a medical career decide to major in biology or chemistry, others elect to concentrate in one of the humanities or social sciences, while structuring their overall program to fulfill medical school requirements. The following courses are part of a typical program:
Cellular and Molecular Biology
Organismal and Population Biology
General Chemistry
Organic Chemistry I and II
Biological Chemistry

## English

Calculus I and II
General Physics I and II
As veterinary and dental schools have more variable requirements, in addition to those listed above, prevet and predental students should meet with Gigi Simeone, the Health Sciences Adviser, to plan their programs.

### 6.7.5 Prelaw Advising

Swarthmore's academic rigor provides an excellent preparation for students considering a career in law. Swarthmore graduates are represented at law schools across the U.S., including such top schools as Harvard, Columbia, Stanford, and Yale.
Swarthmore students interested in law are encouraged to take a varied and challenging academic program, which will develop their analytical, reading, writing and speaking skills. There is no prelaw major or prescribed prelaw coursework. Students have applied successfully to law school with majors and minors in the humanities, social sciences, and natural sciences.
Gigi Simeone, the Prelaw Adviser, is available to any student or alum considering a career in law. The Prelaw Office counsels students throughout their undergraduate years and beyond, and assists them in the process of application to law school. It offers a series of meetings with law school admissions deans each fall. The office also prepares dean's certifications for students applying to law schools that require it. More information is available at www.swarthmore.edu/prelaw.

### 6.7.6 Career Services

Career Services offers individualized attention to students who are seeking career direction, considering majors, exploring internships, job searching or applying for graduate school. Career Counselors and Career Peer Advisers help students develop knowledge of themselves and their life options, advance their career planning and decision-making abilities, and develop skills related to their internship/job search and graduate school admission. Individual counseling and group workshops encourage students to expand their career options through exploration of their values, skills, interests, abilities, and experiences. A noncredit Career Development course is available for all students, regardless of their academic discipline or year.
Career programming includes alumni career panels and dinners, presentations, workshops, employer information sessions, an etiquette dinner, career fairs and interview days. The office cooperates with Alumni Relations and the Alumni Council to help students connect with a wide network of potential mentors and
the offices co-sponsor the annual Lax Conference on Entrepreneurship.
Exploration of career options is encouraged through internships, summer jobs, and alumnihosted externships during winter break. Students may receive assistance in researching, locating, and applying for internships, employment, and graduate school admission and receive advice in how to gain the most they can from these experiences.
Career Services hosts on-campus recruiting by representatives from for-profit, government and nonprofit organizations. The Career Services website
(www.swarthmore.edu/careerservices.xml) provides access to comprehensive online databases of internship and job listings as well as an events calendar to make information about activities and programs available to students. Recommendation files are compiled for interested students and alumni to be sent to prospective employers and graduate admissions committees.

### 6.8 Student Judicial System

Swarthmore students assume responsibility for helping to sustain an educational and social community where the rights of all are respected. This includes conforming their behavior to standards of conduct that are designed to protect the health, safety, dignity, and rights of all. The College community also has a responsibility to protect the possessions, property, and integrity of the institution as well as of individuals. The aim of the College's Student Judicial Procedures is to balance all these rights, responsibilities, and community values fairly and efficiently. The judicial system is overseen by the associate dean of student life, and all questions should be directed to this office.
The formal judicial system at Swarthmore College has two main components: (1) adjudication by individual deans of minor infractions of College regulations, where a finding of guilt would result in a sanction less severe than suspension; and (2) adjudication by the College Judicial Committee (CJC) of serious infractions of College regulations, including all formal charges of academic dishonesty, assault, harassment, or sexual misconduct. The CJC is composed of faculty, staff, and administrators who have undergone training for their role.
Violation of the laws of any jurisdiction, whether local, state, federal, or (when studying abroad) foreign, may, at the discretion of the dean, subject a student to College disciplinary action. A pending appeal of a conviction shall not affect the application of this rule.

### 7.1 General Statement

Swarthmore College offers the degree of bachelor of arts and the degree of bachelor of science. The latter is given only to students who major in engineering. Four years of study are normally required for a bachelor's degree (see section 9.1), but variation in this term, particularly as a result of Advanced Placement (AP) credit, is possible (see section 3.5).
The selection of a program will depend on the student's interests and vocational plans. The primary purpose of a liberal arts education, however, is not merely to provide the best foundation for one's future vocation. The purpose of a liberal arts education is to help students fulfill their responsibilities as citizens and grow into cultivated and versatile individuals. A liberal education is concerned with the development of moral, spiritual, and aesthetic values as well as analytical abilities. Furthermore, just as a liberal education is concerned with the cultural inheritance of the past, so, too, it is intended to develop citizens who will guide societies on a sustainable course where future culture will not be compromised in the development of the present. Intellectually, it aims to enhance resourcefulness, serious curiosity, openmindedness, perspective, logical coherence, and insight.
During the first half of their college program, all students are expected to satisfy most, if not all, of the distribution requirements, to choose their major and minor subjects, and to prepare for advanced work in these subjects by taking certain prerequisites. The normal program consists of four courses or their equivalent each semester, chosen by the student in consultation with his or her faculty adviser.
All students must fulfill the requirements for the major. Before the end of the senior year, students are required to pass a comprehensive examination or its equivalent, given by the major department.
The program for engineering students follows a similar basic plan, with certain variations explained in the section on engineering. Courses outside the technical fields are distributed over all 4 years.
For honors candidates, courses and seminars taken as preparation for external evaluation occupy approximately one-half of the student's work during the last 2 years. In addition to work taken as a part of the Honors Program, the students take other courses that provide opportunities for further exploration. During the senior year, many departments offer a specially designed senior honors study for honors majors and minors to encourage enhancement and integration of the honors preparations. At the
close of the senior year, candidates for honors will be evaluated by visiting examiners.
The course advisers of first-year and sophomore students normally are members of the faculty appointed by the dean. For juniors and seniors, the advisers are the chairs of their major departments or their representatives.

### 7.2 Program for the First and Second Years

The major goals of the first 2 years of a Swarthmore education are to introduce students to a broad range of intellectual pursuits, to equip them with the analytic and expressive skills required to engage in those pursuits, and to foster a critical stance toward learning and knowing. All students must fulfill the requirements normally intended for the first 2 years of study, although in some science and engineering majors, students may spread some requirements over 4 years. Students entering Swarthmore as transfer students normally fulfill these requirements by a combination of work done before matriculation at Swarthmore and work done here, according to the rules detailed below.
To meet the distribution requirements, a student must earn degree-applicable credit in the following areas:

1. Complete at least 20 credits outside of one major department before graduation.
2. Complete at least three courses in each of the three divisions of the College (listed later). In each division, the three courses must be at least 1 credit each and may include up to 1 AP credit or credit awarded for work done elsewhere.
3. Complete at least two courses in each division at Swarthmore; these courses must be at least 1 credit each.
4. Complete at least two courses in each division in different departmental subjects; these courses must be at least 1 credit each and may include AP credit or credit awarded for work done elsewhere.
5. Complete at least three Writing courses or Writing seminars, and those three must include work in at least two divisions; students are advised to complete two Writing courses in the first 2 years.
6. Complete a natural sciences and engineering practicum.
Courses that have been excluded from counting toward the degree do not count toward the distribution requirements.
Students are advised to complete at least two courses in each division within the first 2 years.
For purposes of the distribution requirements, the three divisions of the College follow:

Humanities: art, classics (literature), English literature, modern languages and literatures, music and dance, philosophy, religion, and theater.
Natural sciences and engineering: biology, chemistry and biochemistry, computer science, engineering, mathematics and statistics, physics and astronomy, and psychology courses that qualify for the natural sciences and engineering practicum.
Social sciences: classics (ancient history), economics, education, history, linguistics, political science, psychology (other than natural sciences and engineering practicum courses), and sociology and anthropology.
A few courses do not satisfy the divisional distribution requirement. These are identified as such in the catalog or the official schedule of courses.
Writing courses: In addition to addressing fieldspecific substance, writing courses will focus on the development of the students' expository prose to ensure they can discover, reflect upon, organize, and communicate their knowledge effectively in written form.
NSEP science laboratory requirement: Natural sciences and engineering practicums (NSEPs) have at least 18 hours per semester of scheduled meeting time for laboratory, separate from the scheduled lecture hours. How the laboratory hours are scheduled varies with the nature of the course and the types of laboratories involved. Such meetings may entail weekly or biweekly 3-hour sessions in a laboratory, several all-day field trips, or several observation trips.
Cross-listed courses: Courses that are crosslisted between two departments in different divisions may, with the permission of the instructors, departments, and divisions involved, fulfill the divisional distribution requirement in one of the following ways: (1) in only one of the divisions so identified but not in the other; (2) in either division (but not both), depending on the departmental listing of the course on the academic record; (3) in neither of the divisions. In certain cases, the course may fulfill the distribution requirement according to the nature of the work done in the course by the individual student (e.g., a long paper in one of the departmental disciplines). The division of such courses is normally indicated in the catalog description for each course. When counting credits to determine a student's fulfillment of the 20-course-credit rule, crosslisted courses count (only) in the subject in which they are listed on the student record. Changing the subject listing of a cross-listed course on the student record can be arranged, depending on permissions, during or sometimes
after the course; there is a form for the purpose in the Registrar's Office.
First-year seminars: All students are encouraged to take a first-year seminar during the fall or spring of their first year. First-year seminars are offered across the curriculum and are designed to introduce students to a field of study and to engage them in learning skills that will support them throughout their college experience. Each first-year seminar is limited to 12 first-year students. Many (but not all) firstyear seminars count as the prerequisite to further work in the department in which they are offered.
Foreign language: It is most desirable that students include in their programs some work in a foreign language, beyond the basic language requirement (see section 9.1).
Mathematics: A student who intends to major in one of the natural sciences, mathematics, or engineering should take an appropriate mathematics course in the first year. Students intending to major in one of the social sciences should be aware of the increasing importance of mathematical background for these subjects.
Physical education: Students are encouraged to enjoy the instructional and recreational opportunities offered by the department throughout their college careers. As a requirement for graduation, all students not excused for medical reasons are required to complete 4 units of physical education by the end of their sophomore year. In addition, all students must pass a survival swimming test or complete a unit of swimming instruction. Most physical education courses are offered for a half a semester and earn 1 unit toward the 4 units required for graduation. A complete list of physical education opportunities including how many units each earns is available from the Physical Education and Athletics Office. More information can be found in the Physical Education and Athletics section. To ensure that all students complete the PE requirement and swim test by the end of the second year, students who fail to do so will not be eligible to participate in the spring housing lottery and will not be eligible to preregister for courses.
Transfer students: Students who enter Swarthmore as transfer students must fulfill Swarthmore's requirements for the first 2 years, including the natural sciences and engineering practicum. Transfer courses can be applied toward these requirements if specifically approved by the registrar. Transfer students who enter Swarthmore with 8 credits of college work are exempted from one of the three required writing courses and have the credits-atSwarthmore requirement reduced from 2 in each division to 1 in each division. Transfer students who enter Swarthmore with, at most, four semesters remaining to complete their
degree are exempted from two of the three required writing courses and are exempted from the requirement that in each division 2 credits be taken at Swarthmore. Transfer students can either apply transfer PE units toward the 4-unit physical education requirement or opt for a reduction in the PE requirement based on the student's transfer status, but transfer students cannot both transfer PE units and receive a reduction in the requirement. The optional reduction in PE units depends on the transfer class of the student. Transfer students who enter Swarthmore as sophomores can opt to complete 3 units of physical education and pass a survival swim test (a reduction of 1 PE unit). Transfer students who enter Swarthmore as juniors can opt to complete 2 units of physical education and pass a survival swim test (a reduction of 2 PE units).
Major application-the Sophomore Paper: Early in the sophomore year, each student should identify one or two subjects as possible majors, paying particular attention to departmental requirements and recommendations. In the spring of the sophomore year, each student will, with the guidance of his or her adviser, prepare a reasoned plan of study for the last 2 years. Sophomores who wish to link their interest in social service/social action to their plan of study are also encouraged to take advantage of the advising offered by the staff at the Lang Center for Civic and Social Responsibility. The sophomore plan of study, the "sophomore paper," will be submitted to the chair of the student's proposed major department as a part of the application for a major. Acceptance will be based on the student's record and an estimate of his or her capacities in the designated major. Students who fail to secure approval of a major may be required to withdraw from the College. Although faculty advisers assist students in preparing their academic programs, students are individually responsible for planning and adhering to programs and for the completion of graduation requirements. Faculty advisers, department chairs, other faculty members, the deans, and the registrar are available for information and advice.

### 7.3 Programs for Juniors and Seniors

The major goals of the last two years of a Swarthmore education are to engage students with a chosen field of inquiry and to assist them in assuming an independent role in creating and synthesizing knowledge within it. The breadth of exposure, acquisition of skills, and development of a critical stance during the first two years prepare students to pursue these goals. With the choice of a major and, perhaps, candidacy for honors, the focus shifts from
scope to depth. Students become involved for the second two years with a discrete field of inquiry and demonstrate their command of that field through the completion of courses within the major and courses taken outside the major that expand and deepen the student's perspective on the major.

### 7.4 Majors and Minors

All students are required to include sufficient work in a single department or program designated as a major. To complete a departmental major, a student must be accepted as a major; must complete eight courses (or more, depending on the department); must pass the department's comprehensive requirement; and must fulfill other specific departmental requirements. Detailed requirements for acceptance to departmental majors and for completion of them are specified in this catalog under the respective departmental listings and are designed to ensure a comprehensive acquaintance with the field. A student must accumulate 20 course credits outside one major, but there is no other limit on the number of courses that a student may take in his or her major.
Completing a second major or one or two minors is optional, as is choosing to do an Honors Program. Students are limited in the number of majors and/or minors they may earn. If they have only one major, they may have as many as two minors. Students who choose an honors major plus honors minor may have an additional course minor outside the Honors Program. If students have two majors, they may not have a minor, except in one circumstance: A student who elects honors, designating an honors major and minor, may have a second major outside of honors if that second major includes the same subject as the honors minor. The completion of two majors must be approved by both departments. Triple majoring is not allowed.
Most departments and programs offer course minors. Those departments or programs that do not offer a course minor are Comparative Literature, Economics, Political Science, Sociology and Anthropology, and Studio Art. (These departments or programs do offer honors minors.) Minors will include at least 5 credits.
Double counting in majors and minors: If a student has two majors and one is interdisciplinary, no more than 2 credits may be double counted with the student's other major. However, the double-counting limit is not applicable to courses that students are required by their departmental major to take in other departments. Of the 5 credits required for a minor, 4 may not be double counted with the
student's major or other minor. The doublecounting prohibition applies to any comparison of two given programs of study (not three taken together, even if the student has three programs). This means that a student who has a major in medieval studies, for example, and minors in both English literature and gender and sexuality studies would need four courses in English literature that are not part of the medieval studies major and four courses in gender and sexuality studies that are not part of the medieval studies major. In addition, each minor must have four courses that are not part of the other minor. Special minors are not permitted.
Exceptions to the double-counting prohibition:

1. The double-counting prohibition is not applicable to courses that students are required by their majors or minors to take in other departments. For example, mathematics courses required for an engineering major are not automatically excluded from counting toward a minor defined by the Mathematics and Statistics Department.
2. For an honors major who is also a double major, the double-counting prohibition does not apply to the relationship between the honors minor and the second major because these will always be or include the same field.
Advising in the major: During the junior and senior years, students are advised by the chair of the major department (or a member of the department designated by the chair) whose approval must be secured for the choice of courses each semester.

### 7.4.1 Special majors

Individualized and regularized special majors are available. With permission of the departments concerned, it is possible for a student to plan an individualized special major that includes closely related work in one or more departments. In some areas, such as biochemistry, film and media studies, and psychobiology, in which regularized special majors are done frequently, the departments and programs involved provide recommended programs. These regularized special majors are described in the relevant department sections of the catalog or in material available from department chairs. A special major is expected to be integrated in the sense that it specifies a field of learning (not necessarily conventional) or topic or problems for sustained inquiry that crosses departmental boundaries, or it may be treated as a subfield within the normal departmental major. Special majors consist of at least 10 credits and normally of no more than 12 credits. Students with special majors normally complete a minimum of six courses in the primary department or program, omitting some of the breadth requirements of the major
field. However, course requirements central to systematic understanding of the major field may not be waived. Students with special majors must complete the major comprehensive requirement, which may consist of a thesis or other written research projects designed to integrate the work across departmental boundaries, or a comprehensive examination. By extension, special majors may be formulated as joint majors between two departments, normally with at least 5 credits in each department and 11 in both departments. The departments involved collaborate in advising and in the comprehensive examination. The Registrar's Office website has the required application form and more information for special majors. Students are not allowed to pursue more than one individualized special major.

### 7.5 Honors Program

The Honors Program, initiated in 1922 by President Frank Aydelotte and modified most recently in 1994, is a distinctive part of Swarthmore's educational life.
The Honors Program has as its main ingredients student independence and responsibility in shaping the educational experience; collegial relationships between students and faculty; peer learning; opportunity for reflection on, and integration of, specific preparations; and evaluation by external examiners. Honors work may be carried out in the full range of curricular options, including studio and performing arts, study abroad, and community-based learning.
Students and their professors work in collegial fashion as honors candidates prepare for evaluation by external examiners from other academic institutions and the professional world. Although Swarthmore faculty members grade most of the specific preparations, the awarding of honorifics on a student's diploma is based solely on the evaluation of the external examiners.
Preparations for honors are defined by each department or program and include seminars, theses, independent projects in research as well as in studio and performing arts and specially designated pairs of courses. In addition, many departments offer their own format for senior honors study, designed to enhance and, where appropriate, integrate the preparations in both major and minor.
Each honors candidate's program will include three preparations for external examination in a major and one in a minor or four preparations in a special or interdisciplinary major. By doing honors, students offering three preparations in a major or four preparations in a special or interdisciplinary major normally fulfill the
comprehensive graduation requirement for majors in those fields.
A student who chooses an honors major plus minor may have a second major outside of honors if that second major includes the same topic of study as the honors minor. In the case where an Honors student does a special major in course as a second major, the Honors minor must come from one of the main departments used in the student's special course major. Normally the student must complete the requirements for the Honors minor in that department.
Honors Program preparations for both majors and minors will be defined by each department, program, and interdisciplinary major that sponsors a major. In addition, minors may be defined by any department or program.
Honors special majors who design their own programs, not those in College-sponsored programs such as biochemistry, will be required to include four related preparations in the major from at least two departments or academic programs. Honors special major programs do not include a separate minor. Honors special majors must either (1) write a thesis drawing on their cross-disciplinary work-the thesis will be examined by examiners in different fields or (2) have a panel oral examination that presents the opportunity for cross-disciplinary discussion. Honors special majors will follow the Senior Honors Study (SHS) activity and portfolio procedures of the various departments whose offerings they use as preparations in their programs. Individualized honors special major programs require the approval of all departments involved in the program and of the honors coordinator.
All preparations will be graded by Swarthmore instructors with the exception of theses and other original work. Grades for theses and other similar projects will be given by external examiners. Except in the case of theses or other original work, modes of assessment by the external examiners will include written examinations and/or other written assignments completed in the spring of the senior year. In addition, during honors week at the end of the senior year, every honors candidate will meet on campus with external evaluators for an oral examination of each preparation. Specific formats for preparations and for SHS are available in each department office.
Students will normally include their intention to prepare for honors in their "Plan of Study for the Last 2 Years," written in the spring of their sophomore year. They must also submit a formal application for a specific program of honors preparation to the Registrar's Office. The registrar provides a form for this purpose. Departments, programs, and concentrations will make decisions about acceptance of honors
programs at the end of the sophomore year. Students will be accepted into honors with the proviso that their work continue to be of honors quality. Students may also apply to enter honors during their junior year. Any proposed changes to the Honors Program must be submitted for approval on a form for this purpose available from the registrar. The decision of the departments or interdisciplinary programs will depend on the proposed program of study and the quality of the student's previous work as indicated by grades received and on the student's apparent capacity for assuming the responsibility of honors candidacy. The major department or interdisciplinary program is responsible for the original plan of work and for keeping in touch with the candidate's progress from semester to semester. Normally, honors programs may not be changed after Dec. 1 of a student's senior year, depending on departmental policies. Students may not withdraw from honors after Dec. 1 of the senior year except under extraordinary circumstances and with the permission of the major and minor departments and the Curriculum Committee. Further information about honors policies may be found in the Honors Handbook, which is available in the Registrar's Office.
At the end of the senior year, the decision of whether to award the honors degree to the candidates is entirely in the hands of the visiting examiners. Upon their recommendation, successful candidates are awarded the bachelor's degree with honors, with high honors, or with highest honors.

### 7.6 Exceptions to the 4-Year Program

Although the normal period of uninterrupted work toward the bachelor of arts and bachelor of science degrees is 4 years, graduation in 3 years is freely permitted when a student can take advantage of Advanced Placement credits, perhaps combining them with extra work by special permission. In such cases, students may qualify for advanced standing-they may become juniors in their second year. To qualify for advanced standing, a student must (1) do satisfactory work in the first semester; (2) obtain 14 credits by the end of the first year; (3) intend to complete the degree requirements in 3 years; and (4) signify this intention when she or he applies for a major by writing a sophomore paper during the spring of the first year.
When circumstances warrant, a student may lengthen the continuous route to graduation to 5 years by carrying fewer courses than the norm of four, although College policy does not permit programs of fewer than 3 credits for degree candidates in their first eight semesters of enrollment. A course load lower than the norm may be appropriate for students who enter

Swarthmore lacking some elements of the usual preparation for college, who have disabilities, or who wish to free time for activities relating to their curricular work that are not done for academic credit. Such 5 -year programs are possible in music and studio arts for students who are taking instruction off campus or who wish to pursue studio or instrumental work without full credit but with instruction and critical supervision. However, such programs are possible only on application to, and selection by, the department concerned, which will look for exceptional accomplishment or promise. In all cases where it is proposed to reduce academic credit and lengthen the period before graduation, the College looks particularly to personal circumstances and to careful advising and necessarily charges the regular annual tuition (see the provisions for overloads section 4.1). Full-time leaves of absence for a semester or a year or more are freely permitted and in some cases encouraged, subject also to careful planning and academic advising. Information about work and internship opportunities for those taking a leave is available through the Career Services Office.

### 7.7 Normal Course Load

The academic year at Swarthmore is 32 weeks long, during which time students are expected to complete 6 to 8 semester course credits of work. Normal progress toward the degree of bachelor of arts or bachelor of science is made by eight semesters' work of four course credits or the equivalent each semester, although the object of progress toward the degree is not the mere accumulation of 32 credits. Students may and frequently do vary this by programs of three or five courses, with special permission. College policy does not permit programs of fewer than 3 course credits within the normal eight-semester enrollment. Programs of more than 5 credits or fewer than 4 credits require special permission (see section 4.1 on tuition and section 8.3 on registration).
The definitions of upper-class levels are as follows: Students become sophomores when they have earned 6 to 8 semester course credits toward their degree. Students become juniors when they have earned 14 to 16 credits. Students become seniors when they have earned 22 to 24 credits. Some offices on campus, such as student housing, may have additional requirements in their definitions of the student classes.

### 7.8 Formats of Instruction

Although classes and seminars are the normal curricular formats at Swarthmore, faculty regulations encourage other modes as well. These include various forms of individual
study, student-run courses, and a limited amount of "practical" or off-campus work. The principal forms of individual work are attachments to courses, directed reading, and tutorials. The faculty regulation on attachments provides that a student may attach to an existing course, with the permission of the instructor, a project of additional reading, research, and writing. If this attachment is taken concurrently with the course, it is normally done for 0.5 credit. If it is taken in a later semester (preferably the semester immediately following), it may be done for either half or full credit. This kind of work can be done on either a small-group or individual basis. It is not possible in all courses, but it is in most, including some introductory courses. For firstyear students and sophomores, it is a way of developing capacities for independent work. For honors candidates, it is an alternative to seminars as a preparation for papers. Students who decide before the middle of the semester to do a 0.5 -credit attachment may, with permission, withdraw from a regular course and carry 3.5 credits in that term to be balanced by 4.5 credits in another term. Students may do as many as two attachments each year.

### 7.8.1 Directed Reading and Independent Study

Directed reading and independent study are similar, but the faculty role in the former is more bibliographical than pedagogical, and, because they require somewhat less faculty time, opportunities for directed reading are more frequent in most departments than are opportunities for independent study. In both cases, substantial written work and/or written examinations are considered appropriate, and it is generally desirable that the work be more specialized or more sharply focused than is usually the case in courses or seminars. The work may range from a course of reading to a specific research project. Such work is available primarily to juniors and seniors in accordance with their curricular interests and as faculty time permits.

### 7.8.2 Student-Run Courses

The faculty regulation on student-run courses permits a group of students to propose a topic to an instructor for 0.5 or 1 credit and to run their own course with a reading list approved by the instructor and a final examination or equivalent administered by him or her but normally with no further involvement of faculty. In organizing such a course, students obtain provisional approval and agreement to serve as course supervisor from a faculty member by Dec. 1 (for the spring semester) or May 1 (for the fall semester) on the basis of an initial memorandum emphasizing the principal subject matter to be studied, the questions to be asked
about it, the methods of investigation, and provision of a preliminary bibliography. The course is then registered by its organizers with the provost, who has administrative supervision of such work and who may waive the foregoing deadlines to recognize problems in the organization of such courses. The course supervisor consults his or her department and, in the case of an interdepartmental course, any other department concerned, whose representatives together with the provost will decide whether to approve the course. The supervisor also reviews the course outline and bibliography and qualifications and general eligibility of students proposing to participate in the course. After a student-run course has been found acceptable by the appropriate department (or departments) and the provost, the course supervisor's final approval is due 10 days before the term begins, following which a revised reading list and class list are given to the librarian, and the course title and class list are filed with the registrar. At the end of the course, the supervisor evaluates and grades the students' work in the usual way or arranges for an outside examiner to do so.
Student-run courses may vary in format and content. In particular, they may be provisionally proposed for 0.5 credit to run in the first half of the semester, and at midterm, may be either concluded or, if the participants and course supervisor find the work profitable, continued for the balance of the term for full credit. Alternatively, student-run courses may be started after the beginning of the semester (up to midsemester) for 0.5 credit and then be continued, on the same basis, into the following term. Or they may be taken for 0.5 credit over a full term. The role of the course supervisor may go beyond planning and evaluation and extend to occasional or regular participation. The only essentials, and the purpose of the procedures, are sufficient planning and organization of the course to facilitate focus and penetration. The course planning and organization, both analytical and bibliographical, are also regarded as important ends in themselves, to be emphasized in the review of proposals before approval. Up to 4 of the 32 credits required for graduation may be taken in student-run courses. Many student-run courses are offered only on the credit/no-credit basis.
Finally, as to applied or practical work, the College may, under faculty regulations, grant up to 1 course credit for practical work, which may be done off campus when it can be shown to lend itself to intellectual analysis and is likely to contribute to a student's progress in regular coursework. The work is subject to four conditions: (1) agreement of an instructor to supervise the project; (2) sponsorship by the instructor's department and, in the case of an
interdisciplinary project, any other department concerned, whose representatives together with the provost will decide whether to grant permission for the applied or practical work before that work is undertaken; (3) a basis for the project in some prior coursework; and (4) normally, the examination of pertinent literature and production of a written report as parts of the project. This option is intended to apply to work in which direct experience of the offcampus world or responsible applications of academic learning or imaginative aspects of the practice of an art are the primary elements.
Because such work is likely to bear a loose relation to organized instruction and the regular curriculum, the College limits academic credit for it while recognizing its special importance for some students' programs.

### 7.9 Interdisciplinary Work

The requirements of the major typically leave room for significant flexibility in students' programs, both within and outside the major. This may be used to pursue a variety of interests and to emphasize intellectual diversity. It may also be used for the practical integration of individual programs around interests or principles supplementing the major. The College offers interdepartmental majors in Asian studies, medieval studies, and comparative literature, and formal interdisciplinary minors in black studies, cognitive science, environmental studies, film and media studies, gender and sexuality studies, German studies, interpretation theory, Islamic studies, Latin American studies, peace and conflict studies, and public policy. The specific requirements for these programs are outlined in the relevant sections of the catalog.
It should be recognized that some departments are themselves interdisciplinary in nature and that a considerable number of courses are crosslisted between departments. Also, some courses each year are taught jointly by members of two or more departments, and departments commonly recommend or require supporting work for their majors in other departments. Many other opportunities exist informally (e.g., in African studies, in American studies, in religion and sociology and anthropology, in engineering and social sciences, and in chemical physics). Students are encouraged to seek the advice of faculty members on such possibilities with respect to their particular interests.

### 7.9.1 Guidelines on Scheduling Conflicts Between Academics and Athletics

 The following guidelines (adopted by the faculty in May 2002) are affirmed to recognize both the primacy of the academic mission at Swarthmore and the importance of theintercollegiate Athletics Program for our students. The guidelines are meant to offer direction with an appropriate degree of flexibility. Where conflicts occur, students, the faculty, and coaches are encouraged to work out mutually acceptable solutions. Faculty members and coaches are also encouraged to communicate with one another about such conflicts. Note that the guidelines make a firm distinction between athletics practices and competitive contests.

1. Regular class attendance is expected of all students. Students who are participating in intercollegiate athletics should not miss a class, seminar, or lab for a practice.
2. Students who have a conflict between an athletics contest and a required academic activity, such as a class meeting or a lecture, should discuss it and try to reach an understanding with their coach and their professor as soon as possible, preferably during the first week of the semester and certainly in advance of the conflict. When a mutually agreeable understanding is not reached, students should be mindful of the primacy of academics at Swarthmore. Students should understand that acceptable arrangements may not be feasible for all classes, particularly seminars and laboratories.
3. Students should take their schedule of athletics contests into account as they plan their class schedules and may want to discuss this with their academic advisers. Students should also provide coaches with a copy of their academic schedules and promptly inform them of any changes.
4. Coaches should make every effort to schedule practices and contests to avoid conflict with classes and should collect their students' academic schedules in an effort to coordinate team activities and minimize conflict. Coaches should instruct students not to miss class for practice and should encourage students to work out possible conflicts between classes and contests as early as possible.
5. Faculty members should provide as complete a description of scheduling requirements as possible to their classes early each semester, preferably before registration or during the first week of classes. Both faculty members and coaches should work with students to resolve contest-related conflicts.
6 . Both coaches and faculty should avoid lastminute scheduling changes, and faculty should normally avoid scheduling extraordinary class meetings. Where such meetings seem desirable, students should be consulted and, as the Handbook for Instructional Staff stipulates, the arrangement cleared with the department chair and registrar. Where possible, extraordinary sessions should be voluntary or offered with a
choice of sections to attend. When a schedule is changed after students have arranged their commitments, it is important for the faculty member or coach to be flexible.
6. Classes will normally end each day by 4 p.m. and at 5 p.m. on Fridays. Seminars will often extend beyond 4 p.m. Afternoon laboratories are usually scheduled until $4: 15 \mathrm{p} . \mathrm{m}$. or $4: 30$ p.m., and students who encounter difficulties completing a lab may need to stay later than the scheduled time. In all cases, students are expected to keep to their academic commitments and then attend practices as soon as possible.
7. Faculty members should recognize that students usually set aside the time from $4: 15$ to 7 p.m. for extracurricular activities and dinner. Late afternoon has also traditionally been used for certain courses in the performing arts. Some use of this time for other academic purposes (such as department colloquia, lectures, etc.) is appropriate, but departments are encouraged to exercise restraint in such use, particularly with respect to activities they judge important for the full academic participation of students.

### 7.10 Health Sciences Advisory Program

The function of the Health Sciences Advisory Program is twofold: to advise students interested in a career in the health professions and to prepare letters of recommendation for professional schools to which students apply. The letters are based on faculty evaluations requested by the student, the student's academic record, and nonacademic activities.
Students intending to enter a career in the health professions, especially those applying to medical, dental, or veterinary schools, should plan their academic programs carefully to meet the professional schools' requirements as well as the general College requirements. The following courses fulfill the basic requirements of most medical schools: BIOL 001, 002; CHEM 010, 022, 032, 038; PHYS 003, 004, 004L; MATH 015 and Stat 011; and English, two semester courses. Dental and veterinary schools have more variable requirements, in addition to the biology, chemistry, and physics listed earlier. Students interested in these fields should meet with the health sciences adviser to plan their programs. Specific requirements for each medical, dental, and veterinary school, along with much other useful information, are given in the following publications, which are available in the Health Sciences Office: Medical School Admission Requirements, Official Guide to Dental Schools, and Veterinary Medical School Admission Requirements.

The work of the junior and senior years may be completed in any major department of the student's choice. All required courses should be taken on a graded basis after the first semester of the first year.
The health sciences adviser meets periodically with students interested in health careers and is available to assist students in planning their programs in cooperation with students' own academic advisers. The Health Sciences Office publishes Guide to Premedical Studies at Swarthmore College and Frequently Asked Preveterinary Questions to help new students plan their academic program and understand what schools look for in applicants. The Guide for Applying to Medical School for Swarthmore Undergraduates and Alumni/ae contains detailed information about the application process.
Further information on opportunities, requirements, and procedures can be obtained from the health sciences adviser and from the Health Sciences Office's pages on the
Swarthmore College website at
www.swarthmore.edu/premed.

### 7.11 Creative Arts

Work in the creative arts is available both in the curricula of certain departments and on an extracurricular basis. Interested students should consult the departmental statements in art, English literature (creative writing), music and dance, and theater.

### 7.12 Cooperation with Neighboring Institutions

With the approval of their faculty advisers and the registrar, students may take a course offered by Bryn Mawr or Haverford College or the University of Pennsylvania without the payment of extra tuition. Students are expected to know and abide by the academic regulations of the host institution. (This arrangement does not apply to the summer sessions of the University of Pennsylvania and Bryn Mawr College.) Final grades from such courses are recorded on the Swarthmore transcript, but these grades are not included in calculating the Swarthmore grade average required for graduation.

### 7.13 Student Exchange Programs

To provide variety and a broadened outlook for interested students, the College has student exchange arrangements with Harvey Mudd College, Middlebury College, Mills College, Pomona College, and Tufts University. With each institution, there are a limited and matched number of exchanges. Students settle
financially with the home institution, thus retaining during the exchange any financial aid for which they are eligible.
Application for domestic exchange should be made to the registrar. The application deadline is Oct. 15 for exchange in the following spring semester; the deadline is March 15 for exchange in the following fall semester. Selection is made from among applicants who will be sophomores or juniors at the time of the exchange. Exchange arrangements do not permit transfer of participants to the institution with which the exchange occurs.
Credit for domestic exchange is not automatic. Students must follow the procedures for receiving credit for work done elsewhere, including obtaining preliminary approval of courses and after-the-fact validation of credit by the relevant Swarthmore department chairs.

### 7.14 Study Abroad

The College emphasizes the importance of study abroad and encourages all students to explore possibilities for doing so as integral parts of their degree programs. The OffCampus Study Office will help all interested students at every stage of the process: planning, study abroad, and return.
To be accepted for credit toward the Swarthmore degree, courses taken abroad must meet Swarthmore academic standards, and with proper planning, this condition normally is readily met. Proper planning begins with attendance at a general information meeting, and then a study abroad advising appointment, as early as possible in one's college career. Credit for study abroad is awarded according to College regulations for accrediting work at other institutions, and the process must be completed within the semester following return to the College.
Participants in the Semester/Year Abroad program remain registered at Swarthmore and are subject to the rules and regulations of the College while abroad.
Students are expected to earn the normal load of four credits per semester, or eight credits per academic year. Students are eligible to earn up to a maximum of five credits per semester, or up to a maximum of ten credits per academic year.
To receive Swarthmore credit for study abroad, students must participate in the College's Semester/Year Abroad Program and comply with its payment plan. Students continue to pay Swarthmore's comprehensive fee for tuition, room, and board. The College then pays for the tuition fees, room and board costs, and the round-trip travel of participating students.
Normally, financial aid is automatically applied to study abroad.

## 7 Educational Program

Swarthmore College study abroad programs are listed below. Please consult the Off-Campus
Study website at www.swarthmore.edu/ocs for more information.
The Swarthmore Program in Grenoble, France, was inaugurated in the fall of 1972. This program, under the auspices of the Modern Languages and Literatures Department, is open to students from any department but especially those in humanities and social sciences. The number of participants is limited to 25 and applications from students at other institutions are accepted if places are available. (see Modern Languages and Literatures)
For the following programs, see detailed information under departmental listings.
-The Swarthmore Program at the University of Ghana (Legon, Ghana). (see music and dance) -The Swarthmore Program in Dance in Bytom, Poland. (see music and dance)
-The Swarthmore Program in Environmental Science and Engineering in Krakow, Poland. (see environmental studies)
-The Swarthmore Program in Environmental Studies in Brno, Czech Republic which includes an internship at an environmental NGO. (see environmental studies)
-Macalester, Pomona, and Swarthmore Environmental Studies Program at the University of Cape Town, South Africa. (see environmental studies)
-The Swarthmore in Buenos Aires, Argentina Program. (see Latin American studies)
-The Northern Ireland Semester based in Derry/Londonderry. (see peace and conflict studies)
-The Cloud Forest School Program in Costa Rica. (see educational studies)
The Off-Campus Studies office maintains direct enrollment agreements with universities in Australia, Chile, Ghana, Ireland, New Zealand, and the United Kingdom.
The College has a special relationship or is a member of a consortium with the following programs:
-AIKOM, University of Tokyo
-Hamilton College Academic Year in Madrid
-HECUA - Higher Education Consortium for Urban Affairs (Ecuador and Scandinavia and Eastern Europe)
-ISLE - Intercollegiate Sri Lanka Educational Program
-Siena School for Liberal Arts
-The Swedish Program
In addition to these programs, Swarthmore students attend a number of excellent study abroad programs throughout the world provided by other institutions. The Off-Campus Study

Office, along with the academic departments and programs of the College, will advise students on these. The Off-Campus Study Office is the on-campus clearinghouse for information on study abroad, and normally is the starting place for exploration and planning.

### 7.15 Student Right to Know

Swarthmore College's graduation rate is 93 percent. This is the percentage graduating within 6 years, based on the most recent cohorts, calculated according to "Student Right to Know" guidelines.

### 8.1 Attendance at Classes

Regular attendance is expected. Faculty members will report to the dean the name of any student whose repeated absence is in their opinion impairing the student's work. The number of absences allowed in a given course is not specified, a fact that places a heavy responsibility on all students to make sure that their work is not suffering as a result of absences. First-year students should exercise particular care in this respect.
When illness necessitates absence from classes, the student should report at once to the Health Center.
A student may obtain credit for a course without attending class meetings by reading the material prescribed by a syllabus and taking a final examination, under the following conditions:

1. The student must signify intent to do so at the time of registration, having obtained the instructor's approval in advance.
2. If, after such registration, the student wishes to resume normal class attendance, the instructor's approval must be obtained.
3. The student may be required to perform such work, in addition to the final examination, as the instructor deems necessary for adequate evaluation of his or her performance.
4. The registrar will record the final grade exactly as if the student had attended classes normally.

### 8.2 Grades

During the year, instructors periodically report on the students' coursework to the Dean's and Registrar's offices. Informal reports during the semester take the form of comments on unsatisfactory work. At the end of each semester, formal grades are given in each course either under the credit/no credit (CR/NC) system, or under the letter system, by which A means excellent work; B, good work; C, satisfactory work; D, passing but below the average required for graduation; and NC (no credit), uncompleted or unsatisfactory work. Letter grades may be qualified by pluses and minuses. W signifies that the student has been permitted to withdraw from the course. X designates a condition that means a student has done unsatisfactory work in the first half of a yearlong course but by creditable work during the second half may earn a passing grade for the full course and thereby remove the condition. R is used to designate an auditor or to indicate cases in which the work of a foreign student cannot be evaluated because of deficiencies in English.

### 8.2.1 In Progress

IP (in progress) is the grade used when normally everyone in a class continues working on a project into the next semester. IP is given at the end of the first semester. Final grades are normally due at the end of the succeeding semester.

### 8.2.2 Incompletes

Inc. means that a student's work is incomplete with respect to specific assignments or examinations. The faculty has voted that a student's final grade in a course should incorporate a zero for any part of the course not completed by the date of the final examination or the end of the examination period. However, if circumstances beyond the student's control (e.g., illness, family emergency) preclude the completion of the work by this date, a grade of Inc. may be assigned with the permission of the faculty instructor and the registrar. Note that "having too much work to do" is not, in fairness to other students, considered a circumstance beyond the student's control. A form for the purpose of requesting an incomplete is available from the Registrar's Office and must be filled out by the student and signed by the faculty instructor and the registrar and returned to the registrar no later than the last day of final examinations. In such cases, incomplete work must normally be made up and graded, and the final grade recorded within 5 weeks after the start of the following term. Except by special permission of the registrar and the faculty instructor, all grades of Inc. still outstanding after that date will be replaced on the student's permanent record by NC (no credit). Waiver of this provision by special permission shall in no case extend beyond 1 year from the time the Inc. grade was incurred.

### 8.2.3 Credit/No Credit

The only grades recorded on students' official grade records for courses taken during the first semester of the first year are CR and NC. In the balance of their work at Swarthmore, students may exercise the option to take up to four more courses for credit/no credit by informing the Registrar's Office within the first 9 weeks of the term in which the course is taken, using the form provided for this purpose. Repeated courses normally may not be taken credit/no credit (see section 9.2.4). Courses only offered as credit/no credit do not count in the four options. For first-year students and sophomores, CR will be recorded for work that would earn a grade of straight D or higher. For juniors and seniors, that is, students in their fifth semester or later, the minimum equivalent letter grade for $C R$ will be straight $C$.
Instructors are asked to provide the student and the faculty adviser with an evaluation of the student's CR/NC work. The evaluation for first-
semester first-year students includes a lettergrade equivalent. For other students, the evaluation may be either a letter-grade equivalent or a comment. Such evaluations are not a part of the student's official grade record. If available, letter-grade equivalents for firstsemester first-year students may be provided to other institutions only if requested by the student and absolutely required by the other institution. Students should save their copies of these evaluations for their records.

### 8.2.4 Repeated Courses

Some courses can be repeated for credit; these are indicated in departmental course descriptions. For other courses, the following rules apply: (1) Permission to repeat a course must be obtained from the Swarthmore instructor teaching the repeated class. (2) These repeated courses may not be taken CR/NC. (3) To take a course at another school that will repeat a course previously taken at Swarthmore, the student must obtain permission from the chair of the Swarthmore department in which the original course was taken, both as a part of the preapproval process to repeat it elsewhere and, in writing, as part of the credit validation after the course is taken elsewhere.
For repeated courses in which the student withdraws with the grade notation W , the grade and credit for the previous attempt will stand. For other repeated courses, the registration and grade for the previous attempt will be preserved on the permanent record but marked as excluded, and any credit for the previous attempt will be permanently lost. The final grade and any credit earned in the repeated course are the grade and credit that will be applied to the student's Swarthmore degree.

### 8.2.5 Grade Reports

Grades are available to students on a secure website. Grade reports are not routinely sent to parents or guardians, but such information may be released when students request it. The only exception to this is that parents or guardians of students are normally informed of grades when students have critical changes in status, such as probation or requirement to withdraw.

### 8.2.6 Grade Average

An average of C (2.0) is required in the courses counted for graduation. An average of C is interpreted for this purpose as being a numerical average of at least $2.0(\mathrm{~A}+, \mathrm{A}=4.0$, $\mathrm{A}-=3.67, \mathrm{~B}+=3.33, \mathrm{~B}=3.0, \mathrm{~B}-=2.67, \mathrm{C}+=$ 2.33, $\mathrm{C}=2.0, \mathrm{C}-=1.67, \mathrm{D}+=1.33, \mathrm{D}=1.0$, and $\mathrm{D}-=0.67$ ). Grades of $\mathrm{CR} / \mathrm{NC}$ and grades on the record for courses not taken at Swarthmore College are not included in computing this average.

### 8.3 Registration

All students are required to register and enroll at the times specified in official announcements and to file programs approved by their faculty advisers. Fines are imposed for late or incomplete registration or enrollment.
A regular student is expected to take the prescribed number of courses in each semester to progress toward the degree in the normal eight-semester enrollment. If more than 5 or fewer than 4 credits seem desirable, the faculty adviser should be consulted and a petition filed with the registrar (programs of fewer than 3 credits are not allowed in the normal eightsemester enrollment). Students are expected to select classes that do not pose scheduling conflicts.
Applications to add or drop a course from registration must be delivered to the Registrar's Office within the first 2 weeks of the semester. Applications to withdraw from a course and receive the permanent grade notation W must be received no later than the end of the 9th week of classes or the 5th week of the course if it meets for only half the semester. After that time, late withdrawals are recorded on the student's record with the notation NC unless the student withdraws from the College.
Students are not required to register for audits. Successfully completed audits are recorded (with the notation R) at the end of the semester (except in cases where a registered student has withdrawn after the first 2 weeks of the semester, in which cases the appropriate withdrawal notation stands).
A deposit of $\$ 100$ is required of all returning students before their enrollment in both the spring and fall semesters. This deposit is applied to charges for the semester and is not refundable.

### 8.4 Examinations

Any student who is absent from an examination that is announced in advance must understand that the exam may be rescheduled only by special arrangement with the course instructor. Examinations are not normally rescheduled to accommodate travel plans. Examinations are restricted to students who are registered for the course or otherwise have the explicit permission of the faculty member to take the exam.

### 8.4.1 Final Examinations

The final examination schedule specified in official announcements directs the place and time of all finals unless the instructor has made other special arrangements. However, College policy holds that students with three final examinations within 24 hours are allowed to reschedule one of these examinations in
consultation with the instructor, as long as the consultation occurs in a timely manner.
By College policy, a student who is not in the Honors Program but who is taking an honors written examination as a course final and has an examination conflict should take the course final examination and postpone the honors written examination until the student's next free examination period. Conversely, a student in the Honors Program who has a conflict with a course final examination should take the honors examination and postpone the course examination in consultation with the professor. In no case may a student take an honors examination before the honors written examination period for that examination.

### 8.5 Student Leaves of Absence, Withdrawal, and Readmission

### 8.5.1 Leaves of Absence

Student leaves of absence are freely permitted provided the request for leave is received by the date of enrollment and the student is in good standing. Students planning a leave of absence should consult with a dean and complete the necessary form before the deadline published each semester (usually Dec. 1 and April 1). The form asks students to specify the date of expected return. Students need only notify the dean of their return if their return date changes from that originally indicated on the completed form.

### 8.5.2 Withdrawal

Withdrawal from the College may occur for academic, disciplinary, health, or personal reasons and may be voluntary or required by the College.
For health-related withdrawals, in no case will a student's mental or physical condition itself be a basis for a required withdrawal. However, when health problems of a physical or psychological nature result in behavior that substantially interferes with a student's academic performance or the educational endeavors of other students or poses a significant threat to the student's safety or safety of others, the College may require the student to withdraw. The Evaluation Committee-comprising two deans-makes the decision to require withdrawal for healthrelated reasons. The Evaluation Committee will review the problematic behavior and may consult with the director of Worth Health Center, the director of Counseling and Psychological Services, or any other appropriate college official when making its decision. Decisions of the Evaluation Committee may be appealed to the dean of students.

Students withdrawing from the College before the end of the semester normally receive the grade notation "W" (withdrawal) on their permanent record for all in-progress courses.

### 8.5.3 Readmission

A student who has withdrawn from the College for any reason, voluntarily or involuntarily, may apply for readmission by writing to Dean of Students. Normally, the College will not accept applications for readmission until a full semester, in addition to the semester in which the student has withdrawn, has passed.
A student applying to the College for readmission after withdrawal is required to provide appropriate documentation of increased ability to function academically and in a residential environment and/or of a decreased hazard to health and safety of self and/or others. In the case of withdrawal for medical reasons, this documentation must include an evaluation from the student's personal health care provider. In addition, the student will generally be required to show evidence of successful social, occupational, and/or academic functioning during the time away from the College. This evidence must include the completion of any outstanding incompletes on record.
After such evidence has been provided, the materials will be forwarded to the Evaluation Committee. In the case of health-related withdrawals, the materials will be reviewed by the director of Worth Health Center and/or the director of Counseling and Psychological Services, and the student will be required to be evaluated in person by the appropriate health care professional at the College. At the discretion of the Evaluation Committee, such evaluations may be required for other types of withdrawals as appropriate. These evaluations will provide adjunctive information to the committee's decision-making process. The Evaluation Committee will normally meet with the student and will make a determination regarding the student's readiness to resume study at Swarthmore.

### 8.5.4 Short-Term Health-Related Absences

Students who are hospitalized during the semester are subject to the readmission procedures described above before they may return to campus to resume their studies. In these situations, the Evaluation Committee may also counsel and advise the student about options for how best to approach the remaining academic work in the semester. In all cases, a student returning to campus from the hospital must report to the Worth Health Center and get clearance from the appropriate health care professional before returning to the dormitory to ensure the student's readiness to resume

## 8 Faculty Regulations

college life and so that follow-up care can be discussed.

### 8.6 Summer School Work and Other Work Done Elsewhere

Students who wish to receive Swarthmore College credit for work at another school must obtain preliminary approval and after-the-fact validation by the chair of the Swarthmore department or program concerned. Preliminary approval depends on adequate information about the content and instruction of the work to be undertaken and ensures the likelihood of the work's applicability toward the Swarthmore degree as well as clarifies the amount of Swarthmore credit likely. Preliminary approval is tentative. Final validation of the work for credit depends on evaluation of the materials of the course, including syllabus, transcript, written work, examinations, indication of class hours, and so forth. Work in other programs, especially summer school programs, may sometimes be given less credit than work at Swarthmore, but this will depend on the nature of the program and the work involved. Validation may include an examination, written or oral, administered at Swarthmore. All decisions are made on a case-by-case basis. Credit for AP and similar work is discussed in section 3.5.
An official transcript from the other school must be received by the Registrar's Office before validated work can be recorded for credit. By College policy, in order for work done elsewhere to be granted Swarthmore College credit, the grade for that work must be the equivalent of a straight C or better, but a better than C grade does not in itself qualify for Swarthmore credit.
Students who wish to receive natural sciences and engineering practicum (NSEP) credit for courses taken elsewhere must obtain preliminary approval for the course from the department involved as well as final validation as with other credit. The department can approve NSEP credit if the course is comparable with a Swarthmore NSEP course. Generally, courses taken elsewhere that are not comparable with a Swarthmore NSEP will not receive NSEP credit; however, in exceptional cases, if NSEP criteria are satisfied elsewhere, the department chair may recommend NSEP credit award to the Division of Natural Sciences and Engineering for its final decision.
Requests for credit must be made within the semester following the term in which the work was done. Credit is lost if a student takes a course at Swarthmore that essentially repeats the work covered by the credit.

### 8.7 Physical Education

In the first and second years, all nonveteran students not excused for medical reasons are required to complete 4 units of physical education by the end of their sophomore year. All students must pass a survival swimming test or take up to one unit of swimming instruction. For complete requirements, see Physical Education and Athletics.

### 8.8 Exclusion from College

The College reserves the right to exclude, at any time, students whose academic standing it regards as unsatisfactory and without assigning any further reason therefore, and neither the College nor any of its officers shall be under any liability whatsoever for such exclusion.

### 9.1 Bachelor of Arts and Bachelor of Science

The degree of bachelor of arts or bachelor of science is conferred upon students who have met the following requirements for graduation. The candidate must have:

1. Completed 32 course credits or their equivalent.
2. An average grade of at least C in the Swarthmore courses counted for graduation (see section 8.2.6). A student with more than 32 credits may use the Swarthmore credits within the highest 32 for the purposes of achieving the C average.
3. Complied with the distribution requirements and have completed at least 20 credits outside one major department (see section 7.2).
4. Fulfilled the foreign language requirement, having either: (a) successfully studied 3 years or the "block" equivalent of a single foreign language during grades 9 through 12 (work done before grade 9 cannot be counted, regardless of the course level); (b) achieved a score of 600 or better on a standard achievement test of a foreign language; (c) passed either the final term of a college-level, yearlong, introductory foreign language course or a semester-long intermediate foreign language course; or (d) learned English as a foreign language while remaining demonstrably proficient in another.
5. Met the requirements in the major and supporting fields during the last 2 years. (For requirements pertaining to majors and minors, see section 7.4)
6. Passed satisfactorily the comprehensive examinations in his or her major field or met the standards set by visiting examiners in the Honors Program.
7. Completed four semesters of study at Swarthmore College. Two of these must constitute the senior year (i.e., the last two fulltime semesters of degree work), with the exception that seniors during the first semester of their senior year, with the approval of the chair(s) of their major department(s), may participate in the Swarthmore Semester/Year Abroad Program.
8. Completed the physical education requirement set forth in the Physical Education and Athletics Department statements.
9. Paid all outstanding bills and returned all equipment and library books.

Only students who have completed the work for the bachelor's degree with some distinction, either at Swarthmore or at another institution of satisfactory standing, shall be admitted as candidates for the master's degree at Swarthmore.
The candidate's record and a detailed program setting forth the aim of the work to be pursued shall be submitted, with a recommendation from the department or departments concerned, to the Curriculum Committee. If accepted by the committee, the candidate's name shall be reported to the faculty at or before the first faculty meeting of the year in which the candidate is to begin work.
The requirements for the master's degree shall include the equivalent of a full year's work of graduate character. This work may be done in courses, seminars, reading courses, regular conferences with members of the faculty, or research. The work may be done in one department or in two related departments. A candidate for the master's degree shall be required to pass an examination conducted by the department or departments in which the work was done. The candidate shall be examined by outside examiners, provided that where this procedure is not practicable, exceptions may be made by the Curriculum Committee. The department or departments concerned, on the basis of the reports of the outside examiners, together with the reports of the student's resident instructors, shall make recommendations to the faculty for the award of the degree.
At the option of the department or departments concerned, a thesis may be required as part of the work for the degree.
A candidate for the master's degree will be expected to show before admission to candidacy a competence in those languages deemed by his or her department or departments most essential for the field of research. Detailed language requirements will be indicated in the announcements of departments that admit candidates for the degree.
The tuition fee for graduate students who are candidates for the master's degree is the same as for undergraduates (see section 4.1).

### 9.2 Master of Arts and Master of Science

The degree of master of arts or master of science may be conferred subject to the following requirements:

May 7, 2011 to May 5, 2012
Barbara W. Mather '65, Chair Pepper Hamilton LLP Philadelphia PA
Neil R. Grabois '57, Vice Chair New York NY
Bennett Lorber '64, Secretary Temple University Hospital Philadelphia PA

Maurice G. Eldridge '61, Assistant Secretary
Swarthmore College
Swarthmore PA
Suzanne P. Welsh, Treasurer
Swarthmore College
Swarthmore PA
Lori Ann Johnson, Assistant Treasurer
Swarthmore College
Swarthmore PA

## 11 Board of Managers

## Term Expires May 2012

J. David Gelber '63

New York NY
Neil R. Grabois '57 New York NY
Samuel L. Hayes III '57
Harvard Business School
Boston MA
Harold Kalkstein '78 Belmont CA
Giles K. Kemp '72 Scarsdale NY
Elizabeth H. Scheuer '75 Bronx NY
Salem D. Shuchman ' 84 Entrepreneur Partners, LP Philadelphia PA
Martha Spanninger ' 76 New York NY

## Term Expires May 2013

Jorge L. Aguilar '05 Columbia University New York NY
Richard Barasch ' 75 Universal American Financial Corp. New York NY
Dulany Ogden Bennett '66
South Woodstock VT
James C. Hormel III '55
Equidex, Inc. San Francisco CA
Frederick W. Kyle '54 Philadelphia PA
Susan Levine '78 San Francisco CA
Jorge Munoz '84 The World Bank Washington DC
John A. Riggs '64 The Aspen Institute Washington DC
Carl R. Russo '79 Consigliare Management Co. San Jose CA
Robin Shapiro '78 Encore Financial Services Group New York NY
David W. Singleton '68 Wilmington DE

Thomas E. Spock '78
Scalar Media Partners, LLC
New York NY
Danielle Toaltoan '07
New York NY
Joseph Turner '73
Golden CO
Term Expires May 2014
Rhonda Cohen ' 76
Philadelphia PA
Janet S. Dickerson H'92
Princeton NJ
Jenny Hourihan ' 80
Brooklyn NY
Lewis H. Lazarus ' 78
Morris James LLP
Wilmington DE
Sibella Clark Pedder ' 64 Surrey England
Gustavo R. Schwed ' 84 London England

## Term Expires May 2015

Sohail Bengali '79
San Mateo CA
Nathaniel Erskine ' 10 Paxton MA
Thomas Hartnett '94 New York NY
Jane Lang '67 Sprenger Lang Foundation Washington DC
Lucinda Lewis ' 70 Potomac MD
James Lovelace '79 Los Angeles CA
Bennett Lorber '64 Temple University Hospital Philadelphia PA
Christopher Niemczewski ' 74 Washington DC

## Emeriti

Julie Lange Hall '55
Winnetka IL
Jerome Kohlberg Jr. '46
Kohlberg \& Co.
Mt. Kisco NY
Elizabeth J. McCormack
Rockefeller Family \& Associates
New York NY
Marge Pearlman Scheuer '48
New York NY
J. Lawrence Shane '56

Newtown Square PA

## Ex officio

Rebecca Chopp
Swarthmore College
Swarthmore PA
Susan S. Morrison '81
Austin TX

## Chairman of the Board Emeritus

Eugene M. Lang '38
Eugene M. Lang Foundation
New York NY

### 11.1 Committees of the Board

The chair of the Board is an ex officio member of every committee.

## Executive

Barbara W. Mather, Chair
Neil R. Grabois, Vice Chair
Richard Barasch
Dulany Ogden Bennett
David Gelber
Giles K. Kemp
Eugene M. Lang *
Bennett Lorber
Chris Niemczewski
John A. Riggs
David W. Singleton
Thomas E. Spock

## Academic Affairs

Bennett Lorber, Chair
Neil Grabois, Vice Chair
Jorge Aguilar
Dulany Ogden Bennett
David Gelber
Sibella Clark Pedder
Elizabeth H. Scheuer
Marge Scheuer *
Martha Spanninger
Joseph Turner

## Compensation

Barbara Mather, Chair
Neil R. Grabois, Vice Chair
Janet Dickerson
Susan Levine
Salem D. Shuchman
Thomas E. Spock

## Development and Communications

Giles K. Kemp, Chair
Robin Shapiro, Vice Chair
Jorge Aguilar
Richard Barasch
Rhonda Cohen
Eugene M. Lang *
Lewis H. Lazarus
Susan Levine
Susan Morrison, ex officio
John A. Riggs

Robin Shapiro
Salem D. Shuchman
Martha Spanninger

## Finance

Thomas E. Spock, Chair
Richard Barasch, Vice Chair
Dulany Ogden Bennett
Harold Kalkstein
John A. Riggs
Elizabeth H. Scheuer
David Singleton
Joseph Turner

## Audit

Richard Barasch, Chair
Jenny Hourihan, Vice Chair
Harold Kalkstein
Lewis H. Lazarus
David Singleton
Thomas E. Spock, ex officio

## Investment

Chris Niemczewski, Chair
Salem Shuchman, Vice Chair
Mark Crandall **
Mark M. Harmeling **
Samuel L. Hayes III ***
Eugene M. Lang *
Corey Mulloy **
Gustavo Schwed
Thomas E. Spock

## Nominating \& Governance

John A. Riggs, Chair
Rhonda Cohen, Vice Chair
Dulany Ogden Bennett
Harold Kalkstein
Giles K. Kemp
Bennett Lorber

## Property

David Singleton, Chair
Frederick W. Kyle, Vice Chair
Richard Barasch

## 11 Board of Managers

Samuel L. Hayes III
Harold Kalkstein
Giles K. Kemp
Susan Levine
Sibella Clark Pedder
John A. Riggs
Robin Shapiro
Thomas E. Spock
Danielle Toaltoan

## Social Responsibility

David Gelber, Chair
Susan Levine, Vice Chair
Dulany Ogden Bennett
Frederick W. Kyle
James C. Hormel
Eugene M. Lang *
Jane Lang
Susan S. Morrison, ex officio
Jorge Munoz
Tracey Patillo
Salem D. Shuchman
David W. Singleton

## Student Affairs

Dulany Ogden Bennett, Chair
Janet Dickerson, Vice Chair
Jorge Aguilar
Neil R. Grabois
James C. Hormel
Jenny Hourihan
Eugene M. Lang *
Lewis H. Lazarus
Jorge Munoz
Tracey Patillo
Elizabeth H. Scheuer
Danielle Toaltoan
Joseph Turner
*Emeriti manager
**Non-board member
*** Senior Adviser

## 12 Alumni Association Officers and Alumni Council

The Alumni Relations Office is the primary communication link between the College and its alumni, enabling them to maintain an ongoing relationship with each other. Some of the office's programs and activities include Alumni Weekend, national and international alumni gatherings, and alumni travel. The Alumni Office facilitates online engagement with alumni and manages alumni volunteers. They also hire students for general office work and to help at on-campus alumni events.
The Alumni Office works closely with the Career Services Office to facilitate networking between students and alumni and among alumni, to take advantage of the invaluable experience represented among the alumni. The Alumni Office also helps officers of the senior class and alumni groups plan special events.
The Alumni Office gives staff support to the Alumni Association, which was founded in 1882, and to the Alumni Council, the governing body of the Alumni Association. The Alumni Office also gives staff support to regional alumni and parent groups, called Connections, in Austin/San Antonio; Atlanta; Boston; Chicago; Denver; Houston; London; Los Angeles; Metro DC/Baltimore; Metro N.Y.C; Miami; New Haven; Paris; Philadelphia; San Francisco; Seattle; and Tucson. There are 19,474 alumni: 9,837 men, 9,637 women, with 2,602 married to each other, giving substance to the College's traditional appellation, "Quaker matchbox." The College defines an alumnus/a as anyone who has completed one semester.

## Alumni Association Officers

Susan Signe Morrison '81, president
Robert Steelman '92, vice president
David Ko '92, vice president
Nina Paynter '97, vice president
Jim Moskowitz '88, secretary

## Zone A

Delaware, Pennsylvania
Deborah Smith Dempsey '57 ${ }^{1}$
Philadelphia, Pa.
Joshua Farber ' $02{ }^{1}$
Pittsburgh, Pa .
Loretta Gary '09 ${ }^{1}$
Rose Valley, Pa.
Sarah Mooers ' $88^{3}$
Ambler, Pa .
Christina Paxson ' $82^{2}$
Morrisville, Pa.
Kevin Wilson ' $92^{3}$
Gettysburg, Pa .

## Zone B

New Jersey, New York
Brian Hwang ' $05^{2}$
New York, N.Y.
Jaky Joseph ' $06^{2}$
New York, N.Y.
Stephen Kyle ' $77^{1}$ Lansing, N.Y.
Danielle Moss Lee ' $90^{1}$
New York, N.Y.
Nicole O'Dell Odim ' $88^{3}$
Bellport, N.Y.
John Randolph II ' $97^{3}$
Brooklyn, N.Y.
Rosita Sarnoff ' $64{ }^{2}$
New York, N.Y.
Suzanne Winter ' $10^{2}$ New York, N.Y.

Zone C
Connecticut, Maine, Massachusetts, New
Hampshire, Rhode Island, and Vermont
David Jenemann ' $93^{2}$
Burlington, Vt.
Demetrios Karis ' $74^{3}$
Still River, Mass.
Anne McGuire ' $80^{3}$
Cambridge, Mass.
Nina P. Paynter ' $97^{2}$ Jamaica Plain, Mass.
Elizabeth Thoenen ' $83^{2}$
Belmont, Mass.
Albert Williams III ' $62^{1}$
Woods Hole, Mass.

## Zone D

District of Columbia, Maryland, and Virginia
Emily Aubrey ' $89^{1}$
Baltimore, Md.
William Bradford ' $66^{2}$
Washington, DC
Juan Gelpi ' $84{ }^{3}$
Virginia Beach, Va.
Rakhee Goyal ' $93^{3}$
Olney, Md.
Rohit Malhotra '95 ${ }^{1}$
Charlottesville, Va.
Martha Marrazza ' $09^{2}$
Bethesda, Md.
Donald McMinn ' $86^{2}$
Washington, DC
Zone E
Illinois, Indiana, Iowa, Kansas, Michigan,
Minnesota, Missouri, Nebraska, North Dakota,
Ohio, Oklahoma, South Dakota, Texas, West
Virginia, and Wisconsin
Rebecca Commito ${ }^{\prime} 10^{2}$
Chicago, Ill.
Susan Morrison ' $81^{2}$
Austin, Texas

## 12 Alumni Association Officers and Alumni Council

Thomas Scholz ' $81^{3}$
Iowa City, Iowa
Cynthia Hunter Spann ${ }^{\prime} 75^{3}$
Dallas, Texas
Kristin Bergstrom Vessey ' $61^{2}$
Bowling Green, Ohio
Richard S. Wilson ' $73^{1}$ Green Bay, Wis.
Lynda Yankaskas '99 ${ }^{1}$ Richmond, Ind.
Patrick Zweidler-McKay ' $89^{2}$
Houston, Texas

## Zone F

Alabama, Arkansas, Florida, Georgia,
Kentucky, Louisiana, Mississippi, North
Carolina, South Carolina, Tennessee,
territories, dependencies, and foreign countries
Janet Erlick ' $88^{3}$
Fort Lauderdale, Fla.
Michael Fields ' $69^{1}$
Atlanta, Ga.
Carol Church Holm-Hansen ' $76^{1}$
Vollen, Norway
Sara Orr Sello ' $66^{2}$
Hamburg, Germany
Mark Shapiro ' $88^{3}$
Coral Gables, Fla.
Horatiu Stefan ' $01^{2}$
Seoul, Republic of Korea

## Zone G

Alaska, Arizona, California, Colorado, Hawaii,
Idaho, Montana, Nevada, New Mexico, Oregon,
Utah, Washington, and Wyoming
Kennette Banks ' $06^{3}$
Oakland, Calif.
Linda J. Bovard ' $72^{1}$
Eugene, Ore.
Deborah How ' $89^{2}$
Santa Monica, Calif.
David Ko ' $92^{2}$
San Mateo, Calif.
Armando Leon '09 ${ }^{1}$
Chula Vista, Calif.
Walter Luh ' $99^{3}$
Sunnyvale, Calif.
Robert Oye ' $73^{2}$
Los Angeles, Calif.
Members-at-Large
H.G. Chissel ' $96{ }^{1}$ Bryn Mawr, Pa.
Robert Steelman ' $92^{2}$
Ridgewood, N.J.
Rachel Weinberger ' $80^{2}$ Summit, N.J.
Nominating Committee Chair
Sabrina Martinez ' $92^{2}$
Houston, Texas

## National Extern Program Coordinator

Joshua Green '94²
Keauhou, Hawaii

## National Connection Chair

David Steinmuller ' $56^{2}$
Gallatin Gateway, Mont.

## Connection Representatives

## Atlanta

Linda Valleroy '72
Decatur, Ga .
Emily Nolte '07
Atlanta, Ga .
Austin/San Antonio
Emily Albrink Hartigan '68 Boerne, Texas
Boston
David Wright '69 Wellesley, Mass.
Chicago
Marilee Roberg '73 Wilmette, Ill.
Central New Jersey
Timothy Johnson III '07
Belle Mead, N.J.
Denver
Erin Trapp '92
Denver, Colo.
Durham
Julia Knerr '81 Chapel Hill, N.C.
Houston
Susan Tapscott ' 72 Houston, Texas
Lester Tran '03 Houston, Texas
London
Abby Honeywell ' 85 London, England
Los Angeles
Vincent Jones '98 Los Angeles, Calif.
Metro DC/Baltimore
Wuryati Morris '04 Washington, DC
Arthur Zito Jr ' 81 Millersville, Md.
Metro N.Y.C
Reshma Pattni '06 Brooklyn, N.Y.
Win Ling Chia '06 Brooklyn, N.Y.
Miami
Ana Corrales '97 Miami, Fla.
Jaime Raich '97 Miami, Fla.
Paris
Anais Loizillon '95
Paris, France

## 12 Alumni Association Officers and Alumni Council

## Philadelphia

James J. Moskowitz '88 Swarthmore, Pa.
Pittsburgh
Barbara Sieck Taylor ' 75
Pittsburgh, Pa.
San Francisco
Autumn Quinn-Elmore '04
Mountain View, Calif.
Seattle
James Schembs '01
Seattle, Wash.
Tucson
Laura Markowitz '85
Tucson, Ariz.

[^1]${ }^{3}$ Term ends 2014.
${ }^{4}$ Nominating Committee

### 13.1 Emeriti

Robert C. Bannister, B.A., Ph.D., Yale
University; B.A., M.A., University of Oxford, Scheuer Professor Emeritus of History.
Robert A. Barr Jr., B.A., Swarthmore College; M.A., University of Pennsylvania, Dean Emeritus of Admissions.
Thomas H. Blackburn, B.A., Amherst College; B.A., M.A., University of Oxford; Ph.D., Stanford University, Centennial Professor Emeritus of English Literature.
Thompson Bradley, B.A., Yale University; M.A., Columbia University, Professor Emeritus of Russian.
Lee Devin, B.A., San Jose State College; M.A., Ph.D., Indiana University, Professor Emeritus of Theater.
H. Searl Dunn, B.S.E., M.S.E., Princeton University; Ph.D., Brown University, Henry C. and J. Archer Turner Professor Emeritus of Engineering.
Robert S. DuPlessis, B.A., Williams College; M.A., Ph.D., Columbia University, Isaac H. Clothier Professor Emeritus of History and International Relations.
Marion J. Faber, B.A., M.A., University of California, Berkeley; Ph.D., Harvard University, Scheuer Family Professor Emerita of Humanities and Professor Emerita of German.
James D. Freeman, B.A., M.A., Ph.D., Harvard University, Daniel Underhill Professor Emeritus of Music.
J. William Frost, B.A., DePauw University; M.A., Ph.D., University of Wisconsin, Howard M. and Charles F. Jenkins Professor Emeritus of Quaker History and Research.
John E. Gaustad, A.B., Harvard University; Ph.D., Princeton University, Edward Hicks Magill Professor Emeritus of Astronomy.
Kenneth J. Gergen, B.A., Yale University; Ph.D., Duke University, Gil and Frank Mustin Professor Emeritus of Psychology.
Charles E. Gilbert, B.A., Haverford College; Ph.D., Northwestern University, Professor Emeritus of Political Science and Provost Emeritus.
James H. Hammons, B.A., Amherst College; M.A., Ph.D., Johns Hopkins University, Professor Emeritus of Chemistry.
John J. Hassett, B.A., St. Francis College; M.A., University of Iowa; Ph.D., University of Wisconsin, Susan W. Lippincott Professor Emeritus of Modern and Classical Languages.
Mark A. Heald, B.A., Oberlin College; M.S., Ph.D., Yale University, Morris L. Clothier Professor Emeritus of Physics.

Eleanor K. Hess, B.S., M.S., University of Pennsylvania, Professor Emerita of Physical Education.
Raymond F. Hopkins, B.A., Ohio Wesleyan University; M.A., Ohio State University; M.A., Ph.D., Yale University, Richter Professor Emeritus of Political Science.
Gudmund R. Iversen, M.A., University of Michigan; Ph.D., Harvard University, Professor Emeritus of Statistics.
Charles L. James, B.S., State University of New York at New Paltz; M.S., State University of New York at Albany, Sara Lawrence Lightfoot Professor Emeritus of English Literature.
Jennie Keith, B.A., Pomona College; M.A., Ph.D., Northwestern University, Centennial Professor Emerita of Anthropology and Provost Emerita.
Charles F. Kelemen, B.A., Valparaiso
University; Ph.D., Pennsylvania State
University, Edward Hicks Magill Professor Emeritus of Computer Science.
T. Kaori Kitao, B.A., M.A., University of California, Berkeley; Ph.D., Harvard University, William R. Kenan Jr., Professor Emerita of Art History.
Eugene A. Klotz, B.S., Antioch College; Ph.D., Yale University, Albert and Edna Pownall Buffington Professor Emeritus of Mathematics.
James R. Kurth, B.A., Stanford University; M.A., Ph.D., Harvard University, Claude C. Smith Professor Emeritus of Political Science.
George Krugovoy, B.A., M.A., Ph.D., Philosophical Institute, Salzburg, Austria, Professor Emeritus of Russian.
Hugh M. Lacey, B.A., M.A., University of Melbourne; Ph.D., Indiana University, Scheuer Family Professor Emeritus of Philosophy.
Asmarom Legesse, B.A., University College of Addis Ababa; Ed.M., Ph.D., Harvard University, Professor Emeritus of Anthropology.
Paul C. Mangelsdorf Jr., B.A., Swarthmore College; Ph.D., Harvard University, Morris L. Clothier Professor Emeritus of Physics.
Jeanne Marecek, B.S., Loyola University; Ph.D., Yale University, William R. Kenan Jr. Professor Emerita of Psychology.
John D. McCrumm, B.A., M.S., University of Colorado, Howard N. and Ada J. Eavenson Professor Emeritus of Engineering.
Ann Kosakowski McNamee, B.A., Wellesley College; M.Phil., Ph.D., Yale University, Professor Emerita of Music.
Jane Mullins, B.A., Swarthmore College, Registrar Emerita.

Helen F. North, B.A., M.A., Ph.D., Cornell University, Centennial Professor Emerita of Classics.
Frederick L. Orthlieb, B.S. M.S., Massachusetts Institute of Technology; Ph.D., Carnegie Mellon University, The Isaiah V. Williamson Chair of Civil and Mechanical Engineering, Professor Emeritus of Engineering.
Harold E. Pagliaro, A.B., M.A., Ph.D., Columbia University, Alexander Griswold Cummins Professor Emeritus of English Literature and Provost Emeritus.
Robert F. Pasternack, B.A., Ph.D., Cornell University, Edmund Allen Professor Emeritus of Chemistry and Biochemistry.
Dean Peabody, B.A., Swarthmore College; Ph.D., Harvard University, Professor Emeritus of Psychology.
Jean Ashmead Perkins, B.A., Swarthmore College; M.A., Ph.D., Columbia University, Susan W. Lippincott Professor Emerita of French.
Steven I. Piker, B.A., Reed College; Ph.D., University of Washington, Professor Emeritus of Anthropology.
Ernest J. Prudente, B.S., M.S., University of Pennsylvania, Professor Emeritus of Physical Education.
Frederic L. Pryor, B.A., Oberlin College; M.A., Ph.D., Yale University, Professor Emeritus of Economics.
Gilbert P. Rose, B.A., Ph.D., University of California, Berkeley, Susan Lippincott Professor Emeritus of Modern and Classical Languages.
Alburt M. Rosenberg, B.A., Harvard University; M.S., University of Florida; Ph.D., University of Pennsylvania, Associate Professor Emeritus of Natural Science.
Robert Roza, B.A., University of Toronto; M.A., Ph.D., Princeton University, Susan W. Lippincott Professor Emeritus of French.
Robert E. Savage, B.A., Oberlin College; M.S., Ph.D., University of Wisconsin, Isaac H. Clothier Jr. Professor Emeritus of Biology.
Richard Schuldenfrei, B.A., M.A., University of Pennsylvania; Ph.D., University of Pittsburgh, Professor Emeritus of Philosophy.
Bernard S. Smith, B.A., M.A., University of Oxford; Ph.D., Harvard University, Professor Emeritus of History.
David G. Smith, B.A., M.A., University of Oklahoma; Ph.D., Johns Hopkins University, Richter Professor Emeritus of Political Science.
Barbara Yost Stewart, B.A., Swarthmore College; M.A., Ph.D., Bryn Mawr College, Professor Emerita of Biology.

Donald K. Swearer, B.A., M.A., Ph.D., Princeton University; B.D., S.T.M., Yale Divinity School, Charles and Harriett Cox McDowell Professor Emeritus of Religion.
Francis P. Tafoya, B.S., M.A., University of Colorado; Ph.D., Yale University, Professor Emeritus of French and Spanish.
Peter T. Thompson, B.A., Johns Hopkins University; Ph.D., University of Pittsburgh, Professor Emeritus of Chemistry.
Eva F. Travers, B.A., Connecticut College; M.A., Ed.D., Harvard University, Professor Emerita of Educational Studies.
P. Linwood Urban Jr., B.A., Princeton University; S.T.B., S.T.M., Th.D., General Theological Seminary, Charles and Harriett Cox McDowell Professor Emeritus of Religion.
Judith G. Voet, B.S., Antioch College; Ph.D., Brandeis University, James H. Hammons Professor Emerita of Chemistry.
Robert E. Williams, B.S., Delaware State College; M.S., Rutgers University, Marian Snyder Ware Professor Emeritus of Physical Education and Athletics.
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Nathan Sanders, S.B., Massachusetts Institute of Technology; M.A., Ph.D., University of California, Santa Cruz, Visiting Assistant Professor of Linguistics.
Tomoko Sakomura, B.A., Keio University; M.A., Ph.D., Columbia University, Assistant Professor of Art History.
Matthew Saunders, B.A., Virginia Polytechnic Institute, Assistant Professor of Theater.

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Erin Schlag, B.A., Colgate University; M.S., University of Maryland; Laboratory Instructor in Biology.
Peter J. Schmidt, B.A., Oberlin College; M.A., Ph.D., University of Virginia, The William R. Kenan, Jr., Professorship, Professor of English Literature.
Christopher Schnader, A.B., Dartmouth
College; M.A., Ph.D., University of
Pennsylvania, Lecturer in German Studies.
Allen M. Schneider, B.S., Trinity College;
Ph.D., Indiana University, Centennial Professor of Psychology.
Christine Schuetze, B.A., The Colorado College; Ph.D., University of Pennsylvania, Visiting Professor of Anthropology.
Barry Schwartz, B.A., New York University; M.A., Ph.D., University of Pennsylvania, Dorwin P. Cartwright Professor of Social Theory and Social Action, Professor of Psychology.
Peggy Ann Seiden, B.A., Colby College; M.A., University of Toronto; M.L.I.S., Rutgers University, College Librarian.
Olga Sendra Ferrer, B.A. Universitat Autònama de Barcelona; M.A., North Carolina State University; M.A. Princeton University, Visiting Instructor of Spanish.
Sudharshan Senevirathe, B.A. Delhi
University; M.A., Ph.D., Jawaharlal Nehru
University, Julian and Virginia Cornell Distinguished Visiting Professor.
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Jon Sherman, B.A., Temple University, Associate in Performance (Dance).
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Sunka Simon, M.A., Universitadt Hamburg; Ph.D., Johns Hopkins University, Associate Professor of German.
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Lee A. Smithey, B.A., Emory University; M.A., Ph.D., University of Texas at Austin, Associate Professor of Sociology.
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Eric Song, B.A., Pomona College; M.A., University of Chicago; Ph.D., University of Virginia, Assistant Professor of English Literature.
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Lynne Steuerle Schofield, B.A., Swarthmore College; M.A., Ph.D., Carnegie Mellon University, Assistant Professor of Statistics.
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Dominic Tierney, B.A., M.Phil., Ph.D., Oxford University, Associate Professor of Political Science.
William N. Turpin, M.A., University of St. Andrews; M.A., University of Toronto; Ph.D., Cambridge University, Professor of Classics.
Elena Valdez, B.A., Russian State University for the Humanities; M.A., Rutgers University, Visiting Instructor in Spanish.
Richard Valelly, B.A., Swarthmore College; Ph.D., Harvard University, Claude C. Smith '14 Professor of Political Science.
Elizabeth A. Vallen, B.A., Case Western Reserve University; Ph.D., Princeton University, Associate Professor of Biology. Patricia Vargas, M.A., Inca Garcilaso de la Vega University, Lima, Peru, Lecturer in Spanish.
Amy Cheng Vollmer, B.A., William Marsh Rice University; Ph.D., University of Illinois, Professor of Biology.
Eric R. Wagner, B.A., Connecticut College; M.Ed., Temple University, Head Coach/Instructor, Physical Education and Athletics.
Mark I. Wallace, B.A., University of California at Santa Barbara; M.Div., Princeton Theological Seminary; Ph.D., University of Chicago, Professor of Religion.
Steve C. Wang, B.S., Cornell University; M.S., Ph.D., University of Chicago, Associate Professor of Statistics.
Andrew H. Ward, A.B., Harvard University; Ph.D., Stanford University, Professor of Psychology.
Anna E. Ward, B.A., University of California at Santa Cruz; Visiting Instructor of Gender and Sexuality Studies.
Martin O. Warner, B.A., University of North Carolina at Chapel Hill; M.A., Duke University, Registrar.
Elizabeth Webster, B.A., Swarthmore College; M.F.A. The Academy for Classical Acting at the Shakespeare Theatre, Visiting Instructor of Theater.
Robert E. Weinberg, B.S., Cornell University; M.A., Indiana University; Ph.D., University of California, Berkeley, Professor of History.

## 13 Faculty and Other Instructional Staff

Philip M. Weinstein, B.A., Princeton
University; M.A., Ph.D., Harvard University, Alexander Griswold Cummins Professor of English Literature.
Kevin Welch, B.S., Gettysburg College; Ph.D., University of Virginia, Visiting Assistant Professor of Chemistry and Biochemistry.
Hansjakob Werlen, M.A., University of Notre Dame; Ph.D., Stanford University, Professor of German.
Larry E. Westphal, B.A., Occidental College; Ph.D., Harvard University, J. Archer and Helen C. Turner Professor of Economics.

Patricia White, B.A., Yale University; Ph.D., University of California, Santa Cruz, Professor of Film and Media Studies.
Tyrene White, B.A., Middle Tennessee State University; M.A., Ph.D., Ohio State University, Professor of Political Science.
Thomas Whitman, B.A., Swarthmore College; Ph.D., University of Pennsylvania, Associate Professor of Music.
Richard Wicentowski, B.S., Rutgers College, Rutgers University; M.S., University of Pittsburgh; Ph.D., Johns Hopkins University, Associate Professor of Computer Science. Craig Williamson, B.A., Stanford University; M.A., Harvard University; Ph.D., University of Pennsylvania, Alfred H. and Peggi Bloom Professor of English Literature.
Sarah Willie-LeBreton, B.A., Haverford College; M.A., Ph.D., Northwestern University, Associate Professor of Sociology.
Lee Wimberly, B.A., Stanford University; J.D., University of California at Berkeley, Professor of Physical Education.
Liliya A. Yatsunyk, S.D., Chernivtsi State University, Ukraine; Ph.D., University of Arizona, Assistant Professor of Chemistry and Biochemistry.
Carina Yervasi, B.A., Hofstra University;
Ph.D., City University of New York, Associate Professor of French.
Matthew Zucker, B.A., Vassar College; Ph.D., Carnegie Mellon University, Assistant Professor of Engineering.
Lala Zuo, B.A., Peking University, Beijing; M.A., Ph.D., University of Pennsylvania, Assistant Professor of Chinese.

### 13.3 Divisions, Departments, and Programs

13.3.1 Division of the Humanities

Jean-Vincent Blanchard, Chair

## Asian Studies

Haili Kong, Chair
Classics
William Turpin, Chair
English Literature
Nora Johnson, Chair
History
Bruce Dorsey, Chair
Mathematics and Statistics
Thomas J. Hunter, Chair

## Modern Languages and Literatures

Sibelan Forrester, Chair
Music and Dance
Michael Marissen, Chair
Sharon Friedler, Director of Dance

## Philosophy

Peter Baumann, Chair

## Psychology

Andrew H. Ward, Chair

## Religion

Ellen Ross, Chair
Theater
Allen Kuharski, Chair
13.3.2 Division of the Natural Sciences and Engineering Don Shimamoto, Chair
Biology
Sara Hiebert Burch, Chair
Chemistry and Biochemistry
Paul Rablen, Chair
Computer Science
Richard Wicentowski, Chair
Engineering
Lynne Molter, Chair

## Linguistics

Theodore B. Fernald, Chair
Mathematics and Statistics
Thomas J. Hunter, Chair
Philosophy
Peter Baumann, Chair
Physics and Astronomy
Eric Jensen, Chair
Psychology
Andrew H. Ward, Chair

Art
Michael Cothren, Chair

## 13 Faculty and Other Instructional Staff

### 13.3.3 Division of the Social Sciences <br> John Caskey, Chair

## Economics

Ellen Magenheim, Chair
Educational Studies
K. Ann Renninger, Chair

Engineering
Lynne Molter, Chair

## History

Bruce A. Dorsey, Chair

## Linguistics

Theodore B. Fernald, Chair
Mathematics and Statistics
Thomas J. Hunter, Chair
Philosophy
Peter Baumann, Chair
Political Science
Cynthia Halpern, Chair

## Psychology

Andrew H. Ward, Chair
Sociology and Anthropology
Sarah Willie-LeBreton, Chair
Interdisciplinary Programs
Carol Nackenoff, Chair

Rose Maio, Administrative Coordinator for the Divisions of Humanities, Social Sciences, and Natural Sciences and Engineering

### 13.3.4 Interdisciplinary Programs

Carol Nackenoff, Chair

## Asian Studies

Haili Kong, Chair

## Black Studies

Anthony Foy, Coordinator
Cognitive Science
Theodore B. Fernald, Coordinator

## Comparative Literature

Hansjakob Werlen, Coordinator
Environmental Studies
Peter Collings, Coordinator
Film and Media Studies
Patricia White, Coordinator
Gender and Sexuality Studies
Gwynn Kessler, Coordinator
Interpretation Theory
Richard Eldridge, Coordinator

Islamic Studies
Tariq al-Jamil, Coordinator
Latin American Studies
Luciano Martinéz, Coordinator
Medieval Studies
Craig Williamson, Coordinator
Peace and Conflict Studies
Lee Smithey, Coordinator
Public Policy
John Caskey, Coordinator

### 13.4 Standing Committees of the Faculty

Academic Requirements
Assessment Planning Committee
Faculty Advisory Council to Dean of Admissions
Council on Educational Policy
Committee on Faculty Procedures
Cooper Foundation Committee
Curriculum Committee
Fellowships and Prizes
Health Sciences Advisory
Lang Center Advisory Board
Library
Off-Campus Study
Physical Education and Athletics Advisory Committee
Promotion and Tenure
Research Ethics

### 13.5 Other Committees With Faculty Representation

Advisory Council to the Dean
Ad Hoc Committee on ADA Planning (as needed)
Ad Hoc Committee on Documented Disabilities
Institutional Animal Care and Use Committee
College Budget Committee
College Judiciary Committee
Crum Woods Stewardship Committee
Cultural Diversity
Equal Opportunity Advisory Committee
Faculty and Staff Benefits
Honorary Degrees
Howard Hughes Medical Institute
Sager
Swarthmore Foundation

### 14.1 Administrative Structure

## President

President
Vice President for College and Community Relations and Executive Assistant to the President
Special Assistant to the President and Associate Vice President for Planning
Equal Opportunity Office
Eugene M. Lang Center for Civic and Social Responsibility
Dean of Admissions and Financial Aid
Admissions
Financial Aid
Vice President for Communications and
Public Relations
News and Information Office
Publications Office

## Vice President for Development and Alumni Relations

Advancement Services
Advancement Operations
Alumni and Gift Records
Alumni Relations
Development
Annual Giving
Capital Giving
Corporate, Foundation, and
Government Relations
Donor Relations
Gift Planning
Parents Programs
Research
Vice President for Facilities and Services
Bookstore
Dining Services
Facilities Management
Environmental Services
Grounds
Maintenance
Planning and Construction
Lang Performing Arts Center
Occupational and Environmental Safety
Post Office
Public Safety
Scott Arboretum
Summer Programs
Vice President for Finance and Treasurer Controller

Business Office
Office Services
Student Accounts
Institutional Research
Investment Office
Risk Management
Vice President for Human Resources
Human Resources
Payroll

## Provost

Associate Provost
Executive Assistant to the Provost
Center for Social and Policy Studies
Information Technology Services
Libraries
Cornell Science and Engineering Library
Friends Historical Library
McCabe Library
Swarthmore College Peace Collection
Underhill Music and Dance Library
Off-Campus Study Office
Physical Education and Athletics

## Dean of Students

Associate Dean for Academic Affairs
Associate Dean for Multicultural Affairs
Associate Dean for Student Life
Academic Support
Black Cultural Center
Career Services
Counseling and Psychological Services
Disability Services
Fellowships and Prizes
Gender Education
Health Sciences Office
Health Services
Intercultural Center
Registrar's Office
Residential Life
Student Activities

### 14.2 Admissions Office

James L. Bock III, B.A., Swarthmore College; M.Ed., University of Virginia, Dean of Admissions and Financial Aid.
Yvetta Moat, Administrative Coordinator.
Suzi Nam, B.A., The College of New Jersey; M.A., University of Chicago, Director of Admissions.
Lydia Dagenais, B.A., Haverford College;
M.S.Ed., University of Pennsylvania, Associate Dean of Admissions.
Christine Costello, B.A., Swarthmore College, Senior Assistant Dean of Admissions.
Joaquim Hamilton, B.A., Franklin \& Marshall College, Assistant Dean of Admissions.
David A. Thompson Jr., B.A., Lehigh
University, Assistant Dean of Admissions.
Joanna Weinland, B.A., Kenyon College;
M.S.Ed., University of Pennsylvania, Assistant Dean of Admissions.
Rachel White, B.A., Guilford College, Senior Admissions Counselor.
Daniel Chung, B.A., Swarthmore College, Admissions Counselor.
Wallace Ann Ayres, B.A., Swarthmore College; Ed.M., Harvard University, Admissions Officer.
Margaret T. Kingham, B.A., Mary
Washington College, Admissions Officer.
Carolyn Moir, Operations Coordinator.
Stephanie Berman; Demetria Hamilton;
Stacy Jordan; Mary Frankland; Susan Wigo, Administrative Assistants.
Beverly Atz; Sharon Hartley, A.A., Neumann College, Receptionists.

### 14.3 Bookstore

Kathleen K. Grace, B.S., Elizabethtown College; M.B.A., Philadelphia University, Director.
Steve Levin, B.A., Temple University, Book Manager.
Ed Rowe, Office Coordinator.
Michael Harper and Martha Townsend, Bookstore Assistants.

### 14.4 Career Services

Nancy Burkett, B.A., M.A., University of Tennessee; Ed.S., College of William and Mary, Director.
Erin Massey, B.A., Kutztown University; M.Ed., Widener University, Associate Director.

Jennifer Barrington, B.A., Gettysburg College; M.Ed., University of Delaware, Assistant Director (job share).

Kristie Beucler, B.A., Gettysburg College;
M.S., West Chester University, Assistant Director (job share).
Marissa Deitch, B.S., St. Joseph's University; M.S., Villanova University, Assistant Director, Public Service and Internships.
Lisa Maginnis, Administrative Assistant.

### 14.5 Center for Social and Policy Studies

Keith W. Reeves, B.A., Swarthmore College; Ph.D., University of Michigan, Director. Cathy Wareham, A.S., Wesley College, Administrative Assistant.
Gudmund R. Iversen, M.A., University of Michigan; Ph.D., Harvard University, Professor Emeritus of Statistics, Former Director and Resident Statistician.
Kyle Crawford '12, Jenna Zhu '12, Student Research Assistants.

### 14.6 Communications Office

Nancy Nicely, B.A., College of William and Mary; M.S., University of Pennsylvania, Vice President for Communications and Public Relations.
News and Information
Susan Clarey, B.A., Syracuse University, Director of Advancement Communications.
Alisa Giardinelli, B.A., Pennsylvania State
University; M.A., Temple University, Associate Director, News and Information.
Stacey Kutish, A.B., Hamilton College, Communications Associate.
Steven Lin, B.A., University of Maryland, Web Designer.
John Word, B.A., San Francisco State University, Multimedia Editor.
Kathleen Withington, Administrative
Coordinator.
Publications
Susan Cousins Breen, B.A., Kean University; M.A., Rosemont College, Assistant Director of Publications; Class Notes Editor of the Swarthmore College Bulletin.
Carol Brévart-Demm, B.A., University
College, London, Associate Director of Publications for Editorial; Associate Editor of the Swarthmore College Bulletin.
Eleftherios Kostans, A.S., Art Institute of Philadelphia, Photographer.
Jeffrey Lott, B.A., Middlebury College; M.A.T., Rhode Island School of Design, Senior Publications Editor; Editor of the Swarthmore College Bulletin.
Audree Penner, B.A., University of MissouriColumbia, Desktop Design Specialist.

Phillip Stern, B.A., Swarthmore College; M.F.A., University of Pennsylvania, Associate Director of Publications for Design.
Janice Merrill-Rossi, Administrative Assistant.

### 14.7 Controller's Office

Business Office
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Joseph Cataldi, B.S., LaSalle University; M.B.A., LaSalle University, Associate Controller.
Beth Baksi, B.S., Shippensburg State College; M.B.A., St. Joseph's University, Assistant Controller.
Robert Lopresti, B.S., Rutgers, C.P.A., Manager of Financial Information Systems.
Denise A. Risoli, B.S., LaSalle University, Restricted Funds Accountant.
Nancy E. Sheppard, Manager, Business Office Operations.
Patricia Hearty, Accounts Receivable Clerk.
Catherine Cinquina, Purchasing Coordinator.
Deborah McGinnis, Accounts Payable Clerk.
Office Services
Cheryl Robinson, A.A.S., Delaware County Community College, Manager.
Joann M. Massary, Administrative Assistant.
Tarsia Duff, A.A.S., Delaware County
Community College, Administrative Assistant.
Student Accounts
Linda Weindel, Student Accounts Manager.
Maria McBride, Student Accounts Assistant.

### 14.8 Counseling and Psychological Services

David Ramirez, B.A., M.A., Ph.D., University of Texas, Director.
Paula S. Rosen, B.A., University of Rochester; M.S.S., Bryn Mawr College; Ph.D., Bryn Mawr College Graduate School of Social Work and Social Research, Senior Clinical Social Worker.
Kim D. Grant, B.S., Purdue University; Ph.D., University of South Carolina, Clinical Psychologist.
Joseph C. Hewitt, B.A., University of Pennsylvania; D.O., University of Medicine and Dentistry, New Jersey School of Osteopathic Medicine, Consulting Psychiatrist.
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University, Seoul, Korea; M.A., Ph.D., Bryn Mawr College; Post-doctoral Clinical Fellow.
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Diane Christie Shaffer, B.A., M.A., Trinity College; Psy.D. Immaculata University; Postdoctoral Clinical Fellow.
Sarah Teague, B.A., Butler University; M.A., Bryn Mawr College; Clinical Psychology Intern.
Theresa D. McGrath, Administrative Assistant.

### 14.9 Dean's Office

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Diane Downer Anderson, B.A., Montclair State College; M.S., Drexel University; Ph.D., University of Pennsylvania, Associate Dean for Academic Affairs and Associate Professor.
Myrt Westphal, A.B., Occidental College; Ed.M., Boston University, Associate Dean for Student Life.
Rafael Zapata, B.A., Iona College; M.A., Arizona State University, Assistant Dean of the College and Director of the Intercultural Center.
Karen M. Henry, B.A., Swarthmore College;
M.S.S., Bryn Mawr College Graduate School of Social Work; Ph.D., Temple University, Assistant Dean of the College and Gender Education Adviser.
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Rachel Head, B.S.W., Florida State University; Ed.M., University of South Florida, Assistant Dean for Residential Life.
Angela "Gigi" Simeone, A.B., Wellesley College; Ed.M., Boston University; Ph.D., University of Pennsylvania, Health Sciences Adviser and Prelaw Adviser.
Paury Flowers, B.A., Sarah Lawrence College, Assistant Coordinator of Student Activities.
Melissa Mandos, B.A., Wesleyan University; Master of City and Regional Planning, Rutgers University, Fellowships and Prizes Adviser.

Jennifer Marks-Gold, B.S., Drexel University; Ed.M., Cabrini College, International Students and Scholars Adviser.
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Patricia A. Coyne, Administrative Coordinator.
Betsy Durning; Ruthanne Krauss; Jennifer Lenway, M.S.W. Portland State University; Devonia "Bonnie" Lytle; Joanna K. Nealon, A.B., Immaculata College; Diane E. Watson, Administrative Assistants.

### 14.10 Development and Alumni Relations

Stephen D. Bayer, B.A., Tufts University; J.D., Emory University School of Law, Vice President for Development and Alumni Relations.
Connie Baxter, Administrative Coordinator.

### 14.10.1 Advancement Services

Drusie Sheldon, B.A., University of Texas at Austin, Director.
Millie Dappollone, A.A.S., Community
College of Philadelphia, Administrative Assistant.
Advancement Operations
Mimi Weiler, Manager, Advancement Information Systems.
Barbara Mann, B.S., West Chester University, Manager, Advancement Data and Technology. Alumni and Gift Records
Ruth Krakower, B.F.A., University of Hartford, Hartford School of Art, Director.
Jane Pedrick, B.A., Franklin \& Marshall College, Records Information Specialist.
Trish Tancredi, Gift Specialist.
Marianne Kennedy, Gift Recorder.
Stephanie Specht, Alumni Recorder.
Catherine Powell, B.S., Rosemont College, Alumni Recorder.
Theresa Rodriguez, Administrative Assistant.

### 14.10.2 Alumni Relations

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Astrid Devaney, Associate Director.
Geoff Semenuk, B.A., University of Delaware, Associate Director.
Wendy Waltman, B.A., Lock Haven University, Assistant Director.
Julie DiPietro, Administrative Assistant.

### 14.10.3 Development

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Mary Carr, A.B.A., Keystone School of Business, Administrative Assistant. Annual Giving
Mary Beth Mills, B.A., Pennsylvania State University; M.S., Drexel University, Director.
Dennis Archey, A.A., University of Maryland;
B.A., Pennsylvania State University, Assistant Director.
Kara McDonald, B.S., Ohio University, Assistant Director.
Fritz Ward, B.A., Eckerd College; M.F.A., University of North Carolina at Greensboro, Marketing Manager.
Deborah J. Mulligan, Administrative Assistant. Capital Giving
Kay Fairs, B.A., University of Lancaster, England, Director.
Anne Bonner, B.A., University of Wyoming; M.A., University of Washington, Senior Associate Director.
Susan Lathrop, B.A., Wellesley College; M.Ed., Smith College; B.S., University of Delaware, Associate Director.
Alex Unger, B.A. University of Pennsylvania; M.P.A., New York University, Associate Director.
Dierdre W. Konar, B.S. Babson College; M.S.
Drexel University, Associate Director.
Sandy Byers, Administrative Assistant.
Corporate, Foundation, and Government Relations
Kenneth Dinitz, B.A., Swarthmore College; M.A., New School for Social Research, Director.
Nadine Kolowrat, B.F.A., New York University Tisch School of the Arts, Associate Director.
Tania Johnson, B.A., M.A., University of Pennsylvania, Assistant Director.
Deborah L. Thompson, B.S., Kutztown University, Administrative Assistant. Donor Relations
Melissa M. Pizarro, A.B., Lafayette College, Director.
K. Nadine Kavanaugh, A.B., University of Chicago; M.F.A., Columbia University, Associate Director.
Gift Planning
Michael Valoris, B.A., Pennsylvania State University; J.D., Widener University School of Law, Director.
Patti Bender, B.S., University of Minnesota; M.A., St. Mary's University, Associate Director.

Amanda M. Hrincevich, B.A., Marist College;
J.D., Widener University School of Law, Gift Planning Administrator.
Parents Programs
Danielle F. Shepherd, B.S., Georgetown
University, Director.
Carol Stuart, Administrative Assistant.
Research
Florence Ann Roberts, B.A., Gettysburg College; M.S., University of Pennsylvania, Director.
Barbara Fleming, B.A., Tufts University, Research Associate/Writer.
Sara J.M. Gruner, M.S., Purdue University; B.S., Pennsylvania State University, Research Analyst.
Kay Watson, A.A.S., Pennsylvania State University, Research Specialist.

### 14.11 Dining Services

Linda McDougall, B.A., Temple University, Director of Dining Services.
Janet A. Kassab, Director of Purchasing and Menu Planning.
Benton Peak, A.S., Bucks County Community College, Executive Chef.
Augustine Ruhri, Cash Operations Manager.
Therese Hopson, Front-of-House Manager.
Lynn Grady, Office Manager.
Barbara Boswell, Catering Manager.
Lisa Scolaro, Culinary Institute of America, Catering Chef.

### 14.12 Equal Opportunity Office

Sharmaine B. LaMar, B.S., St. Joseph's University; J.D., University of Richmond, Equal Opportunity Officer.

### 14.13 Facilities and Services

C. Stuart Hain, B.A., Roanoke College, Vice President for Facilities and Services.
Paula Dale, B.A., Wake Forest University; M.A., University of North Carolina at Chapel Hill, Executive Assistant, Facilities and Services.
Mary K. Hasbrouck, B.A., Oberlin College, Technology Coordinator.
Christi A. Pappert, Administrative Coordinator.
Jinny Schiffer, A.B., Smith College, M.S., Temple University, Environmental Health \& Safety Officer.
Susan Smythe, B.A., Wesleyan University, A.D.A. Program Manager.

### 14.14 Facilities Management

Claire Ennis, Facilities Management Coordinator.
Alice Balbierer, Assistant Director of Facilities Management, Director of Special Projects.
Patricia Maloney, B.A., Pennsylvania State
University, Facilities Coordinator and Director of Summer Programs.
Environmental Services
Patti Shields, Director.
Don Bankston, Supervisor.
Brian Vazquez, Supervisor.
Alvin Miser, Supervisor.
Grounds
Jeff Jabco, B.S., Pennsylvania State
University; M.S., North Carolina State
University, Director of Grounds/Coordinator of Horticulture.
Steve Donnelly, Athletic Fields Supervisor. Paul Eriksen, B.S., University of Delaware, Garden Supervisor.
Chuck Hinkle, B.S., Temple University, Garden Supervisor.
Bill Costello, A.S., Temple University and A.S., Pennsylvania State University, I.P.M. Coordinator/Gardener II.
Sue Stark, B.A., Lafayette College; M.L.A., University of Pennsylvania, Volunteer Coordinator/Gardener II.
Maintenance
Ralph P. Thayer, Director of Maintenance.
Bill Maguire, Manager, Maintenance/Trades.
Carolyn Vance, Workbox Coordinator.
John Scalio, Supervisor.
Bob McCaughern, Supervisor.
Bernard Devlin, Supervisor.
Planning and Construction
Janet M. Semler, B.S., Pennsylvania State
University; M.S., Drexel University, Director of Planning and Construction.
Michael Boyd, Senior Project Manager.
Tom Cochrane, Senior Project Manager for Engineering Systems.
Woodford Frazier, A.S., Montgomery County
Community College, Facilities Information Manager.

### 14.15 Finance and Treasurer's Office

Suzanne P. Welsh, B.A., B.S., University of Delaware; M.B.A., University of Pennsylvania, Vice President for Finance and Treasurer.
Lois L. Falzone, Administrative Coordinator.

### 14.16 Financial Aid Office

Laura Talbot, B.A., Wheaton College, Director of Financial Aid.
Kristin Moore, B.S., St. Francis University; M.A., Indiana University of Pennsylvania, Associate Director of Financial Aid.
Judith A. Strauser, B.S., B.A., Gannon University, Associate Director of Financial Aid.
Erin McConnell, B.A., DePauw University, Assistant Director of Financial Aid.
Joanne Barracliff, Loan Coordinator.
Catherine Custer, B.S., Lock Haven University; Gina Fitts, Administrative Assistants.

### 14.17 Health Sciences/Prelaw Advisory Program

Gigi Simeone, A.B., Wellesley College; Ed.M., Boston University; Ph.D., University of Pennsylvania, Health Sciences Adviser. Jennifer Lenway, M.S.W., Portland State University, Administrative Assistant.

### 14.18 Health Services

Beth Kotarski, M.S.N., C.R.N.P., University of Pennsylvania, Nurse Practitioner, Director.
Suzie H. Long, M.S.N., C.R.N.P., University of Pennsylvania, Nurse Practitioner.
Cheryl Donnelly, R.N., B.S.N., West Chester University, Nurse.
Ethel Kaminski, R.N., B.S.N., Gwynedd Mercy College; M.S.N., University of Pennsylvania, Nurse.
Barbara Krohmer, R.N., A.S., Delaware County Community College, Nurse.
Eileen Stasiunas, R.N., B.S.N., Villanova University, Nurse.
Matthew Cohen, B.S., University of Pennsylvania; M.D., Jefferson Medical College, Consultant, Internal Medicine.
Rima Himelstein, B.S., M.D., University of Pennsylvania, Consultant, Adolescent Medicine.
Pei Ann Kong, B.S., M.D., Temple University, College of Science and Technology, Temple University School of Medicine. Residency Wayne State University. Consultant, Internal Medicine.
Barry Rinker, B.S., Muhlenberg College; M.S., University of Michigan; M.D., Jefferson Medical College, Consultant, Internal Medicine.
Alan Zweben, B.S., State University of New York at Stony Brook; M.D., New York Medical College, Consultant, Internal Medicine.
Mary Jane Palma, Medical
Administrator/Insurance Coordinator.

### 14.19 Human Resources

Sharmaine B. LaMar, B.S., St. Joseph's University; J.D., University of Richmond, Interim Vice President, Human Resources.
Lee Robinson, B.A., Rhode Island College; M.S., Villanova University, Employee Relations Manager.
Betsy Batter, B.S., St. Joseph's University, SPHR, CCP, GRP, Compensation and Benefits Manager.
Carolyn Hatt, B.A., University of Delaware; M.S., Widener University, Employment Manager.
Theresa Handley, Benefits Administrator. Janis Leone, Human Resources Coordinator. Ben Wilson, Administrative Assistant. Payroll
Karen Phillips, Payroll Director.
Susan Watts, Payroll Coordinator.
Catherine Wilson, Payrol1/Human Resources Assistant.

### 14.20 Information Technology Services

Gayle R. Barton, A.B., Bryn Mawr College; M.Ed., St. Lawrence University, Chief Information Technology Officer.
Kelly A. Fitzpatrick, IT Coordinator. Academic Technologies
Michael Bednarz, B.A., Pennsylvania State University, Media Services Technician. Eric Behrens, B.A., Swarthmore College, Associate Chief Information Technology Officer, Academic Technologies.
Michael Kappeler, B.A., Richard Stockton
College of New Jersey, Web Content Coordinator.
Leslie Leach, B.S., University of Maine, Web Developer.
David T. Neal Jr., B.A., Temple University, Media Services Technician.
Michael Patterson, B.A., Temple University, Media Services Manager.
Andrew Ruether, B.A., Swarthmore College; M.Eng., Cornell University, Academic Technologist.
Karen "Corrine" Schoeb, B.A., Goddard College, Web Content Management Developer.
Doug Willen, B.A., Princeton University; Ph.D., University of California, Academic Technologist.
Administrative Applications Support
Robin Jacobsen, B.B.S., Temple University, Systems Analyst.
Frank Milewski, B.S., St. John's University, Director, Administrative Information Systems.

Jean Pagnotta, B.S.I.E., University of Pittsburgh, System Analyst.
Rhoni A. Ryan, B.S., Villanova University, System Support Analyst.
Edward Siegle, B.A., West Chester University, Senior Systems Analyst.
Client Services
Kenneth Collins, B.A., Temple University, Client Services
Coordinator/Telecommunications
Administrator.
Mark CJ Davis Jr., A.S., CLC, B.S., Delaware
Valley College, Software Specialist.
Heather Dumigan, Client Services
Coordinator.
Seth Frisbie-Fulton, B.A., Antioch College, Client Services Coordinator.
Aixa I. Pomales, B.A., Temple University, Director, Client Services.
Michael Rapp, Hardware Support Technician.
Enterprise Services
Nathan Austin, B.A., Widener University, Systems Administrator.
Wenping Bo, B.A., Tianjin Foreign Languages Institute; M.S., Lawrence Technological University; M.S., Clemson University, System Analyst.
Michael Clemente, B.S., Rowan University, Systems Administrator.
Nicholas Hannon, B.S., Worcester Polytechnic Institute; M.S., Syracuse University, Information Security Analyst.
Jason Rotunno, B.S., Drexel University, Junior Systems Administrator.
R. Glenn Stauffer, B.B.A., Temple University, Director, Enterprise Systems.
Donald Tedesco, B.A., Rutgers University, Data Center Supervisor.
Networking and Telecommunications
Mark J. Dumic, B.A., M.B.A., University of Rochester, Director, Networking and Telecommunications.
Robert Velez, B.S., Liberty University, Network Administrator.

### 14.21 Institutional Research Office

Robin H. Shores, B.A., M.A., Ph.D., University of Delaware, Director of Institutional Research.
Alexander McClung, B.A., Colgate University; M.A., SUNY-New Paltz, Research Analyst.

### 14.22 Investment Office

Mark C. Amstutz, B.A., College of William and Mary; M.A., University of Virginia, C.F.A., Managing Director Investments.
Lori Ann Johnson, B.A., Rutgers University; M.B.A., Villanova University, Director of Investment Operations and Assistant Treasurer.
Nathan Newport, B.A., University of Florida; M.B.A., Drexel University, Investment Analyst.

Carmen Duffy, Investment Associate.

### 14.23 Lang Center for Civic and Social Responsibility

Joy Charlton, B.A., University of Virginia; M.A., Ph.D., Northwestern University, Executive Director.
Cynthia Jetter, B.A., Swarthmore College, Director for Community Partnerships and Planning.
Debra Kardon-Brown, B.S., Pennsylvania State University, Assistant Director for Student Programs.
George Lakey, B.S., Cheyney University; M.A., University of Pennsylvania, Research Fellow and Visiting Assistant Professor of Peace and Conflict Studies.
Jennifer Magee, B.A., M.A., Washington College; Ph.D. Institute for Conflict Analysis and Resolution, George Mason University, Associate Director for Student Programs.
Delores Robinson, Administrative Assistant.

### 14.24 Lang Performing Arts Center

James P. Murphy, B.F.A., State University of New York at Albany, Managing Director.
Allison Emmerich, B.A., DeSales University, Production Assistant.
Jean R. Tierno, B.A., Widener University; J.D., Widener University School of Law, Administrative Assistant.

### 14.25 Libraries

### 14.25.1 College Library

Peggy Ann Seiden, B.A., Colby College; M.A., University of Toronto; M.L.I.S., Rutgers University, College Librarian.
Annette Newman, B.A., Evergreen State College, Assistant to the College Librarian.
Digital Initiatives
Kate Carter, B.F.A., New York University; M.L.S., University of Pittsburgh, Digital Initiatives Librarian.
Spencer Lamm, B.A., University of Washington; M.L.I.S., University of Washington, Digital Initiatives Librarian.

## Reference and Bibliographic Instruction

Anne Garrison, B.A., Drew University; M.A., University of Washington; M.L.S., University of Washington, Humanities Librarian.
Pam Harris, B.A., Mary Washington College; M.L.S., Drexel University, Outreach, Instruction, and Reference Services Librarian.
Melanie Maksin, B.A., Swarthmore College; M.L.S., University of Pittsburgh, Social Sciences Librarian.
Technical Services
Barbara J. Weir, B.S., Pennsylvania State University; M.L.S., Drexel University, Associate College Librarian for Technical Services \& Digital Initiatives.
Amy McColl, B.A., University of Delaware; M.L.S., Drexel University, Assistant Director for Collections and TriCollege Consortium Licensing Librarian.
Susan Dreher, B.A., Wesleyan University; M.L.I.S., Drexel University, Digital Resources Digitization Coordinator.
Sarah Hartman-Caverly, B.A., Haverford College; M.L.I.S. and M.I.S., Drexel University, Serials and Electronic Resources Specialist.
So-Young Jones, B.A., Euha Women's University, Korea; M.L.S., Simmons College, Technical Services Specialist.
Melinda Kleppinger, B.S., Lebanon Valley College, Government Documents Specialist.
Mary Marissen, B.A., Calvin College; M.M., Catholic University of America, Technical Services Specialist.
Danie Martin, B.A., B.S., Ohio State
University; M.L.S., Kent State University, Technical Services Specialist.
Kerry McElrone, B.A., Saint Joseph's University, Interlibrary Loan Specialist.
Louise Petrilla, A.A., Delaware County Community College, Technical Services Specialist.
Sandra M. Vermeychuk, B.A., Swarthmore College; M.S. in Ed., University of Pennsylvania, Interlibrary Loan Specialist. Access and Lending Services
Alison J. Masterpasqua, B.S., Millersville State College, Access and Lending Services Supervisor.
Linda Hunt, B.A., West Chester University, Access and Lending Services Specialist.
Chris Gebert, B.A., University of Delaware, Access and Lending Services Specialist.
Mary Ann Wood, B.S., Pennsylvania State University; M.Ed., Temple University, Evening Access and Lending Services Supervisor.

## Tricollege Library Consortium

Anna Headley, B.A., Swarthmore College, Library Applications Intern.
Chelsea Lobdell, B.S., Muhlenberg College; M.S., University of Pennsylvania, Library Applications Programmer.
Ken Watts, Book Van Driver.

### 14.25.2 Cornell Science and Engineering Library

Meg E. Spencer, B.A., University of Richmond; M.S., Drexel University, Head of Cornell Library of Science and Engineering and Science Librarian.
Teresa E. Heinrichs, B.A., Waynesburg College, Cornell Access and Lending Services Supervisor.
Margaret J. Brink, B.A., University of Iowa, Serials and Access Specialist.

14.25.3 Underhill Music and Dance Library<br>Donna Fournier, B.A., Connecticut College; M.L.S., Southern Connecticut State University; M.A., West Chester University, Music and Dance Librarian.

14.25.4 Friends Historical Library Christopher Densmore, B.A., Oberlin College; M.A., University of Wisconsin, Curator.
Patricia Chapin O'Donnell, B.A., M.A., University of Pennsylvania; M.A., University of Delaware, Archivist.
Barbara E. Addison, B.S., University of Wisconsin-Milwaukee; M.S.L., University of Wisconsin-Madison, Technical Services Coordinator.
Susanna K. Morikawa, B.A., Dickinson College; M.F.A., Ph.D., Syracuse University, Archival Specialist.
Charlotte A. Blandford, Administrative Assistant.
Honorary Curators of the Friends Historical Library
Esther Leeds Cooperman, Mary R. Dunlap (emerita), Philip L. Gilbert, Valerie Gladfelter, James E. Hazard, Howard T. Hallowell III (emeritus), Adalyn Purdy Jones, Elizabeth H. Moger (emerita), Robert C. Turner, Nancy V. Webster, Signe Wilkinson, and Harrison M. Wright.

### 14.25.5 Swarthmore College Peace Collection

Wendy E. Chmielewski, B.A., Goucher College; M.A., Ph.D., State University of New York at Binghamton, George Cooley Curator.
Barbara E. Addison, B.S., University of Wisconsin-Milwaukee; M.S.L., University of Wisconsin-Madison, Librarian.

Mary Beth Sigado, B.M., Temple University, M.S.W., Widener University, Technical Services Specialist.
Anne Yoder, B.A., Eastern Mennonite College; M.L.S., Kent State University, Archivist.

Advisory Council of the Swarthmore College Peace Collection
Harriet Hyman Alonso, Kevin Clements, Hilary Conroy (emeritus), John Dear, Donald B. Lippincott, Hannah and Felix Wasserman.

### 14.26 List Gallery

Andrea Packard, B.A., Swarthmore College; Certificate, Pennsylvania Academy of the Fine Arts; M.F.A., American University, Director.

### 14.27 Off-Campus Study Office

Sharon E. Friedler, B.A., Colby College;
M.F.A., Southern Methodist University, Faculty Adviser for Off-Campus Study.
Patricia C. Martin, B.A., Williams College; M.A., School for International Training, Director for Off-Campus Study.
Rosa M. Bernard, B.S., Pace University, Assistant Director for Off-Campus Study.
Diana R. Malick, B.S., Neumann College, OffCampus Study Assistant.

### 14.28 Post Office

Vincent J. Vagnozzi, B.S., West Chester University, Supervisor.
David Robinson, Assistant Supervisor. John Steel, Russ Quann, Vincent O'Connell, Tom McGilligan and Tom Dibattista, Clerks.

### 14.29 President's Office

Rebecca S. Chopp, B.A., Kansas Wesleyan University; M.Div., St. Paul School of Theology; Ph.D., University of Chicago, President of the College and Professor of Religion.
Maurice G. Eldridge, B.A., Swarthmore College; M.Ed., University of Massachusetts, Vice President for College and Community Relations and Executive Assistant to the President.
Garikai Campbell, B.A., Swarthmore College; Ph.D., Rutgers University, Special Assistant to the President, Associate Vice President for Planning, and Associate Professor of Mathematics.
Laura K. Warren, B.A., Strayer University, Executive Coordinator.
Jenny Gifford, Administrative Coordinator.

### 14.30 Provost's Office

Thomas A. Stephenson, B.S., Furman
University; Ph.D., University of Chicago, Provost and James H. Hammons Professor of Chemistry and Biochemistry.
Patricia L. Reilly, B.A., University of California; M.A., Bryn Mawr College; Ph.D., University of California, Associate Provost and Associate Professor of Art History.
Marcia C. Brown, B.A., Villanova University; M.Ed., University of Pennsylvania, Executive Assistant to the Provost.
Cathy Pescatore, Administrative Coordinator.
Joanne Kimpel, Administrative Coordinator.

### 14.31 Public Safety

Herbert Barron, B.A., Cheyney State College, Acting Director of Public Safety. Brian Harris, Dominick Martino, Patrol Sergeants.
John Dukes, B.S., St. Joseph University; Joe Forgacic, Patrol Corporals.
Jim Ellis; Bob Stephano; Kathy Agostinelli, A.A.S., Delaware County Community College; Tony Green; Tom Gallo; and Rob Warren, Public Safety Officers.
George Darbes, Ellie Jamison, Terry
McGonigle, Communications Center.
Terri Narkin, Mary Lou Lawless,
Administrative Assistants.

### 14.32 Registrar's Office

Martin O. Warner, B.A., University of North Carolina at Chapel Hill; M.A., Duke University, Registrar.
Diane M. Collings, B.A., Smith College, Associate Registrar.
Stacey Hogge, A.S., Delaware County Community College; B.S., West Chester University, Assistant Registrar.
Janet McSwiggan, Assistant Registrar.

### 14.33 The Scott Arboretum

Claire Sawyers, B.S., M.S., Purdue University; M.S., University of Delaware, Director.

Julie Jenney, B.A., University of Oregon, Educational Programs Coordinator. Andrew Bunting, A.A.S., Joliet Junior College; B.S., Southern Illinois University, Curator.
Jody Downer, A.A.S., Drexel University, Administrative Assistant.
Jeff Jabco, B.S., Pennsylvania State
University; M.S., North Carolina State
University, Horticultural Coordinator.

Rhoda Maurer, B.A., University of Washington, Collections Documentation and Project Manager.
Rebecca Robert, B.S., M.S., Pennsylvania
State University, Member and Visitor Programs Coordinator.
Jacqui West, Administrative Coordinator.

### 14.34 Academic Administrative Assistants and Technicians

Art: June V. Cianfrana, A.A.S., Delaware County Community College, Administrative Assistant; Stacy Bomento, B.A., LaSalle University, Slide Curator; Douglas Herren, B.F.A., Wichita State University; M.F.A., Louisiana State University, Studio Technician.
Asian Studies: Anna Everetts, Administrative Assistant.
Biology: Matt Powell, B.S., Central Michigan University, Administrative and Technology Manager; Diane Fritz, Administrative Coordinator; John Kelly, A.A.S., Community College of Philadelphia; B.S., Wharton School, University of Pennsylvania, Senior Technical Specialist; Gwen Rivnak, B.S., Denison University; M.E., Widener University, Laboratory Coordinator; Bill Pinder, B.A., Swarthmore College, Biology Greenhouse Manager; Tami Gura, B.A., Western Maryland College, Animal Facilities Manager.
Black Studies: Anna Everetts, Administrative Assistant.
Chemistry and Biochemistry: Kathryn R. McGinty, B.A., M.A., California State University at Long Beach, Administrative Assistant; David S. Trimble, B.S., Denison University; Ph.D., University of Tennessee, Instrument Coordinator.
Classics: Deborah Sloman, Administrative Assistant.
Computer Science: Bridget M. Rothera, Administrative Assistant; Jeffrey M. Knerr, B.S., College of William and Mary; M.S., Ph.D., University of North Carolina, Lab/System Administrator.
Economics: Nancy Carroll, B.A., Barat College, Administrative Assistant.
Educational Studies: Kae Kalwaic, B.S., Shippensburg University; M.Ed., Temple University, Administrative Assistant.
Engineering: Joyce Glackin, Administrative Assistant; Grant Smith, Mechanician; Edmond Jaoudi, Electronics, Instrumentation, and Computer Specialist, B.S., Fairleigh Dickinson University; M.Arch., Virginia Polytechnic Institute and State University.

English Literature: Carolyn Anderson, Administrative Coordinator; Joanne Howard, B.A., Rutgers University, Administrative Assistant.
Environmental Studies: Anita Pace, Administrative Assistant.
Film and Media Studies: Carolyn Anderson, Administrative Coordinator; Joanne Howard, B.A., Rutgers University, Administrative Assistant.
Gender and Sexuality Studies: Anna Everetts, Administrative Assistant.
German Studies: Eleonore Baginski, B.S., St. Joseph's University, Administrative Coordinator; Cassy Burnett, Administrative Assistant.
History: Jennifer Moore, B.A., University of Pennsylvania; M.S.Ed., University of Pennsylvania, Administrative Assistant.
Interpretation Theory: Anna Everetts, Administrative Assistant.
Islamic Studies: Anita Pace, Administrative Assistant.
Latin American Studies: Anna Everetts, Administrative Assistant.
Linguistics: Aaron J. Dinkin, A.B., Harvard University, Phonetics Lab Coordinator; Dorothy Kunzig, Administrative Assistant.
Mathematics and Statistics: Stephanie J. Specht, Administrative Assistant; Kaitlyn E. O'Neil, B.A., Merrimack College; M.A., University at Buffalo, The State University of New York, Academic Support Coordinator.
Modern Languages and Literatures:
Eleonore Baginski, B.S., St. Joseph's
University, Administrative Coordinator; Cassy
Burnett, Administrative Assistant; Michael Jones, B.A., State University of New York at Buffalo, Language Resource Center Director.
Music and Dance: Bernadette Dunning, Administrative Coordinator; Susan Grossi, Administrative Assistant; Geoffrey Peterson, B.M., Cleveland Institute of Music, Concert Manager; Hans Boman, B.M., Philadelphia College of Performing Arts, Dance Program Accompanist; Tara Nova Webb, B.A., Swarthmore College; M.A., New York University, Arts Administration Intern and Costume Shop Supervisor.
Peace and Conflict Studies: Anna Everetts, Administrative Assistant.
Philosophy: Donna Mucha, Administrative Assistant.

## 14 Administration

Physical Education and Athletics: Christyn P. Abaray, B.A., Washington University; M.A., University of North Carolina at Chapel Hill, Associate Director of Athletics; Marian Fahy, A. S., Delaware County Community College, Sharon J. Green, Administrative Assistants; Ray Scott, B.A., Widener University, Larry Yannelli, B.A., Widener University, Equipment/Facilities Managers; Marie Mancini,
A.T.C., B.S., C.C.C.S., West Chester University; Jessica Lydon, M.S., A.T.C., West Chester University; Allison Hudak, A.T.C., West Chester University.
Physics and Astronomy: Carolyn Warfel, A.S., Widener University, Administrative Assistant; James Haldeman, Instrumentation/Computer Technician; Steven Palmer, Machine Shop Supervisor; Timothy Gray, B.A., Swarthmore College; Ph.D., Princeton University, Postdoctoral Research Scientist.
Political Science: Gina Ingiosi; Deborah Sloman, Administrative Assistants.
Psychology: Kathryn Timmons, Administrative Coordinator; Julia L. Welbon, B.A., William Smith College, Academic Coordinator.
Public Policy: Catherine Wareham, A.S., Wesley College, Administrative Assistant.
Religion: Anita Pace, Administrative Assistant. Sociology and Anthropology: Rose Maio, Administrative Coordinator.
Theater: Thomas Snyder, B.S., Pennsylvania State University, Production Manager and Technical Director; Jean Tierno, B.A., Widener University, J.D., Widener University School of Law, Administrative Assistant; Tara Nova Webb, B.A., Swarthmore College, M.A., New York University, Arts Administration Intern and Costume Shop Supervisor.

## Art

Catherine Balco, Hartford Art School

## Art History

Kathleen Nolan, Hollins University
Christine Poggi, University of Pennsylvania

## Biology

David Braun, University of Missouri Samantha Chapman, Villanova University Melissa Coleman, Claremont McKenna College Gerald Grunwald, Thomas Jefferson University Michael Hanna, Texas $A \& M$
Mark Haussmann, Bucknell University
Amy Johnson, Bowdoin University Tyler Lorig, Washington and Lee University Anna Mitchell, Case Western University Claudio Pikielny, Dartmouth Medical School Mitchell Singer, University of California-Davis John VandenBrooks, Arizona State University David White, University of Pennsylvania David Winkler, Cornell University

## Chemistry and Biochemistry

Christopher Fecko, University of North Carolina-Chapel Hill
Terrence Oas, Duke University
Bjorn Soderberg, West Virginia University

## Classics-Greek

Timothy Power, Rutgers University-New Brunswick
Peter Struck, University of Pennsylvania
Classics-Greek \& Latin
John Marincola, Florida State University

## Classics—Latin

Andrew Feldherr, Princeton University

## Comparative Literature

Russell Scott Valentino, University of Iowa

## Computer Science

Gregory Benson, University of San Francisco
Kuzman Ganchev, Google, Inc.
Brent Heeringa, Williams College
Deepak Kumar, Bryn Mawr College
James Marshall, Sarah Lawrence College
Michael Siff, Sarah Lawrence College
Laura Toma, Bowdoin College

## Economics

Andrew Feldman, BadgerStat
Joseph Joyce, Wellesley College
David Kreps, Stanford University-Graduate School of Business
Adrienne Lucas, Wellesley College
Greg Nini, The Wharton School, Univ. of Pennsylvania
David Owens, Haverford College
Peter Schnabl, University of Delaware
Steven Mark Sheffrin, The Murphy InstituteTulane University
Eugene Steuerle, The Urban Institute

## Educational Studies

Sigal Ben-Porath, University of Pennsylvania Chris Bjork, Vassar College
Pat Enciso, The Ohio State University
Kara Finnigan, University of Rochester
Wesley Shumar, Drexel University

## English Literature

Herman Beavers, University of Pennsylvania Woon Ping Chin, Dartmouth College Timothy Corrigan, University of Pennsylvania Andrew Duncan, Frostburg State University Jed Esty, University of Pennsylvania Elaine Freedgood, New York University
Priya Joshi, Temple University
Matthew Kozusko, Ursinus College
Edward Larkin, University of Delaware
Sue-Im Lee, Temple University
Vicki Mahaffey, University of Illinois
Brian McHale, The Ohio State University
Rosemary O'Neill, Haverford College
Judith Pascoe, University of Iowa
Veronica Schanoes, Queens College-CUNY
Andrea Stevens, University of Illinois-UrbanaChampaign
Jamie Taylor, Bryn Mawr College
Sarah Werner, Folger Shakespeare Library
Ivy Wilson, Northwestern University

## Environmental Studies

Albert Markhart, University of Minnesota

## Gender and Sexuality Studies

Leah Hochman, University of Southern
California-Louchheim School for Judaic
Studies
Lázaro Lima, Bryn Mawr College

## History

Gail Bederman, University of Notre Dame
Pamela Crossley, Dartmouth College
Paulo Drinot, University of London
Poppy Fry, St. Anselm College
Louise McReynolds, University of North Carolina-Chapel Hill
Caitlin Murdock, California State UniversityLong Beach
Louise Newman, University of FloridaGainesville
Jessica Roney, Ohio University
Rebecca Winer, Villanova University
David Witwer, Pennsylvania State UniversityHarrisburg

## Interpretation Theory

Jennie Hirsh, Maryland Institute of Art
Jeffrey Peters, University of Kentucky

## Linguistics

Laura Ahearn, Rutgers University
Mark Baker, Rutgers University-New Brunswick
Barry Bandstra, Hope College
Chris Barker, New York University

Abbas Benmamoun, University of Illinois
Susan Fischer, University of California-San Diego
Colleen Fitzgerald, University of Texas at Arlington
Shizhe Huang, Haverford College
Maud McInerney, Haverford College
Eugene Narmour, University of Pennsylvania
Angela Nonaka, University of Texas-Austin
Eric Raimy, University of Wisconsin-Madison
Keren Rice, University of Toronto
Jonathan Rosa, New York University
Adam Ussishkin, University of Arizona

## Mathematics \& Statistics

Michael Artin, Massachusetts Institute of Technology
Lynne Butler, Haverford College
Mark Hovey, Wesleyan University
Robin Pemantle, University of Pennsylvania
Richard Wentworth, University of MarylandCollege Park

## Modern Language-Chinese

Xiaorong Li, University of California-Santa Barbara
Yingjin Zhang, University of California-San Diego

## Modern Language-French

Deborah Steinberger, University of Delaware

## Modern Language-German

Erik Butler, Emory University
Marc Weiner, Indiana University

## Modern Language-Russian

Anthony Anemone, The New School for General Studies

## Modern Language-Spanish

Ana Maria Amar Sanchez, University of California-Irvine

## Music and Dance

Ingrid Arauco, Haverford College
Ninotchka Bennahum, University of California-Santa Barbara
David Kasunic, Occidental College
Marshall Taylor, Temple University

## Peace and Conflict Studies

Alex Weisiger, University of Pennsylvania

## Philosophy

William Day, LeMoyne College Robert Guay, Binghamton University Jon Mandle, University at Albany-SUNY Tomas Polger, Univeristy of Cincinnati G. Fred Schueler, University of Delaware Bharath Vallabha, Bryn Mawr College James Van Cleve, University of Southern California-Claremont

Physics and Astronomy
Enrique Galvez, Colgate University
Seth Major, Hamilton College
David Statman, Allegheny College
James Stone, Princeton University
Political Science
Marc Blecher, Oberlin College
Erik Bleich, Middlebury College
William J. Booth, Vanderbilt University
Craig Borowiak, Haverford College
Kareem Crayton, University of North CarolinaChapel Hill
Mark Graber, The University of Maryland School of Law
Carol Hager, Bryn Mawr College
Nicole Mellow, Williams College
Jason Neidleman, University of La Verne
Chad Rector, George Washington University
Christina Rosan, Temple University
Arthur Schmidt, Temple University
Jessica Stanton, University of Pennsylvania
Dana Villa, University of Notre Dame
Alex Weisiger, University of Pennsylvania

## Psychology

Sarah Brown-Schmidt, University of IllinoisUrbana Champaign
Chi Yue Chiu, Nanyang Technological University
Alexander Huk, The University of Texas-Austin
John Monterosso, University of Southern California-Los Angeles
Acacia Parks, Reed College
Kenneth Short, Target Behavioral Response Laboratory
Jami Young, Rutgers University-Piscataway
Public Policy
Craig Borowiak, Haverford College
Carol Hager, Bryn Mawr College
Christina Rosan, Temple University

## Religion

Timothy Beal, Case Western Reserve University
Jason Bivins, North Carolina State University
Najam Haider, Barnard College
Tamar Kamionkowski, Reconstructionist Rabbinical College
Scott Kugle, Emory University
Anne McGuire, Haverford College

## Sociology and Anthropology

Charles Gallagher, LaSalle University
Kathryn Geurts, Hamline University
David Gibson, University of Pennsylvania
Mark Goodale, George Mason University
Judith Goode, Temple University
Kathleen Hall, University of Pennsylvania
Dustin Kidd, Temple University
Judith Porter, Bryn Mawr College
Gregory Starrett, University of North CarolinaCharlotte

## Theater

Walter Bilderback, The Wilma Theater
Henrik Borgstrom, Niagara University
Leon Ingulsrud, SITI Company
Mark Lord, Bryn Mawr College
Karen Shimakawa, New York University-Tisch School

May 29, 2011

### 16.1 Bachelor of Arts

Samia Jihan Abbass, Sociology and Anthropology and Special Major in Peace and Conflict Studies
Joshua David Abel, Economics
Jane Lief Abell, Sociology and Anthropology and Special Major in Islamic Studies
Ashley Victoria Acle, Psychology
Caitlin Marie Adams, Biology
Emmanuel Kwame Afrifa, Religion
Nidal Akram Shaaban Alayasa, Political Science and Economics
Andrew George Allen, Political Science and Economics
Claire Alexander Almand, Psychology
Eva Suzanne Amessé, Theater
Vivek Ananthan, Biology
Eric Levy Anderson, History
Marcia Frances Archuleta, Russian
Katherine Elise Ashmore, Sociology and Anthropology
Laura Rogan Backup, English Literature
Abraham Calvin Bae, Economics
Natalie Bamdad, English Literature and Psychology
Nell Anna Bang-Jensen, English Literature and Theater
Samuel Anson Barrows, Economics
Bryan Daniel Baum, Economics
Rachel Lauren Baumann, Biology
James Simon Klihr Beall, Economics
William Robert Beck, Greek
Meghan Therese Auker Becker, Special Major in Peace and Conflict Studies
Sarah Lisa Bedolfe, Biology
Leila Dare Bengali, Economics
James Malcolm Bernard, Economics
Jonah Emery Bernhard, Special Major in Chemical Physics
Jordan Mark Bernhardt, Political Science and Economics
Jesse Lyle Bertrand, Chemistry
Amlan Jyoti Bhattacharjee, Psychology
Ruby Bhattacharya, French and Political Science
Allison Lynn Bishop, Special Major in Art and Educational Studies
Allegra Black, Biology
Shameika Monique Black, Special Major in Africana Studies
Matthew Denali Bleiman, Political Science and Mathematics
Sylvia Nyanta Boateng, Special Major in
Political Science and Educational Studies
Ceylan Bodur, Economics
Laura Elizabeth Bolger, Political Science and Psychology
Shilpa Boppana, Religion
Sarah Iola Brajtbord, Political Science and Religion
Alexander Dodd Breslow, Computer Science

Chelsea Louise Brett, History and Economics
Sarah Jean Bricault, Special Major in
Biophysics and English Literature
Richard Gregory Brode, Economics
Ming Cai, English Literature
Mariaeloisa Carambó, History
Ryan Austin Carlson, Computer Science
Philippe Vital Celestin, Economics and Political Science
Elizabeth Salome Chang, Biology
Jimmy Charite, Economics
Charlotte Anne Chase, Philosophy
Joshua Daniel Chavez, Philosophy
Neena Rose Cherayil, Chemistry
Hena Choi, Special Major in Latin American Studies and Economics
Augusta Yeager Christensen, Political Science
Young In Chung, Psychology and Art History
Luann Alice Cignavitch, Economics
Valerie Clover Clark, Art
Kelsey Coleen Cline, Psychology and Biology
Xena Sunshine Colby, Psychology
Robin Dayanna Collin, Biology
Megan Carolyn Colombo, Economics and Sociology and Anthropology
Elizabeth Ann Comuzzi, English Literature and Medieval Studies
Alexander James Cooper, Biology
Andrea Cornejo, Economics and Political Science
Julia Lyn Corrigan, English Literature
Matthew Joseph Corso, Sociology and Anthropology
Emily Elizabeth Crawford, English Literature
Mark Christopher Czernyk, Political Science
Radwan Dahhan, Religion and Political Science
Jean Iris Dahlquist, Physics and English Literature
Caitlin Mieko Daimon, Special Major in Psychobiology
Benjamin Nicholas Glenn Rothfuss Dair, Biology
Daniel Rene Dandurand, Physics and Mathematics
Quinn Cameron David, Special Major in Psychobiology
Arik Spenser Davidson, Political Science
Zoe Catherine Gawain Davis, Art
Steven Michael Dean, Political Science
Benjamin Grant DeGolia, Philosophy and Political Science
Emanne Francoise Desjardins, Computer Science
Fatima Edris De Vol, Economics
Alicia Rochelle DeWitt, Biology and Art
Brenna Marie DiCola, Spanish
Yilun Dong, Mathematics and Economics
Michael John Duffy, Biology
David Terence Dulaney, Mathematics and Biology

Zachary Alexander Eaton, Religion and History
David Andrew Edelman, English Literature
Fumiko Egawa, Greek and Biology
Thomas Peter Eisenberg, Economics and Mathematics
Andrew Crane Eisenlohr, Economics
Bertolain Jean-Baptiste Elysee, Sociology and Anthropology
Dina Emam, Economics
Melissa Suzanne Emmerson, Special Major in Psychology and Educational Studies and Linguistics
Ecem Erseker, Economics
Emily Louise Evans, Special Major in Psychology and Educational Studies
Erica Elizabeth Evans, Special Major in Biochemistry
Dennis Fan, Political Science
Alicia Rose Farnos Wilker, Political Science
Carlo Maria Batol Felizardo, Political Science and Sociology and Anthropology
Sophia Helene Ferguson, History
Benjamin Joshua Immanuel Firestone, Special Major in Film and Media Studies
Bradley Taylor Fong, Special Major in Environmental Science
Pierre Christian Vidaurreta Font, Economics
Sara Laila Forster, Religion and Special Major in Film and Media Studies
Jonathan David Erwin-Frank, Political Science
Nelson Andres Freire, Economics and Spanish
Alexander Kent Frye, Political Science
Nicholas Paxson Gabinet, English Literature
Althea Erica Gaffney, Chemistry
Rahul Garg, Economics
Allison Hope Goldberg, Linguistics
Matthew Shen Goodman, Special Major in Cultural Sociology and Philosophy
Clara Lucia Gordon, Linguistics
Samuel Moses Green, History and Religion
Patrick Daniel Greene, Political Science
Ross Kelly Greenwood, Computer Science and Mathematics
Choongheon Han, Biology and Economics
Isaac Han, Special Major in Film and Media Studies
Patrick Edward Hartnett, Special Major in Biochemistry
Sarah Elizabeth Hawkins, Special Major in Linguistics and Languages
Kerin Elizabeth Hayes, English Literature
Yaeir Zev Heber, Special Major in World-views and Sustainability
Sarah Heffernan, Psychology
Zoe Mistrale Hendrickson, Sociology and Anthropology and Biology
Alexis Anne Hickman, Psychology
Calvin Nhi Ho, Special Major in Linguistics and Languages
Isaac Walton Hock, History
Jesse Lauren Hoff, Economics and Biology
Alexander Trevor Hollender, Art History
Jessica Ann Holler, English Literature

William Jefferson Hopkins, Psychology and English Literature
Michael Chance Hsieh, Psychology
Hanyue Hu, Economics
Xiaonan Huang, Economics
Justin Nathaniel Hughes, Computer Science
Jonathan Douglas Hum, Economics
Daniel Sung-Joo Hwang, Biology
Halil Omer Ikizler, Biology
Ishan Ruzbeh Irani, Economics
Alexandra Tafoya Israel, Special Major in Linguistics and Languages
Lucas John Janes, Political Science
Jonathan Caleb Jaquette, Mathematics
Joanie Jean, Biology and Special Major in Japanese
Dong Hwan Jeoung, Latin and Economics
Priya Anne Johnson, Sociology and Anthropology
Camilia Layla Kamoun, Special Major in Islamic Studies
Derrick Dar-Wei Kao, Biology
Nicole Anna Marie Kato, Economics
Louis Robert Katz, Political Science and Linguistics
Amber Suzanne Kavka-Warren, Philosophy
Laura Elizabeth Keeler, History
Alison Irene Kelly, Political Science
Jamie Anderson Kendall, Special Major in Geology
Kira Rose Kern, Political Science
Behram Khan, Chemistry
Amelia Chayet Kidd, Psychology
Jia Venice Kim, Biology and Art
Jung Min (Kevin) Kim, History
Kun Hee Kim, Economics
Sara Ka Rham Kim, Biology and Asian Studies
Mary Joyce Klap, Economics
Andrew Evan Koontharana, Special Major in Astrophysics and Economics
Dina Kopansky, Special Major in Gender and Sexuality Studies
Max Morton Korein, Computer Science and Physics
Adam Isaac Kornetsky, Economics
Serra Kornfilt, Special Major in Film and Media Studies
Adam Levin Koshkin, Political Science
Daniel Keleher Kurz, Mathematics
Leland Paul Kusmer, Linguistics
Jonathan Richard Kwan, Philosophy
Kevin Russell Labe, Physics and Mathematics
Samuel Symington Lacy, Political Science
Ambar Mariela La Forgia, Economics
Andreas Lagos, Psychology
Edward Lam, Economics
Katherine J Lam, Political Science
Sarah Lynn Lambert, Psychology
Joanna Sarah Lang, History
Amy Elizabeth Langdon, Biology
Morgan Gregory Langley, Economics
Soren Austin Larson, Economics
Vivienne Elizabeth Layne, English Literature

Myung Eun Lee, Political Science
Stephan Gilbert Lucien Lefebvre, Economics
Sophia Zoe Lewicki, Linguistics
Richard Li, English Literature and Mathematics
Peter Liebenson, Psychology and Special Major in Film and Media Studies
Joshua Charles Lipman, Theater and Political Science
Sara Elizabeth Lipshutz, Biology
Sandra Elizabeth Liss, Physics
Michelle Bo Liu, Economics
Andrew Zhu An Loh, Political Science
Santiago Lombo, Spanish and Biology
Elisa Maury Lopez, Special Major in Sociology and Anthropology and Educational Studies
Katherine Mary Love-Cooksey, Religion
James Paton MacArthur, Physics
Nicole Caroline Machac, Biology
Chengetai Ruvimbo Mahomva, Special Major in Biochemistry
Tuan Dung Mai, Economics and Mathematics
Rachael Alexandra Mansbach, Physics
Ernesto Manzo, Biology
Noah Hertz Marks, Religion
Cecilia Marquez, Special Major in Black Studies
Jesse Kevin Marshall, Political Science
Ariel Fraser Martino, English Literature
Michael Loren May, Economics
Christopher Merritt Mayer-Bacon, Special Major in Psychobiology
Sara Ann McCabe, Religion and Biology
Eva Jamila McKend, English Literature
Brendan Sean McVeigh, Mathematics
Anne Charlotte Mecklenburg, English Literature and Psychology
Neil Patrick Mejia, Psychology
Diego Guillermo Menéndez Estrada, Political Science and History
Sable Mensah, Special Major in Black Studies
Nathaniel Emil Meyer, Chemistry
Summer Ruth Miller-Walfish, Political Science
Elizabeth Anne Falcone Mills, Special Major in Chemical Physics
Wootae Min, Psychology
Susanna Decker Mitro, Biology
Carson James Monetti, Philosophy
Hugh Graham Montag, Economics and Mathematics
Amanda Ling Morrison, Economics
Connor Hoover Morrison, Sociology and Anthropology
Jakob Mrozewski, Special Major in Psychobiology
Ann Louise Murray, Economics and Mathematics
Thomas Satoshi Nakamura, Economics
Sirkka Joanne Natti, Music and Biology
Kylin Mari Navarro, Sociology and Anthropology
Sara Ann Nawaz, Economics
Melinda Courtney Neal, Political Science
Gage Slaughter Newman, Psychology

Jing Yi Ng, Art History
Candice Mai Khanh Nguyen, English Literature and Political Science
Debbie Nguyen, English Literature
Annie Jennifer Ning, Psychology
Devon Mary Novotnak, Sociology and Anthropology
Ada Elizabeth Okun, Special Major in English Literature and Educational Studies
Blaine David O'Neill, Special Major in Biology and Studio Art
Zachary Francis Ontiveros, Special Major in Cognitive Science
Kwame Amankwa Osei, Economics
Ashley Michele Oudenne, Computer Science
Peter Kwadwo Owusu-Opoku, Mathematics
Noah Hong De Pang, Mathematics and Philosophy
Michael Park, Economics
Maxwell Timothy Parke, Computer Science
Teal Vickers Patterson, Linguistics
Sarah Pearlstein-Levy, Psychology
Nina Colette Pelaez, Art History
Kirsten Ann Peterson, Biology
John William Phillips, Philosophy
John MacKenzie Pierce, Special Major in Music and Philosophy
Alexandria Placido, German Studies
Zachary Edward Postone, Political Science
Mary Ayn Prager, Philosophy
James Matthew Preimesberger, Special Major in Japanese
Robert Wood Griffith Purcell, Mathematics and Physics
Hannah Claire Goldstein Purkey, History
Benjamin Egan Rachbach, Special Major in Chinese and Educational Studies
Lauren Elizabeth Ramanathan, Special Major in Gender and Sexuality Studies
Brian David Ratcliffe, Chemistry
Sarah Pearl Reece, Sociology and Anthropology and French
Tobias Sebastian Resch, Political Science and Economics
Gabriel Lucas Gitin Riccio, Music
Miriam Shoshanna Rich, History
Rebecca Jeanne Ringle, Mathematics
Hadley Elizabeth Southall Roach, English Literature
Camille Gwen Rogine, Special Major in Visual Studies: Biological and Societal Imaging
Deivid Steven Rojas, History
Julia Sackett Roseman, History
Michael Elliot Roswell, Linguistics and Biology
Yoel Haim Roth, Political Science
Caitlin Elizabeth Russell, Biology
Adriana Sanchez de Lozada, Economics
Kei Saotome, Chemistry
Orion Eli Sauter, Physics
Jonathan Drew Schaefer, Psychology
Krista Ella Scheirer, English Literature and Biology

Benjamin Charles Schneiderman, English Literature
Nicholas Robert Schultz, Computer Science
Hannah Ruth Schutzengel, Art
Samuel Philip Sellers, Political Science
Theresa Joan Sepulveda, Linguistics
Asher Eliya Sered, Philosophy and Mathematics
Ching-Chieh Shen, Mathematics and Physics
Marilyn Rabinovitch Sherris, Spanish and Biology
Michael Jeehun Shin, Special Major in Linguistics and Educational Studies
Sneha Shrestha, Economics
Faiza Jahan Siddiqui, Sociology and Anthropology
Erika Abigail Slaymaker, Sociology and Anthropology
Amy Elizabeth Smolek, Linguistics
Samuel Jacob Socolar, Biology
Joshua Daniel Sokol, English Literature and Astronomy
Isabel Healy St. Clair, Theater
Daniel Charlton Stair, Economics
Benjamin Forrest Staplin, Sociology and Anthropology
Benjamin Alexander Starr, Music
Christopher Robert Stern, Special Major in Linguistics and French
Richard Peter Stillman, Philosophy
Tyler Justin Stivala, Special Major in Japanese
Kathryn Anne Stockbower, Biology and German Studies
Leonard Scott Storch, Chinese
Ariana Rebecca Strandburg-Peshkin, Physics
Stephanie Su, Special Major in English Literature and Educational Studies
Aakash Madhusudan Suchak, English Literature
Nathaniel William Sufrin, English Literature
Dougal James Sutherland, Computer Science
Aaron James Sweeney, English Literature
Nemo Abraham Swift, Linguistics
Daniel John Symonds, Special Major in Sociology and Anthropology and Educational Studies
Rhiannan Elizabeth Thomas, Special Major in Language Education: German and Chinese
Emilia Galli Thurber, Biology and Economics
Natasha April Tonge, Special Major in Psychobiology
Nicole Rose Topich, History
Dustin Trabert, Political Science and English Literature
William Luke Treece, History
Jennifer Trinh, Physics
Ashia Denise Troiano, Special Major in History and Educational Studies
Crystal Fung Yee Tsang, Political Science
Amalia Marika Tsiongas, Linguistics
Sophia Elizabeth Uddin, Music and Biology
Amy Lynn Vachal, Art and Economics
Daniel Garrett Vail, Economics

Benjamin Coleman Van Zee, History
Natan Jacob Vega Potler, Special Major in Cognitive Science
Frank Vilaboy, Political Science
Alba Nydia Villamil, Sociology and Anthropology
Marguerite Diva Vizcarra, Sociology and Anthropology
Vy Ai Vo, Biology and Special Major in Cognitive Science
Nathan Wainstein, English Literature
Katherine Graves Walton, Psychology
Vanessa Lynn Wanjeri, Biology
Logan K. Tiberi-Warner, Art
Alexander Benjamin Warso, Economics and Political Science
Gabrielle Veronica Watkins, German Studies and Biology
Mark Jihoon Wee, Jr., Biology
Zachary Alan Weinstein, Philosophy
Alex Gregory Weintraub, Special Major in Visual Studies and Social Thought
Scott D Weiss, Latin and Greek
Corey Alan White, Physics
Brian Gregory Willis, Theater
Madrianne Mun Fung Wong, Sociology and Anthropology
Rebecca Yao Hay Woo, History
Douglas Peter Woos, Computer Science
Rebecca Celeste Wright, Special Major in Linguistics and Deaf Studies
Jiuxing Xie, English Literature
Jing Yan, History
Benjamin Freedman Yelsey, Physics
Philip Chase Yeres, Economics
Catherine Yoon, Ancient History
Janet Marie Zarate, Special Major in Gender and Sexuality Studies
Mi Zheng, Economics
Zheng Zheng, Biology
Simon Nin Zhu, Philosophy and Economics
Aaron Edward Zimmerman, Mathematics
Andrew McCrindle Zimmerman, Physics and Mathematics
Raymond Anthony Zuniga, Political Science

### 16.2 Bachelor of Science

Erick John Frederick Ball, Engineering James Simon Klihr Beall, Engineering Ryan Patrick Carmichael, Engineering Lucas John Janes, Engineering Cecilia Jou, Engineering
Nicole Anna Marie Kato, Engineering
Lauren Lyn Marczi, Engineering
Noah Hertz Marks, Engineering
Logan Jean Osgood-Jacobs, Engineering
Trevor Joel Rizzolo, Engineering
Aaron Llevret Farchaus Stein, Engineering
Michael James Ticehurst, Engineering
Janet Marie Zarate, Engineering
Aaron Edward Zimmerman, Engineering

### 17.1 Honors Awarded by the Visiting Examiners

## Highest Honors

William Robert Beck, Jonah Emery Bernhard, Yilun Dong, Nicholas Paxson Gabinet, Patrick Edward Hartnett, Zoe Mistrale Hendrickson, Jessica Ann Holler, Carson James Monetti, Hugh Graham Montag, Ann Louise Murray, John MacKenzie Pierce, Zachary Edward Postone, Miriam Shoshanna Rich, Yoel Haim Roth, Jonathan Drew Schaefer, Samuel Jacob Socolar, Isabel Healy St. Clair, Nathan Wainstein

## High Honors

Joshua David Abel, Jane Lief Abell, Eric Levy Anderson, Katherine Elise Ashmore, Laura Rogan Backup, Abraham Calvin Bae, Nell Anna Bang-Jensen, Samuel Anson Barrows, Rachel Lauren Baumann, Leila Dare Bengali, James Malcolm Bernard, Jordan Mark Bernhardt, Elizabeth Ann Comuzzi, Emily Elizabeth Crawford, Benjamin Grant DeGolia, Zachary Alexander Eaton, Fumiko Egawa, Thomas Peter Eisenberg, Carlo Maria Batol Felizardo, Sara Laila Forster, Jonathan David Erwin-Frank, Althea Erica Gaffney, Clara Lucia Gordon, Sarah Elizabeth Hawkins, Isaac Walton Hock, Ishan Ruzbeh Irani, Camilia Layla Kamoun, Louis Robert Katz, Amber Suzanne Kavka-Warren, Laura Elizabeth Keeler, Amelia Chayet Kidd, Kun Hee Kim, Dina Kopansky, Leland Paul Kusmer, Jonathan Richard Kwan, Kevin Russell Labe, Katherine J. Lam, Amy Elizabeth Langdon, Myung Eun Lee, Stephan Gilbert Lucien Lefebvre, Richard Li, James Paton MacArthur, Rachael Alexandra Mansbach, Jesse Kevin Marshall, Ariel Fraser Martino, Elizabeth Anne Falcone Mills, Susanna Decker Mitro, Sara Ann Nawaz, Candice Mai Khanh Nguyen, Debbie Nguyen, Ada Elizabeth Okun, Sarah Pearlstein-Levy, John William Phillips, Alexandria Placido, Robert Wood Griffith Purcell, Benjamin Egan Rachbach, Tobias Sebastian Resch, Hadley Elizabeth Southall Roach, Camille Gwen Rogine, Julia Sackett Roseman, Caitlin Elizabeth Russell, Faiza Jahan Siddiqui, Daniel Charlton Stair, Richard Peter Stillman, Stephanie Su, Aakash Madhusudan Suchak, Dougal James Sutherland, Daniel Garrett Vail, Vy Ai Vo, Alex Gregory Weintraub, Scott Daniel Weiss, Douglas Peter Woos, Rebecca Celeste Wright, Andrew McCrindle Zimmerman

## Honors

Eva Suzanne Amessé, Natalie Bamdad, Matthew Denali Bleiman, Sarah Jean Bricault, Ming Cai, Ryan Austin Carlson, Jimmy Charite, Julia Lyn Corrigan, Arik Spenser Davidson, Steven Michael Dean, David Andrew Edelman, Dennis Fan, Sophia Helene

Ferguson, Alexander Kent Frye, Calvin Nhi Ho, Jesse Lauren Hoff, William Jefferson Hopkins, Michael Chance Hsieh, Alexandra Tafoya Israel, Jonathan Caleb Jaquette, Jung Min (Kevin) Kim, Max Morton Korein, Adam Levin Koshkin, Ambar Mariela La Forgia, Joanna Sarah Lang, Soren Austin Larson, Michelle Bo Liu, Andrew Zhu An Loh, Nicole Caroline Machac, Brendan Sean McVeigh, Anne Charlotte Mecklenburg, Connor Hoover Morrison, Teal Vickers Patterson, Hannah Claire Goldstein Purkey, Asher Eliya Sered, Nathaniel William Sufrin, Aaron James Sweeney, Nemo Abraham Swift, Benjamin Coleman Van Zee, Alba Nydia Villamil, Zachary Alan Weinstein, Rebecca Yao Hay Woo, Philip Chase Yeres, Zheng Zheng

### 17.2 Elections to Honorary Societies

## Phi Beta Kappa

Joshua David Abel, Nell Anna Bang-Jensen, William Robert Beck, Leila Dare Bengali, James Malcolm Bernard, Matthew Denali Bleiman, Daniel Rene Dandurand, Brenna Marie DiCola, Yilun Dong, Sara Laila Forster, Jonathan David Erwin-Frank, Rahul Garg, Clara Lucia Gordon, Sarah Elizabeth Hawkins, Yaeir Zev Heber, Zoe Mistrale Hendrickson, Isaac Walton Hock, Camilia Layla Kamoun, Amber Suzanne Kavka-Warren, Laura Elizabeth Keeler, Kevin Russell Labe, Sara Elizabeth Lipshutz, Andrew Zhu An Loh, James Paton MacArthur, Rachael Alexandra Mansbach, Noah Hertz Marks, Anne Charlotte Mecklenburg, Nathaniel Emil Meyer, Hugh Graham Montag, Candice Mai Khanh Nguyen, Ada Elizabeth Okun, Sarah Pearlstein-Levy, John William Phillips, John MacKenzie Pierce, Alexandria Placido, Zachary Edward Postone, Robert Wood Griffith Purcell, Tobias Sebastian Resch, Miriam Shoshanna Rich, Yoel Haim Roth, Caitlin Elizabeth Russell, Jonathan Drew Schaefer, Hannah Ruth Schutzengel, Amy Elizabeth Smolek, Samuel Jacob Socolar, Isabel Healy St. Clair, Richard Peter Stillman, Kathryn Anne Stockbower, Ariana Rebecca Strandburg-Peshkin, Dougal James Sutherland, Emilia Galli Thurber, Sophia Elizabeth Uddin, Alex Gregory Weintraub, Rebecca Celeste Wright, Mi Zheng

## Sigma Xi

Natalie Bamdad, Rachel Lauren Baumann, Allegra Black, Alexander Dodd Breslow, Ryan Austin Carlson, Ryan Patrick Carmichael, Elizabeth Salome Chang, Alexander James Cooper, Caitlin Mieko Daimon, Benjamin Nicholas Glenn Rothfuss Dair, Daniel Rene Dandurand, Erica Elizabeth Evans, Ross Kelly Greenwood, Choongheon Han, Patrick Edward Hartnett, William Jefferson Hopkins, Michael

Chance Hsieh, Lucas John Janes, Cecilia Jou, Amelia Chayet Kidd, Sara Ka Rham Kim, Kevin Russell Labe, Ambar Mariela La Forgia, Amy Elizabeth Langdon, Sara Elizabeth Lipshutz, Nicole Caroline Machac, Chengetai Ruvimbo Mahomva, Rachael Alexandra Mansbach, Noah Hertz Marks, Christopher Merritt Mayer-Bacon, Anne Charlotte Mecklenburg, Elizabeth Anne Falcone Mills, Jakob Mrozewski, Zachary Francis Ontiveros, Logan Jean Osgood-Jacobs, Ashley Michele Oudenne, Sarah Pearlstein-Levy, Miriam Shoshanna Rich, Michael Elliot Roswell, Caitlin Elizabeth Russell, Kei Saotome, Jonathan Drew Schaefer, Theresa Joan Sepulveda, Ching-Chieh Shen, Kathryn Anne Stockbower, Dougal James Sutherland, Emilia Galli Thurber, Natasha April Tonge, Jennifer Trinh, Vy Ai Vo, Katherine Graves Walton, Benjamin Freedman Yelsey, Janet Marie Zarate, Zheng Zheng
Tau Beta Pi
Ryan Patrick Carmichael, Lucas John Janes, Noah Hertz Marks

### 17.3 Pennsylvania Teacher Certification

Ashley Victoria Acle, Allison Lynn Bishop, Ming Cai, Brenna Marie DiCola, Ernesto Manzo, Crystal Fung Yee Tsang

### 17.4 Awards and Prizes

The Adams Prize is awarded each year by the Economics Department for the best paper submitted in quantitative economics. Awarded to Joshua D. Abel '11.
The Stanley Adamson Prize in Chemistry was established in memory of Stanley D. Adamson '65. It is awarded each spring to a well-rounded junior majoring in chemistry or biochemistry, who, in the opinion of the department, gives the most promise of excellence and dedication in the field. Awarded to Jack Nicoludis '12.
The American Chemical Society Scholastic Achievement Award is given to the student whom the Department of Chemistry and Biochemistry judges to have the best performance in chemistry and overall academic achievement. Awarded to Patrick Hartnett '11.
The American Chemical Society Undergraduate Award in Analytical Chemistry is awarded annually to the student whom the Chemistry and Biochemistry Department judges to have the best academic performance in analytical chemistry and instrumental methods. Not awarded this year.
The American Chemical Society Undergraduate Award in Organic Chemistry is awarded annually to the student whom the Chemistry and Biochemistry Department judges to have
the best academic performance in organic chemistry. Awarded to Alice Wong '13.
The American Institute of Chemists Student Honor Awards are given to students whom the Chemistry and Biochemistry Department judge to have outstanding records in chemistry and overall academic performance. Awarded to Nathaniel Meyer '11.
The Solomon Asch Award recognizes the most outstanding independent work in psychology, usually a senior course or honors thesis. Awarded to Sarah Pearlstein-Levy '11 and Katherine G. Walton '11.
The Boyd Barnard Prize, established by Boyd T. Barnard ' 17 is awarded by the music faculty each year to a student in the junior class in recognition of musical excellence and achievement. Awarded to Corey Silbertstein ' 12 .
The James H. Batton '72 Award, endowed in his memory by G. Isaac Stanley ' 73 and Ava Harris Stanley ' 72 , is awarded for the personal growth or career development of a minority student with financial need. Awarded to Elizabeth Bryant '13.
The Paul H. Beik Prize in History is awarded each May for the best thesis or extended paper on a historical subject by a history major during the previous academic year. Awarded to Isaac Hock ' 11 and Miriam Rich ' 11.
The Bobby Berman '05 Memorial Prize Fund was established in 2008 in his memory, by his family. It is awarded by the Physics Department to a graduating senior with a major in physics who has shown achievement, commitment and leadership in the field. Awarded to Jennifer Trinh ' 11 .
The Tim Berman Memorial Award is presented annually to the senior man who best combines qualities of scholarship, athletic skill, artistic sensitivity, respect from and influence on peers, courage, and sustained commitment to excellence. Awarded to Philippe Celestin '11.
The Black Alumni Prize is awarded annually to honor the sophomore or junior minority student who has shown exemplary academic performance and community service. Awarded to Leah Guthrie '12 and Sonja Spoo '13.
The Brand Blanshard Prize honors Brand Blanshard, professor of philosophy at Swarthmore from 1925 to 1945, and was established by David H. Scull '36. The Philosophy Department presents the award each year to the student who submits the best essay on any philosophical topic. Awarded to Carson James Monetti ' 11.
The Sophie and William Bramson Prize is awarded annually to an outstanding student majoring in sociology and anthropology. The prize recognizes the excellence of the senior
thesis, in either the course or external examinations program as well as the excellence of the student's entire career in the department. The Bramson Prize is given in memory of the parents of Leon Bramson, founding chairman of Swarthmore's Sociology and Anthropology Department. Awarded to Zoe Hendrickson '11 and Erika Slaymaker ' 11 .
The Heinrich W. Brinkmann Mathematics Prize honors Heinrich Brinkmann, professor of mathematics from 1933 to 1969 , and was established by his students in 1978 in honor of his 80th birthday. Awards are presented annually by the Mathematics and Statistics Department to the student or students who submit the best paper on a mathematical subject. Awarded to Kevin Labe '11.
The Chemistry and Biochemistry Department Service Awards are given each year to the students (usually one junior and one senior) who have provided the department with the greatest service during the preceding academic year. Awarded to Hannah Edelman '12 and Brian Ratcliffe ' 11.
The Susan P. Cobbs Scholarship is awarded to the most outstanding student of classics in the rising senior class. It was made possible by a bequest of Susan P. Cobbs, who was dean and professor of classics until 1969, and by additional funds given in her memory. Awarded to Amanda Klause '12 and Adriana Massi ' 12.
The Sarah Kaighn Cooper Scholarship, founded by Sallie K. Johnson in memory of her grandmothers, Sarah Kaighn and Sarah Cooper, is awarded to the member of the junior class who is judged by the faculty to have had the best record for scholarship, character, and influence since entering the College. Awarded to Tianyu (Tom) Liu '12.
The CRC Press Freshman Chemistry Achievement Award is awarded annually by the Chemistry and Biochemistry Department to the first-year student(s) who achieves the highest performance in the first-year chemistry curriculum. Awarded to Elena Kingston '14 and Michael Fisher ' 14.
The Alice L. Crossley Prize in Asian studies is awarded annually by the Asian Studies Committee to the student or students who submit the best essays on any topic in Asian studies. Awarded to Benjamin Rachbach '11 (first prize), Calvin Ho ' 11 and James Preimesberger ' 11 (second prize).
The Dunn Trophy was established in 1962 by a group of alumni to honor the late Robert H. Dunn, a Swarthmore coach for more than 40 years. It is presented annually to the sophomore male who has contributed the most to the intercollegiate athletics program. Awarded to Will Gates '13.

The Robert S. DuPlessis Prize is awarded each May to a student for the best senior comprehensive research paper on a historical subject by a history major in the previous year. Awarded to Ashia Troiano '11.
The William C. Elmore Prize is given in recognition of distinguished academic work. It is awarded annually to a graduating senior majoring in physics, astrophysics, or astronomy. Awarded to Arianna StrandburgPeshkin '11 and Daniel Dandurand ' 11 .
The Lew Elverson Award is given in honor of Lew Elverson, who was a professor of physical education for men from 1937 to 1978. The award is presented annually to the junior or senior man who has demonstrated commitment and dedication to excellence and achieved the highest degree of excellence in his sport. Awarded to Morgan Langley '11.
The Flack Achievement Award, established by Jim and Hertha Flack in 1985, is given to a deserving student who, during his or her first two years at the College, has demonstrated leadership potential and a good record of achievement in both academic and extracurricular activities. Not awarded this year. The Renee Gaddie Award. In memory of Renee Gaddie '93, this award is given by the music faculty to a member of the Swarthmore College Gospel Choir who is studying voice through the Music Department (MUSI 048: Individual Instruction) program. The award subsidizes the entire cost of voice lessons for that semester. Awarded to Mark Chin '12, Porsche Poole '13 and Aden Tedla ' 12.
The Dorothy Ditter Gondos Award was bequeathed by Victor Gondos Jr. in honor of his wife, Class of 1930. It is given every other year by a faculty committee to a student of Swarthmore College who submits the best paper on the subject dealing with a literature of a foreign language. The prize is awarded in the spring semester. Preference is given to essays based on works read in the original language. The prize is awarded under the direction of the Literature Committee. Awarded to Alex Weintraub '11 and Nathaniel Sufrin '11 (cowinners of first prize), and Shawn Doherty ' 12 and Becky Wright '11.
The John Russell Hayes Poetry Prizes are offered for the best original poem or for a translation from any language. Awarded to Aakash Suchak '11 (first prize) and James Preimesberger '11 (second prize).
The Eleanor Kay Hess Award is given in honor of "Pete" Hess, whose 33 years of service to Swarthmore College and Swarthmore students were exemplified by her love of athletics, leadership, hard work, fairness, and objectivity. This award is given to the sophomore woman who best demonstrates those qualities and has
earned the respect and affection of her peers for her scholarship and dedication through athletics. Awarded to Kathryn Montemurro '13 and Annalise Penikis '13.
The Philip M. Hicks Prizes are endowed by friends of Philip M. Hicks, former professor of English and chairman of the English Literature Department. They are awarded to the students who submit the best critical essays on any topic in the field of literature. Awarded to Aakash Suchak '11 (first prize), and Nicholas Allred '13, William Beck '11 and Hadley Roach '11 (honorable mention).
The Jesse H. Holmes Prize in Religion was donated by Eleanor S. Clarke '18 and named in honor of Jesse Holmes, a professor of history of religion and philosophy at Swarthmore from 1899 to 1934. It is awarded by the Religion Department to the student who submits the best essay on any topic in the field of religion. Awarded to Noah Marks '11.
The Gladys Irish Award is presented to the senior woman who has best combined devotion to excellence in athletic performance with qualities of strong leadership and the pure enjoyment of sports activities at Swarthmore. Awarded to Kathryn Stockbower '11.
The Ivy Award is made by the faculty each year to the man of the graduating class who is outstanding in leadership, scholarship, and contributions to the College community. Awarded to Dougal James Sutherland '11. The Chuck James Literary Prize is awarded to the graduating senior who has made the greatest contribution to the literary life of the black community. Awarded to Eva McKend '11.
The Michael H. Keene Award, endowed by the family and friends of this member of the Class of 1985 , is awarded by the dean to a worthy student to honor the memory of Michael's personal courage and high ideals. It carries a cash stipend. Awarded in confidence to a worthy member of the Class of 2011.
The Naomi Kies Award is given in her memory by her classmates and friends to a student who has worked long and hard in community service outside the academic setting, alleviating discrimination or suffering, promoting a democratic and egalitarian society, or resolving social and political conflict. It carries a cash stipend. Awarded to Debbie Nguyen '11.
The Kwink Trophy, first awarded in 1951 by the campus managerial organization known as the Society of Kwink, is presented by the faculty of the Physical Education and Athletics Department to the senior man who best exemplifies the society's five principles: service, spirit, scholarship, society, and sportsmanship. Awarded to Aaron Stein '11.
The Lang Award was established by Eugene M. Lang '38. It is given by the faculty to a
graduating senior in recognition of outstanding academic accomplishment. Awarded to Daniel Rene Dandurand ' 11 and Zachary Edward Postone ' 11 .
The Leo M. Leva Memorial Prize was established by his family and friends and is awarded by the Biology Department to a graduating senior in biology whose work in the field shows unusual promise. Awarded to Sara Lipshutz '11, Zoe Hendrickson '11, Samuel Jacob Socolar '11, Kathryn Stockbower '11, Sara Kim '11 and Michael Duffy '11.
The Linguistics Prizes were established in 1989 by contributions from alumni interested in linguistics. Two awards are presented annually, one for linguistic theory and one for applied linguistics, to the two students who, in the opinion of the program in linguistics, submit the best senior papers or theses in these areas. The Linguistics Prize in Applications of Theory was awarded to Theresa Sepulveda '11. The Linguistics Prize in Linguistic Theory was awarded to Cansada Martin (Haverford College) ' 11.
The McCabe Engineering Award, founded by Thomas B. McCabe ' 15 , is presented each year to the outstanding engineering student in the senior class. A committee of the Engineering Department faculty chooses the recipient. Awarded to Noah Hertz Marks '11.
The Norman Meinkoth Field Biology Award was established by his friends and former students to honor Dr. Norman A. Meinkoth, a member of the College faculty from 1947 to 1978. It is awarded to support the essential costs of the study of both naturalistic and experimental biological studies in a natural environment. The intent of this fund is to facilitate the joint participation of Swarthmore students and faculty in field biology projects, with priority given to marine biology. The awards are given annually by the Biology Department. Awarded to Katherine Cushman '12, Adam Hardy '12, and Zhengyang Wang '14.
The Morris Monsky Prize in Mathematics was established by a gift from the children of Morris Monsky, who fell in love with mathematics at Boys' High and at Columbia University and maintained the passion all his life. This prize in his memory is awarded to a first-year student who has demonstrated outstanding promise and enthusiasm. Awarded to Peter Ballen '14 and Patrick Walsh '14.
The Kathryn L. Morgan Award was established in 1991 in honor of late Professor of History, Kathryn L. Morgan. The award recognizes the contributions of members of the African American community at the College to the intellectual and social well-being of African American students. The Morgan fund also
supports acquisitions for the Black Cultural Center Library. The fund is administered by the Dean's Office and the Black Cultural Center in consultation with alumni. Awarded to Darryl Smaw, associate dean for multicultural affairs and Devonia Lytle, administrative assistant. The Lois Morrell Poetry Award, given by her parents in memory of Lois Morrell '46, goes to the student who has submitted the best original poem in the annual competition for this award. The fund also supports campus readings by visiting poets. Awarded to Benjamin Ellentuck '14.
The Morrell-Potter Summer Stipend in Creative Writing, intended to enable a summer's writing project, is awarded by the English Literature Department to a poet or fiction writer of exceptional promise in the spring of the junior year. Awarded to Dante Fuoco ' 12.
The A. Edward Newton Library Prize, endowed by A. Edward Newton, to make permanent the Library Prize first established by W.W. Thayer, is awarded annually by the Committee of Award to the undergraduate who shows the best and most intelligently chosen collection of books upon any subject. Particular emphasis is laid not merely upon the size of the collection but also on the skill with which the books are selected and upon the owner's knowledge of their subject matter. Awarded to Ben Goossen '13 (first prize), Christopher Geissler ' 13 (second prize), Mackenzie Pierce '11 (third prize).
The Oak Leaf Award is made by the faculty each year to the woman of the graduating class who is outstanding in leadership, scholarship, and contributions to the College community. Awarded to Kathryn Anne Stockbower '11.
The May E. Parry Memorial Award, donated by the Class of 1925 of which she was a member, is presented by the Physical Education and Athletics Department faculty to the senior woman who has made a valuable contribution to the College by her loyalty, sportsmanship, and skill in athletics. Awarded to Sarah Bedolfe '11.
The Drew Pearson Prize is awarded by the dean on the recommendation of the editors of The Phoenix, The Daily Gazette, and the senior producers of War News Radio at the end of each staff term to a member of those respective organizations for excellence in journalism. The prize was established by the directors of The Drew Pearson Foundation in memory of Drew Pearson, Class of 1919. It carries cash stipends. Awarded to Alexandra Israel '11, Louis Katz '11, and Dougal Sutherland ' 11 .
The David A. Peele '50 Sportsmanship Award is made to a tennis player after submission of a written essay. It is endowed by Marla Hamilton Peele in memory of her husband's love and
advocacy of tennis and carries a cash stipend. Awarded to Seth Udelson '13.
The John W. Perdue Memorial Prize, established in 1969 in memory of an engineering student of the Class of 1969 , is awarded by the Engineering Department to the outstanding student entering the junior class with a major in engineering. Awarded to Keliang He ' 13.
The William Plumer Potter Public Speaking Fund and Prize in Fiction was established in 1927. It provides funds for the collection of recorded literature and sponsors awards for the best student short stories. The fund is also a major source of funds for campus appearances by poets and writers. Awarded to Sara Pearlstein-Levy ' 11 (first prize), Dante Fuoco ' 12 (second prize), and Paul LaFreniere '13 (third prize).
The Ernie Prudente Sportsmanship Award is given in honor of Ernie Prudente, a coach and professor at Swarthmore College for 27 years, to the male and female athletes that, through their participation, have demonstrated the characteristic exemplified by Ernie: sportsmanship, love of the sport, and respect for their teammates. Awarded to Adam Koshkin '11 and Jean Dahlquist '11.
The Dinny Rath Award is administered by the Athletics Department and is given to a senior woman who demonstrates the highest degree of achievement, commitment to intercollegiate athletics, high regard for fair play, and awareness of the positive values of competition. Awarded to Hannah Purkey '11.
The Jeanette Streit Rohatyn '46 Fund is used to grant the "Baudelaire Award" to a Swarthmore student participating in the College Program in Grenoble. The student must be considering a major or a minor in French, and use the award, which is granted on the recommendation of the program director, to travel in metropolitan France. Awarded to Maia Gerlinger ' 12 and Eleanore Glewwe '12.
Judith Polgar Ruchkin Prize Essay is an award for a paper on politics or public policy written during the junior or senior year. The paper may be for a course, a seminar, or an independent project, including a thesis. The paper is nominated by a faculty member and judged by a committee of the Political Science Department to be of outstanding merit based on originality, power of analysis and written exposition, and depth of understanding of goals as well as technique. Awarded to Candice Nguyen '11 and Samuel Sellers '11.
The Robert Savage Image Award recognizes outstanding biological images taken by Swarthmore biology students. The award is supported by the Robert Savage Fund which was established by students and colleagues to
honor Professor Robert E. Savage, the first professor of Cell Biology at Swarthmore College. Awarded to Camille Rogine '11, Elizabeth Cozart '12, Emily MacDuffie '13, and Natalie Campen '14.
The Frank Solomon Jr. Student Art Purchase Fund permits the Art Department to purchase outstanding student art from the senior major exhibitions. Awarded to Zoe Davis '11, Christie DeNizio '11, Alicia DeWitt '11, Jia Kim '11, Hannah Schutzengel '11, and Amy Vachal '11.
The Hally Jo Stein Award, endowed in her memory by her brother Craig Edward Stein '78, is given to an outstanding student who the dance faculty believes best exemplifies Hally Jo's dedication to the ideals of dance. It carries a cash stipend. Awarded to Amelia Kidd '11.
The Karen Dvonch Steinmetz '76 Memorial Prize, endowed in her memory by many friends and family, is awarded annually to a Swarthmore medical school applicant who demonstrates a special compassion for others. Awarded to Kelsey Cline '11 and Marsha-Gail Davis ' 10.
The Pan American Award is administered by Latin American Studies. Not awarded this year.
The Peter Gram Swing Prize is awarded by the music faculty to an outstanding student whose plans for graduate study in music indicate special promise and need. The endowment for the prize was established in the name of Ruth Cross Barnard, Class of 1919. Awarded to John MacKenzie Pierce '11.
The Melvin B. Troy Prize in Music and Dance was established by the family and friends of Melvin B. Troy ' 48 . Each year, it is given by the Music and Dance Department to a student with the best, most insightful paper in music or dance or composition or choreography. This award carries a cash stipend. Awarded to Joy Heller '11 (Dance), Gabriel Riccio '11 (Music) and Sophia Uddin '11 (Music).
The Albert Vollmecke Engineering Service Award was established in 1990 in memory of Albert Vollmecke, father of Therese Vollmecke
'77. The Vollmecke Prize is awarded for service to the student engineering community. The Engineering Department administers the fund. Awarded to Cecelia Jou '11 and Janet Marie Zarate ' 11.
The Eugene Weber Memorial Fund was established in honor of the late Eugene Weber, professor of German. The Weber Fund supports study abroad by students of German language and literature. Awarded to Joan O'Bryan '13 and Kelsey Johnson '13.
The Jerome H. Wood Memorial Excellence and Leadership Award was created in 1997 in honor of the late Professor Jerry Wood and is awarded annually. Awarded to Sable Mensah '11 and Emmanuel Afrifa '11.

### 17.5 Faculty Award

The Flack Faculty Award is given for excellence in teaching and promise in scholarly activity by a member of the Swarthmore faculty to help meet the expenses of a full year of leave devoted to research and self-improvement. This award acknowledges the particularly strong link that exists at Swarthmore between teaching and original scholarly work. The president gives the award based upon the recommendation of the provost and the candidate's academic department. This award is made possible by an endowment established by James M. Flack and Hertha Eisenmenger Flack '38. Awarded to Benjamin Berger, Associate Professor of Political Science.

### 17.6 Fellowships

The Stanley Adamson Summer Internship for Research in Chemistry is endowed in memory of Stanley D. Adamson ' 65 by his parents, June and George Adamson. It provides funding for the summer research of a well-rounded rising student who, in the opinion of the Chemistry and Biochemistry Department, gives great promise of excellence and dedication in the field. Not awarded this year.
The Altman Summer Grant was created by Shingmei Poon Altman '76 in memory of her husband, Jonathan Leigh Altman '74. It is awarded by the Art Department to a junior who has strong interest and potential in studio arts. It provides support for purposeful work in the studio arts during the summer between junior and senior year. Awarded to Virginia Hottinger ' 12.
John W. Anderson '50 Memorial Internship was created by his wife, Janet Ball Anderson '51. The Anderson internship supports students teaching science to disadvantaged children, with preference for students interested in working with children in grades K-12. Not awarded this year.
In 2005, Bernard Bailyn established The Lotte Lazarsfeld Bailyn '51 Research Endowment in honor of his wife, the T. Wilson Professor of Management, emerita, at MIT. The fund supports a student summer research fellowship for a rising junior or senior woman majoring in mathematics, science, or engineering who intends to go into graduate studies in one or more of these fields. Awarded to Ling Zhong ' 13.
The David Baltimore/Broad Foundation Endowment was established in 2007 by a grant from the Broad Foundation at the request of David Baltimore ' 60 . This fellowship is awarded to a student doing summer research in the natural sciences or engineering with a preference given to a student engaging in mentored off-campus laboratory research and
with letters of support from an on-campus faculty mentor. Awarded to Yvonne Socolar ' 13.
The Monroe C. Beardsley Research Fellowship and Internship Fund was established in 2004 to support students in the humanities by providing grants to encourage and facilitate research, original scholarship, and professional development in the areas of art, classics (literature), English literature, modern languages and literature, music and dance, philosophy, religion, and theater. Named after renowned contemporary philosopher Monroe C. Beardsley, a professor of philosophy at Swarthmore for more than 20 years, the fund is administered by the Division of the Humanities and the Provost's Office. Awarded to Michelle Fennell '12, Michelle Lin '12, Tayarisha Poe , 12 .
The Cilento Family Community Service Internship was established in 2002 by Alexander Cilento ' 71 to support Swarthmore College students who carry out community service projects that benefit low-income families in the area. The Swarthmore Foundation administers the fund. Awarded to William Max Rennebohm '13.
The Susan P. Cobbs Prize Fellowship is awarded to one or more students to assist them in the study of Latin or Greek or with travel for educational purposes in Italy or Greece. It was made possible by gifts from alumni, managers, faculty members, and friends made in memory of Susan P. Cobbs, who was dean and professor of classics until 1969. Awarded to Sophia Agathis '13.
The Hilde Cohn Student Fellowship Endowment was established in 2007 by Walter H. Clark, Jr. '54 to honor a former faculty member who conveyed to her students her love of the German language and literature. The fund shall be used to support students participating in academic study, internships, and research fellowships in German-speaking countries or in immersive German language programs. It will be administered by the German section of the Modern Languages and Literatures Department. Awarded to Amanda Cardillo '13 and Ben Goossen '13.
The Joel Dean Fellowships were established in 1982 and are supported by gifts from the Joel Dean Foundation. These fellowships are awarded for summer research in the social sciences. Awarded to Adam Chuong '12, Charlotte Gaw '12, Hilary Hamilton '12, Marjorie Herbert '12, Hannah Jones '12, Gabriela Moats '12, Jared Nolan '12, Hilary Pomerantz '12, Alan Zhao '12.
The Deborah A. DeMott '70 Student Research and Internship Fund was established by Deborah A. DeMott ' 70 in 2004. The fund is
awarded to students following their second or third years on the recommendation of the Provost's Office in conjunction with an advisory panel of faculty. The recommendation is based on the caliber and potential of the student project proposals. Awarded to Maria Rogers ' 13.
The Robert Enders Field Biology Award was established by his friends and former students to honor Dr. Robert K. Enders, a member of the College faculty from 1932 to 1970. It is awarded to support the essential costs of both naturalistic and experimental biological studies in a natural environment. The Biology Department gives the field research award annually to Swarthmore students showing great promise in biological field research. Awarded to Evelyn Strombom '12, Michelle Call '13, and Kathryn Wu ' 14.
The Anne and Alexander Faber International Travel Fund was established by family and friends in honor of Anne Faber and in memory of Alexander L. Faber, parents of three Swarthmore graduates. It provides grants for travel outside the United States and Canada for students majoring in the humanities. Not awarded this year.
The David E. Fisher '79-Arthur S. Gabinet '79 Summer Internship for Biological Sciences and Public Service was established by Andrew H. Schwartz '79 and his wife, Dagmar Schwartz, to honor Andy's friends and classmates, David E. Fisher ' 79 and Arthur S. Gabinet ' 79 , and supports students working in life sciences or public service who exemplify Fisher's and Gabinet's values, pursuing studies out of love of learning and devotion to the improvement of the human condition. Awarded to Molly Siegel '12.
The Hannay Chemistry Fund was established by a gift from the General Signal Corp. in honor of N. Bruce Hannay '42. The fund will provide support for a student's summer research in chemistry. Bruce Hannay was a research chemist with Bell Laboratories and received an honorary doctor of science degree from Swarthmore in 1979. Awarded to Travis Mattingly ' 13.
The Hay-Urban Prize in Religion is named in honor of Stephen N. Hay ' 51 and P. Linwood Urban, professor emeritus of religion. Thanks to a generous gift from Stephen Hay '51, and funds given in honor of Professor Urban's distinguished service as a Religion Department faculty member, the Hay-Urban Prize assists in supporting one student internship, summer study, or research in the area of religion studies. Not awarded this year.
The Samuel L. Hayes III Award. Established in 1991 through the generosity of members of Swarthmore Alumni in Finance, the Hayes

Award honors the contributions made by Samuel L. Hayes III '57, former member of the Board of Managers and the Jacob Schiff Professor of Business at the Harvard Business School. The Economics Department administers the award, which provides support for student summer research in economics. Not awarded this year.

## The Hopkins International Public Policy

 Internship Endowment was established in 2005 to support student travel to Africa, Asia or Europe for an internship dealing with policy issues of global significance, working within a public or non-profit organization. The internship, for any appropriate interval, such as a summer or semester, shall be administered by the Provost's Office and the Public Policy Program. Not awarded this year.The William L. Huganir Summer Research Endowment is awarded each spring by the chairs of the Social Science Division based on the academic interests of a student or students who wish to pursue summer research on global population issues. Awarded to Andrew Cheng '12.
The Richard M. Hurd '48 Engineering Research Endowment was created in 2000 in memory of distinguished alumnus and former member of the Board of Managers Richard M. Hurd '48. The fund supports students interested in pursuing engineering research during the summer. Awarded to Jacqueline Kay '14.
The Janney Fellowship, established through the bequest of Anna Janney DeArmond '32, is named in honor of the donor's grandmother, Anna Canby Smyth Janney, the donor's mother, Emily Janney DeArmond (1904), and the donor's aunt, Mary Janney Coxe (1906). It is awarded each year to a woman graduate of the College, preferably a member of the Religious Society of Friends, to assist graduate study in the humanities in this country or elsewhere. This renewable fellowship is awarded annually by the faculty to seniors or graduates of the College for the pursuit of advanced work on the basis of scholarship, character and need. Applications must be submitted by April 20. Awarded to Jessica Bear '09 and Kathryn Speer '08.
The Giles K. '72 and Barbara Guss Kemp Student Fellowship Endowment was established by Giles and Barbara Kemp in 2005 to support student internships and research projects with a preference for students whose fellowship experience will be abroad. Awarded to James Jordan '12, Marina Tucktuck '13, and Sarah Vogelman '13.
The Olga Lamkert Memorial Fund is income from a fund established in 1979 by students of Olga Lamkert, professor of Russian at Swarthmore College from 1949 to 1956. It is
available to students with demonstrated financial need who wish to attend a Russian summer school program in this country or summer or semester programs in Russia. Awards based on merit and financial need will be made on the recommendation of the Russian section of the Modern Languages and Literatures Department. Not awarded this year.
The Lande Research Fund was established in 1992 through a gift by S. Theodore Lande to provide support for student research in field biology both on and off campus. Grants are awarded at the direction of the provost and the chair of the Biology Department. Awarded to Camilla Seirup '12, Emily Dolson '13, and Andrea Merritt ' 13.
The Landis Community Service Fund was established in 1991 by James Hormel and other friends of Kendall Landis '48 in support of his 18 years of service to the College. The fund provides grants for students (including graduating seniors) to conduct service and social change projects in the city of Chester. Awarded to Shelly Wen '14 and Jasmeet Samra '14.
The Eugene M. Lang Summer Initiative Awards are made each spring to 15 students who are selected by the provost in consultation with the appropriate division heads to support facultystudent research (five awards), independent student research (five awards), and student social service activity specifically related to research objectives and tied to the curriculum, under the supervision of faculty members (five awards). Awarded to Ayman Abunimer '12, Lori Barkin '12, Adam Bortner '12, Matt Bowers '12, Emily Bryant '12, Roger Chin '13, Philip Chodrow '12, Nicole Cox '12, Alison Devine '13, Stephen Dini '13, Ibidayo Fayanju '14, Nolan Gear '12, Will Glovinsky '12, Keliang He '13, Solange Hilfinger-Pardo '12, Jennifer Johnson '12, Adriana Massi '12, Mondira Ray '13, Madeleine Reichman '13, Alexander Rolle '12, Hilary Traut '13, Harry Wang '13, Jeffery Wickham '12, and Madeline Williams ' 12.
The Genevieve Ching-wen Lee '96 Memorial Fund was established in her memory by family and friends and recognizes the importance of mutual understanding and respect among the growing number of ethnic groups in our society. The fund supports an annual lecture by a prominent scholar of Asian American studies and/or an annual award to two students to assist in projects pertaining to Asian American studies. Not awarded this year.
The Hannah A. Leedom Fellowship was founded by the bequest of Hannah A. Leedom. This award is granted on recommendation of the Committee on Fellowships and Prizes for a proposed program of advanced study that has the approval of the faculty. Applications must
be submitted by April 20. Awarded to Benjamin Bradlow '08, Neena Rose Cherayil '11, Louis Jargow '10, Noah Hertz Marks '11, Aakash Madhusudan Suchak '11, and Scott Daniel Weiss ' 11.
The Lenfest Student Fellowship Endowment was established in 2008 by Gerry and Marguerite Lenfest. The fund shall be used to support student participation in research fellowships, internships, and other summer opportunities, and selection will be made by the Provost's Office and the Lang Center for Civic and Social Responsibility. Awarded to Jonathan Hui ' 12.
The Joshua Lippincott Fellowship was founded by Howard W. Lippincott, of the Class of 1875, in memory of his father. This award is granted on recommendation of the Committee on Fellowships and Prizes for a proposed program of advanced study that has the approval of the faculty. Applications must be submitted by April 20. Awarded to Ryo Akasaka '09, Rachel Lauren Baumann '11, Yilun Dong '11, Nabil Khan '07, Maithili Parikh '10, Benjamin Charles Schneiderman '11, and Rebecca Yao Hay Woo '11.
The John Lockwood Memorial Fellowship was founded by the bequest of Lydia A. Lockwood, New York, in memory of her brother, John Lockwood. It was the wish of the donor that the fellowship be awarded to a member of the Society of Friends. The Lockwood Fellowship is renewable for a second year. This award is granted on recommendation of the Committee on Fellowships and Prizes for a proposed program of advanced study that has the approval of the faculty. Applications must be submitted by April 20. Awarded to Elisabeth Jaquette '07, Mark Kharas '08, and Troy Wellington Smith '05.
The Joanna Rudge Long '56 Conflict
Resolution Endowment was created in 1996 in celebration of the donor's 40th reunion. The stipend is awarded to a student whose meritorious proposal for a summer research project or internship relates to the acquisition of skills by elementary school or younger children for the peaceful resolution of conflict. Awarded to Haydil Henriquez '14, Sinan Kazaklar '14.
The Julia and Frank L. Lyman '43 Student Summer Research Stipend was created in February 2000. It is awarded each spring by the provost upon receiving recommendations from members of the faculty involved with peace and conflict studies. Awarded to William Nakhoda '12, William Renneboh '13.
The Thomas B. McCabe Jr. and Yvonne Motley McCabe Memorial Fellowship. This fellowship, awarded annually to graduates of the College, provides a grant toward an initial year of study at the Harvard Business School, or at other
business schools as follows: the University of Chicago, Massachusetts Institute of Technology, Northwestern University, the University of Pennsylvania, or Stanford University. The McCabe Fellowship is renewable for a second year on the same program. Yvonne and Thomas B. McCabe Jr. lived in Cambridge, Mass., for a time, and he received an M.B.A. from Harvard and was a visiting lecturer there. In selecting the recipient, the Committee on Fellowships and Prizes follows the standards that determine the McCabe Achievement Awards, giving special consideration to applicants who have demonstrated superior qualities of leadership. Young alumni and graduating seniors are eligible to apply. Applications must be submitted by April 20. Awarded to John Russell Charles '07, Nimrod Cohen '06, Sonya Hoo ${ }^{\prime} 05$, Darren Johnson '08, Inessa Lurye '06, Matthew Schiller '07, and Zachary Wright Ellison '04.
The Norman Meinkoth Premedical Research Fund was established in 2004 by Marc E. Weksler ' 58 and Babette B. Weksler ' 58 to honor Norman A. Meinkoth's long service as a premedical adviser to students at Swarthmore College, where he was professor of biology for 31 years and chairman of the department for 10 years. The funds are awarded on the basis of scientific merit to a rising junior or senior premedical student to allow the pursuit of laboratory research in the sciences on or off campus. The Provost's Office administers the fund. Awarded to Henry Ainley '12.
Mellon Mays Undergraduate Fellowship Program. The Andrew W. Mellon Foundation has provided a grant to establish an undergraduate fellowship program intended to increase the number of minority students, and others, who choose to enroll in doctoral programs and pursue academic careers. The foundation's grant provides term and summer stipends for students to work with faculty mentors as well as a loan-forgiveness component to reduce undergraduate indebtedness for those fellows who pursue graduate study. The fellowships are limited to the humanities, a few of the social sciences, and selected physical sciences. A faculty selection committee invites nominations of sophomores in February and awards the fellowships in consultation with the dean and provost. Awarded to Jessica Adomako '13, Julio Alicea '13, Nilo Bermeo '12, Khalia Grady '13, and Javier Ernesto Perez '13.
The James H. '58 and Margaret C. Miller Internship for Environmental Preservation enables a Swarthmore student to engage in meaningful work directed toward the preservation of the environment, including such activities as environmental education,
environmental justice, habitat preservation and restoration, issues dealing with environmentally sustainable technologies and economies, and relevant public policy. This may take the form of an internship with an organization which is committed to a sustainable future. The Nature Conservancy, American Farmland Trust, and Natural Resources Defense Council are current examples of organizations engaging in such work. The Award is intended to encourage a student to explore a career in public policy relating to preserving the environment for future generations. The Lang Center for Civic and Social Responsibility selects the internship recipient. Not awarded this year.
The Lucretia Mott Fellowship was founded by the Somerville Literary Society and is sustained by the contributions of Swarthmore alumnae. It is awarded each year to a senior woman or alumna who is to pursue advanced study in an institution approved by the committee. Applications must be submitted by April 20. Awarded to Natalie Bowlus '08, Brigette Davis '10, Sheveen Greene '07, Sara Ann Nawaz '11, Lois Park '10, and Julissa Ventura '10.
The John W. Nason Community Service Fellowship. The John W. Nason Community Service Fellowship celebrates the contributions of Swarthmore's eighth president by supporting students pursuing off-campus community service related to their academic program. The Nason Fellowship was initiated by members of the Class of 1945 in anticipation of their 50th reunion. The Nason Fellowship is administered by the Swarthmore Foundation. Not awarded this year.
The Helen F. North Fund in Classics, established in 1996 by Susan Willis Ruff '60 and Charles F.C. Ruff ' 60 to honor the distinguished career of Helen F. North and her enduring impact on generations of Swarthmore students, is awarded to support the program of the Classics Department. At the discretion of the department, it shall be used to fund annually the Helen F. North Distinguished Lectureship in Classics and, as income permits, for a conference or symposium with visiting scholars; summer study of Greek or Latin or research in classics-related areas by students majoring in the field; or study in Greece or Italy in classics by a graduate of the department. Awarded to Daniel Browning '13, Ben Ellentuck '13, and Bradford Kim '13.
The Arthur S. Obermayer '52 Summer Internship was established in 2005 and is intended to broaden and enrich the experience of a Swarthmore student. The grant shall be awarded with preference to a domestic student who is studying in a major that may not inherently offer an international opportunity. Awarded to Michelle Fennell ' 12.

The Robert F. Pasternack Research Fellowship was established in 2005 by a gift from the estate of Thomas Koch, deceased husband of Jo W. Koch and father of Michael B. Koch '89. The fellowship honors a beloved member of Swarthmore's Chemistry Department and supports student summer research in chemistry. The fellowship shall be administered by the Provost's Office. Awarded to Raymundo Alfaro-Aco '12.
The J. Roland Pennock Undergraduate Fellowship in Public Affairs. The fellowship, endowed by friends of Professor J. Roland Pennock at his retirement in 1976 and in recognition of his many years of distinguished teaching of political science at Swarthmore, provides a grant to support a substantial research project (which could include inquiry through responsible participation) in public affairs. The fellowship, for Swarthmore undergraduates, would normally be held off campus during the summer. Preference is given to applicants from the junior class. Awarded to Emma Ambrose '12, Lindsay Dolan '12, Shiran Shen '12, Paul Shortell '13, Kimberly St. Julian '12, Yuanzhuo Wang '13, and Jenna Zhu ' 12.

## The Penrose International Service Fund

 provides a stipend to support participation in a project to improve the quality of life of a community outside North America. The project should involve direct interaction with the affected community and be of immediate benefit to them rather than action in support of social change at a regional or national level. The stipend will be available to a Swarthmore student from any class for a project in any country other than that of his or her own citizenship. The Lang Center for Civic and Social Responsibility administers the Penrose International Service Fund. Awarded to Philippe Celestin '11 and Sara Nawaz '11. Phi Beta Kappa Fellowship. The Swarthmore Chapter of Phi Beta Kappa (Epsilon of Pennsylvania) awards a fellowship for graduate study to a senior who has been elected to Phi Beta Kappa and has been admitted to a program of advanced study in some branch of the liberal arts. Not awarded this year.The Simon Preisler Memorial Endowment was established in 2006 by Richard A. Barasch ' 75 and Renee Preisler Barasch to honor the memory of Simon Preisler. Mr. Preisler, Renee's father, was an Auschwitz survivor, and with this endowment the Baraschs's wish to create a permanent memorial of the human devastation that occurred during the Holocaust and the lack of adequate global response to the tragedy. The fund supports Ruach at Swarthmore as well as student summer internships and research fellowships in human rights, conflict resolution, and the promotion of peace and understanding. Preference will be

## 17 Distinctions, Awards, and Fellowships

given to students pursuing internships and research fellowships related to genocide and other large-scale violent conflicts, projects involving peaceful prevention or intervention, non-violent resistance, or local peacemaking, reconciliation, and healing initiatives. Awarded to Tarini Kumar '12.
The Project Japan Fund is used to support one student during the summer months to conduct research in Japan on contemporary issues. Not awarded this year.
The Public Policy Program Internship Funding. The Public Policy Program provides travel (not travel to home area) and living expense support for students who minor in public policy working at an internship that fulfills the program's requirements. Awarded to Peter Akkies '12, Prashant Arya '13, Jessica Downing '12, Paul Eisenberg '12, Amanda Eng '12, Christopher Fernandez '12, Kyle Goeckner-Wald '12, Julian Leland '12, Jordan Martinez '13, Renu Nadkarni '13, and Sonal Parasrampuria ' 12.
The Anwural Quadir Summer Research Fellowship was established in 2005 by Iqbal A. Quadir ' 81 to honor the memory of his father. This fellowship will enable a Swarthmore student to travel, conduct research, and/or explore and problem solve on issues related to Bangledesh and the student's major.
Swarthmore's first fund to support research related to Bangladesh, this award will be determined by the provost, the chair of the interdisciplinary council, and the division chairs from the humanities, social sciences, and natural sciences and engineering. Not awarded this year.
The Sager Fund of Swarthmore College was established in 1988 by alumnus Richard Sager '73, a leader in San Diego's gay community. To combat homophobia and related discrimination, the fund sponsors events that focus on concerns of the lesbian, bisexual, and gay communities and promotes curricular innovation in the field of lesbian and gay studies. The fund also sponsors an annual three-day symposium. The fund is administered by a committee of women and men from the student body, alumni, staff, faculty, and administration. In 2004, Richard Sager created an "internship" to provide funding for students in internships with nonprofit organizations whose primary missions address gay/lesbian/bisexual/transgender issues. The Lang Center for Civic and Social Responsibility administers the internship. Not awarded this year.
The James H. Scheuer Summer Internship in Environmental and Population Studies
Endowment was established in 1990. The Scheuer Summer Internship supports student research in environmental and public policy issues. The coordinators of the environmental
studies and public policy concentrations select interns in alternate years. Awarded to Isabel Newlin '13, and John Stevick ' 12.
The Somayyah Siddiqi '02 Economics Research Fellowship, for economics research, is funded by T. Paul Schultz '61 in memory of Somayyah Siddiqi ' 02 . Not awarded this year.
The David G. Smith Internship in Health and Social Policy, endowed by alumni, faculty, friends, and former students of David G. Smith, is to support an internship in the social services, with priority for the field of health care, for a Swarthmore undergraduate during the summer or a semester on leave. Not awarded this year.
Solodar Family Science and Engineering
Summer Research Fund was established in 2006. The fund supports a summer research fellowship for a Swarthmore student of science or engineering, with a preference toward the chemical sciences. Not awarded this year.
The Starfield Student Research Endowment was established by Barbara Starfield '54 and Phoebe Starfield Leboy '57 in 2004. The fund supports student summer research fellowships in social justice with a preference for students pursuing research in the areas of health services delivery/health policy and social, demographic, and geographic equity. Starfield and Leboy established the fellowships to honor their parents, Martin and Eva Starfield, educators who instilled a love of learning and social justice in their daughters. Awarded to Lam-Anh Nguyen '12.
The Surdna Fellowships were established in 1979 by a gift from the Surdna Foundation and are awarded for summer research by Swarthmore students in collaboration with a faculty member in any department in the Natural Sciences and Engineering Division. Awarded to Atish Agarwala '13, Alex Burka '12, Seth Foster '13, and Aashish Srinivas '14.
The Pat Tarble Summer Research Fund was established in 1986 through the generosity of Mrs. Newton E. Tarble. The Tarble Summer Fund supports undergraduate research. The Provost's Office administers the fund. Awarded to Benjamin Geselowitz '13 and Jonathan Gluck ' 12.
The Martha E. Tyson Fellowship was founded by the Somerville Literary Society in 1913 and is sustained by the contributions of Swarthmore alumnae. It is awarded each year to a senior woman or alumna who plans to enter elementary or secondary-school work. The recipient of the award is to pursue a course of study in an institution approved by the committee. Applications must be submitted by April 20. Awarded to Mariaeloisa Carambó '11, Ada Elizabeth Okun ' 11 , Nicole Singer ' 10 , and Ashia Denise Troiano '11.

The Hans Wallach Research Fellowship, endowed in 1991 by colleagues and friends, honors the eminent psychologist Hans Wallach (1904-1998), who was a distinguished member of the Swarthmore faculty for more than 60 years. The fellowship supports one outstanding summer research project in psychology for a rising Swarthmore College senior or junior, with preference given to a project leading to a senior thesis. Awarded to Jessica Lee Schleider ' 12.

### 17.7 Faculty Fellowships and Support

The Mary Albertson Faculty Fellowship was endowed by an anonymous gift from two of her former students, under a challenge grant issued by the National Endowment for the Humanities. It will provide an annual award of a semester's leave at full pay to support research and writing by members of the humanities faculty. Mary Albertson joined the Swarthmore faculty in 1927 and served as chairman of the History Department from 1942 until her retirement in 1963. She died in May 1986.

The Janice Robb Anderson '42 Junior Faculty Research Endowment was established by Janice Robb Anderson '42 in 2001. The Anderson endowment supports faculty research, with preference for junior faculty members in the humanities whose research requires study abroad.
The George Becker Faculty Fellowship was endowed by Ramon Posel ' 50 under a challenge from the National Endowment for the Humanities, in honor of this former member of the English Department and its chairman from 1953 to 1970. The fellowship will provide a semester of leave at full pay for a member of the humanities faculty to do research and write, in the fields of art history, classics, English literature, history, linguistics, modern languages, music, philosophy, or religion but with preference given to members of the Department of English Literature.
The Brand Blanshard Faculty Fellowship is an endowed faculty fellowship in the humanities established in the name of philosopher and former faculty member Brand Blanshard, who taught philosophy at Swarthmore from 1925 to 1944. The fellowship will provide a semester leave at full pay for a member of the humanities faculty to do research and to write. On recommendation of the Selection Committee, a small additional grant may be available for travel and project expenses. Any humanities faculty member eligible for leave may apply. Fellows will prepare a paper about the work of their leave year and present it publicly to the College and wider community. The Blanshard Fellowship is made possible by an anonymous
donor who was Blanshard's student at Swarthmore, and a challenge grant from the National Endowment for the Humanities.
The Constance Hungerford Faculty Support Fund was established in 2007 by Eugene M. Lang ' 38 to recognize Constance Cain Hungerford for her dedicated service as provost and faculty leader and for her outstanding contributions to Swarthmore's educational program. Connie Hungerford, an art historian, joined the Art Department in 1974 and served as provost from 2001 to 2011. This fund allows the provost to make grants to individual faculty members to support their professional responsibilities and scholarly and creative careers.
The Eugene M. Lang Faculty Fellowship is designed to enhance the educational program of Swarthmore College by contributing to faculty development, by promoting original or innovative scholarly achievement of faculty members, and by encouraging the use of such achievements to stimulate intellectual exchange among scholars. The fellowship will provide financial support for faculty leaves through a grant of about one-half the recipient's salary during the grant year. On recommendation of the Selection Committee, a small additional grant may be available for travel and project expenses and for library book purchases. The Selection Committee shall consist of the provost, three divisional chairs, and three others selected by the president, of whom at least two must be Swarthmore alumni. Any faculty member eligible for leave may apply. Fellows will be expected to prepare a paper or papers resulting from the work of their leave year, presented publicly for the College and wider community. The Selection Committee may wholly or partially support the cost of publishing any of these papers. These fellowships are made possible by an endowment established by Eugene M. Lang '38.

The Edmund Allen Professorship of Chemistry was established in 1938 by a trust set up by his daughter Laura Allen, friend of the College and niece of Rachel Hillborn, who served on the Board of Managers from 1887 to 1913.
The Franklin E. and Betty Barr Chair in Economics was established in 1989 as a memorial to Franklin E. Barr Jr. '48 by his wife, Betty Barr.
The Alfred H. and Peggi Bloom Professorship was established in 2002 by Eugene M. Lang '38 in honor of President Alfred H. and Peggi Bloom.
The Albert L. and Edna Pownall Buffington Professorship was established in 1964 by a bequest from Albert Buffington, Class of 1896 in honor of his wife, Edna Pownall Buffington, Class of 1898.
The Dorwin P. Cartwright Professorship in Social Theory and Social Action was created in 1993 by Barbara Weiss Cartwright '37, to honor her husband, Dorwin P. Cartwright ' 37. The professorship is awarded for a period of five years to a full professor who has contributed to and has the promise of continuing major contributions to the understanding of how social theory can be brought to bear on creating a more humane and ethically responsible society.
Centennial Chairs. Three professorships, unrestricted as to field, were created in 1964 in honor of Swarthmore's centennial from funds raised during the Centennial Fund Campaign.
The Isaac H. Clothier Jr. Professorship of Biology was established by Isaac H. Clothier Jr. as a tribute of gratitude and esteem to Dr. Spencer Trotter, a professor of biology from 1888-1926.
The Isaac H. Clothier Professorship of History and International Relations was created in 1888 by Isaac H. Clothier, a member of the Board of Managers. Originally the professorship was granted in the field of civil and mechanical engineering. Clothier later approved its being a chair in Latin; in 1912, he approved its present designation.
The Morris L. Clothier Professorship of Physics was established in 1905 by Morris L. Clothier, Class of 1890 .
The Julien and Virginia Cornell Visiting Professorship was endowed by Julien Cornell '30 and Virginia Stratton Cornell '30, former members of the Board of Managers, to bring professors and lecturers from other nations and cultures for a semester or a year. Since 1962, Cornell professors and their families from every corner of the world have resided on the campus so that they might deepen the perspective of both students and faculty.

## The Alexander Griswold Cummins

Professorship of English Literature was established in 1911 in honor of Alexander Griswold Cummins, Class of 1889, by Morris L. Clothier, Class of 1890.

The Howard N. and Ada J. Eavenson Professorship in Engineering was established in 1959 by Mrs. Eavenson, whose husband graduated in 1895.
The Neil R. Grabois '57 Professorship was established in 2010 by Eugene M. Lang ' 38 to honor Neil Grabois, mathematician and educator. This fund supports a professorship in the division of natural sciences and engineering, with a preference for a member of the mathematics department.
The James H. Hammons Professorship was established in 1997 by Jeffrey A. Wolfson '75, to recognize the inspiring academic and personal guidance provided by James H. Hammons, professor of chemistry, who began his distinguished teaching career at Swarthmore in 1964. The professorship may be awarded in any division, with preference given to the Chemistry Department.
The James C. Hormel Professorship in Social Justice, established in 1995 by a gift from James C. Hormel '55, is awarded to a professor in any academic division whose teaching and scholarship stimulate increased concern for and understanding of social justice issues, including those pertaining to sexual orientation.
The Howard M. and Charles F. Jenkins Professorship of Quakerism and Peace Studies was endowed in 1924 by Charles F. Jenkins H'26 and a member of the Board of Managers, on behalf of the family of Howard M. Jenkins, a member of the Board of Managers, to increase the usefulness of the Friends Historical Library and to stimulate interest in American and Colonial history with special reference to Pennsylvania. The fund was added to over the years through the efforts of the Jenkins family and by a 1976 bequest from C. Marshall Taylor, Class of 1904.
The Walter Kemp Professorship in the Natural Sciences was established in 2006 by Giles K. "Gil" ' 72 and Barbara Guss Kemp. Gil and Barbara wanted to honor Gil's father, a retired psychiatrist, who "has always been an inspiration" and "a great believer in both science and education." The professorship is awarded with particular regard for combining professional engagement with excellence in teaching.
The William R. Kenan Jr. Professorships were established in 1973 by a grant from the William R. Kenan Jr. Charitable Trust to "support and encourage a scholar-teacher whose enthusiasm for learning, commitment to teaching, and sincere personal interest in students will
enhance the learning process and make an effective contribution to the undergraduate community."
The Eugene M. Lang Research Professorship, established in 1981 by Eugene M. Lang '38, a member of the Board of Managers, normally rotates every four years among members of the Swarthmore faculty and includes one year devoted entirely to research, study, enrichment, or writing. It carries an annual discretionary grant for research expenses, books, and materials.
The Eugene M. Lang Visiting Professorship, endowed in 1981 by Eugene M. Lang '38, brings to Swarthmore College for a period of one semester to 3 years an outstanding social scientist or other suitably qualified person who has achieved prominence and special recognition in the area of social change.
The Jane Lang Professorship in Music was established by Eugene M. Lang '38, to honor his daughter, Jane Lang '67. The Jane Lang Professorship is awarded to a member of the faculty whose teaching or professional activity promotes the centrality of music in the educational process by linking it to other disciplines.
The Stephen Lang Professorship of Performing Arts was established by Eugene M. Lang '38, to honor his son, Stephen Lang '73. The Stephen Lang Professorship of Performing Arts is awarded for five years to a member of the faculty whose teaching or professional activity promotes excellence in the performing arts at Swarthmore.
The Sara Lawrence Lightfoot Professorship was created by the College in 1992 in recognition of an unrestricted gift by James A. Michener '29. The professorship is named in honor of Sara Lawrence Lightfoot '66, Doctor of Humane Letters, 1989, and a former member of the Board of Managers.
The Susan W. Lippincott Professorship of Modern and Classical Languages was endowed in 1911 through a bequest from Susan W. Lippincott, a member of the Board of Managers, a contribution from her niece, Caroline Lippincott, Class of 1881, and gifts by other family members.
The Edward Hicks Magill Professorship of Mathematics and Natural Sciences was created in 1888 largely by contributions of interested friends of Edward H. Magill, president of the College from 1872 to 1889, and a bequest from John M. George.
The Charles and Harriett Cox McDowell
Professorship of Philosophy and Religion was established in 1952 by Harriett Cox McDowell, Class of 1887 and a member of the Board of Managers, in her name and that of her husband, Dr. Charles McDowell, Class of 1877.

The Mari S. Michener Professorship was created by the College in 1992 to honor Mrs. Michener, wife of James A. Michener '29, and in recognition of his unrestricted gift.
The Gil and Frank Mustin Professorship was established by Gilbert B. Mustin ' 42 and Frank H. Mustin '44 in 1990. It is unrestricted as to field.
The Richter Professorship of Political Science was established in 1962 by a bequest from Max Richter at the suggestion of his friend and attorney, Charles Segal, father of Robert L. Segal '46 and Andrew Segal '50.
The Scheuer Family Chair of Humanities was created in 1987 through the gifts of James H. Scheuer '42; Walter and Marge Pearlman Scheuer '44; and their children, Laura Lee '73, Elizabeth Helen '75, Jeffrey '75, and Susan '78 and joined by a challenge grant from The National Endowment for the Humanities.
The Howard A. Schneiderman '48 Professorship in Biology was established by his wife, Audrey M. Schneiderman, to be awarded to a professor in the Biology Department. The Claude C. Smith '14 Professorship was established in 1996 by members of the Smith family and friends of Mr. Smith. A graduate of the Class of 1914, Claude Smith was an esteemed lawyer with the firm of Duane, Morris and Heckscher and was active at the College, including serving as chairman of the Board of Managers. This chair is awarded to a member of the Political Science or Economics departments.

## The Henry C. and Charlotte Turner

Professorship was established in 1998 by the Turner family. Henry C. Turner, Class of 1893 and J. Archer Turner, Class of 1905, served as members of the Board of Managers of Swarthmore College, as officers of the corporation, and as members of various committees. Henry Turner was founder of the Turner Construction Co.; his brother, J. Archer Turner, was the firm's president. Four generations of Turners have had ties with the College, and Sue Thomas Turner '35, wife of Robert C. Turner '36 (son of Henry C. Turner), is a board member emerita. Howard Turner '33, son of J. Archer Turner, has also been very active as a member of the Board of Managers over the years.
The J. Archer and Helen C. Turner Professorship was established in 1998 by the Turner family. Henry C. Turner, Class of 1893 and J. Archer Turner, Class of 1905, served as members of the Board of Managers of Swarthmore College, as officers of the corporation, and as members of various committees. Henry Turner was founder of the Turner Construction Co.; his brother, J. Archer Turner, was the firm's president. Four
generations of Turners have had ties with the College, and Sue Thomas Turner '35, wife of Robert C. Turner '36 (son of Henry C. Turner), is a board member emerita. Howard Turner '33, son of J. Archer Turner, has also been very active as a member of the Board of Managers over the years.
The Henry C. and J. Archer Turner Professorship of Engineering was established with contributions and gifts from members of the Turner family in 1946 in recognition of the devoted service and wise counsel of Henry C. Turner, Class of 1893 and his brother, J. Archer Turner, Class of 1905 . Both were members of the Board of Managers.
The Daniel Underhill Professorship of Music was established in 1976 by a bequest from Bertha Underhill to honor her husband, Class of 1894 and a member of the Board of Managers.
The Marian Snyder Ware Director of Physical Education and Athletics was endowed in 1990 by Marian Snyder Ware '38.
The Joseph Wharton Professorship of Political Economy was endowed by a trust given to the College in 1888 by Joseph Wharton, chair of the Board of Managers.
The Isaiah V. Williamson Professorship of Civil and Mechanical Engineering was endowed in 1888 by a gift from Isaiah V. Williamson.

| 19.1 Enrollment of Students by Classes (Fall 2010) |  |  |
| :--- | :---: | ---: |
|  | Men | Women |
| Seniors | 181 | 188 |
| Juniors | 187 | 192 |
| Sophomores | 179 | 194 |
| Freshmen | $\frac{193}{740}$ | $\underline{195}$ |
|  | 769 | 369 |
| Graduate students | 0 | 0 |
| Special student | $\frac{4}{744}$ | $\frac{11}{150}$ |
| TOTAL |  | 780 |

Note: These counts include 90 students studying abroad.

| 19.2 Geographic Distribution of Students (Fall 2010) |  |  |
| :---: | :---: | :---: |
| Alabama ............................. 3 | North Carolina ................... 31 | India .................................... 8 |
| Alaska................................ 3 | North Dakota....................... 3 | Indonesia............................. 1 |
| Arizona ............................. 16 | Ohio................................. 23 | Jamaica ............................... 1 |
| Arkansas ............................. 6 | Oklahoma........................... 2 | Japan .................................. 5 |
| California......................... 155 | Oregon ............................. 14 | Jordan ................................. 1 |
| Colorado ........................... 15 | Pennsylvania .................... 188 | Kenya................................. 1 |
| Connecticut ....................... 49 | Puerto Rico ......................... 1 | Laos ................................... 1 |
| Delaware .......................... 19 | Rhode Island ....................... 3 | Malaysia ............................. 3 |
| District of Columbia............ 10 | South Carolina ..................... 5 | Mexico ............................... 1 |
| Florida .............................. 28 | South Dakota ...................... 1 | Morocco.............................. 1 |
| Georgia ............................. 19 | Tennessee........................... 6 | Myanmar............................. 1 |
| Guam ................................. 1 | Texas ................................ 41 | Nepal.................................. 1 |
| Hawaii ................................ 2 | Utah................................... 5 | Netherlands......................... 1 |
| Idaho.................................. 2 | Vermont ............................ 13 | New Zealand........................ 1 |
| Illinois............................... 32 | Virgin Islands...................... 3 | Nigeria ............................... 1 |
| Indiana............................... 7 | Virginia ............................ 38 | Pakistan.............................. 1 |
| Iowa ................................... 7 | Washington ....................... 28 | Palestine.............................. 2 |
| Kansas ................................ 4 | West Virginia...................... 2 | People's Republic of China.. 17 |
| Kentucky ............................ 5 | Wisconsin........................... 5 | Peru.................................... 1 |
| Louisiana ............................ 2 | Wyoming ........................... 1 | Philippines ........................... 1 |
| Maine............................... 20 | Total United States ......... 1,402 | Poland ................................ 1 |
| Maryland ........................... 87 |  | Romania.............................. 2 |
| Massachusetts.................... 88 |  | Singapore............................ 1 |
| Michigan ........................... 18 |  | South Africa ........................ 1 |
| Military PO......................... 2 | Austria............................... 1 | South Korea ....................... 29 |
| Minnesota.......................... 15 | Brazil................................. 2 | Turkey................................ 4 |
| Mississippi.......................... 1 | Brunei................................ 1 | Uganda............................... 1 |
| Missouri.............................. 8 | Canada ............................... 2 | United Arab Emirates............ 2 |
| Montana............................. 3 | Czech Republic.................... 1 | United Kingdom.................. 3 |
| Nebraska............................. 6 | Ecuador .............................. 2 | Vietnam .............................. 2 |
| Nevada............................... 4 | France................................. 2 | Zambia............................... 1 |
| New Hampshire.................. 10 | Germany............................. 3 | Zimbabwe........................... 2 |
| New Jersey ...................... 134 | Ghana ................................ 3 | Total from abroad........... 122 |
| New Mexico ........................ 6 | Greece ................................ 1 |  |
| New York ........................ 202 | Hong Kong......................... 5 | GRAND TOTAL............ $\underline{\underline{1,524}}$ |

## 20 Course Credit and Numbering System

The semester course credit is the unit of credit. One semester course credit is normally equivalent to 4 semester hours elsewhere. Upper-class seminars and colloquia are usually given for 2 semester course credits. A few courses are given for 0.5 credit.
Courses are numbered as follows:

| 001 to 010 | Introductory courses <br> 011 to 099 |
| :--- | :--- |
| Other courses (Some of <br> these courses are not open <br> to first-year students or |  |
| 100 to 199 | sophomores.) |
| Seminars for upper-class <br> students and graduate <br> students. |  |

The numbers for yearlong courses are joined by a hyphen (e.g., 001-002) and must be continued
for the entire year. For introductory language yearlong courses, credit is not given for the first semester's work only, nor is credit given for the first semester if the student fails the second semester. In cases where credit is not earned for the second half of a yearlong course, the first semester is excluded from counting toward degree credit, although the registration and grade for the first semester remain on the permanent record.
Course listings in this catalog are intended to facilitate planning, but are subject to change. A better guide to course offerings in any particular semester is the schedule of courses available at the Registrar's website www.swarthmore.edu/Admin/registrar/.

## Subject Code Key

| ARAB | Arabic | INTP | Interpretation Theory |
| :--- | :--- | :--- | :--- |
| ARTH | Art History | ISLM | Islamic Studies |
| ASIA | Asian Studies | JPNS | Japanese |
| ASTR | Astronomy | LASC | Latin American Studies |
| BIOL | Biology | LATN | Latin |
| BLST | Black Studies | LING | Linguistics |
| CHEM | Chemistry and Biochemistry | LITR | Modern Languages and Literatures |
| CHIN | Chinese | MATH | Mathematics |
| CLAS | Classics | MDST | Medieval Studies |
| CLPT | Comparative Literature | MUSI | Music |
| COGS | Cognitive Science | PEAC | Peace and Conflict Studies |
| CPSC | Computer Science | PHIL | Philosophy |
| DANC | Dance | PHYS | Physics |
| ECON | Economics | POLS | Political Science |
| EDUC | Educational Studies | PPOL | Public Policy |
| ENGL | English Literature | PSYC | Psychology |
| ENGR | Engineering | RELG | Religion |
| ENVS | Environmental Studies | RUSS | Russian |
| FMST | Film and Media Studies | SOAN | Sociology and Anthropology |
| FREN | French | SPAN | Spanish |
| GMST | German | STAT | Statistics |
| GREK | Greek | STUA | Studio Art |
| GSST | Gender and Sexuality Studies | THEA | Theater |
| HIST | History |  |  |

## Footnote Key

1 Absent on leave, fall 2011.
2 Absent on leave, spring 2012.
3 Absent on leave, 2011-2012.
4 Absent on administrative leave, 2011-2012.
5 Fall 2011.
6 Spring 2012.
7 Affiliated faculty.
8 Ex-officio.

9 Campus coordinator, Swarthmore Program in Grenoble, fall 2011.
10 Campus coordinator, Swarthmore Program in Grenoble, spring 2012.
11 Program director, Swarthmore Program in Grenoble, fall 2011.
12 Program director, Swarthmore Program in Grenoble, spring 2012.

SYDNEY L. CARPENTER, Professor of Studio Art
MICHAEL W. COTHREN, Professor of Art History and Chair
RANDALL L. EXON, Professor of Studio Art and Studio Art Coordinator
CONSTANCE CAIN HUNGERFORD, Professor of Art History ${ }^{3}$
BRIAN A. MEUNIER, Professor of Studio Art
JANINE MILEAF, Associate Professor of Art History ${ }^{3}$
PATRICIA L. REILLY, Associate Professor of Art History and Associate Provost
LOGAN GRIDER, Assistant Professor of Studio Art
TOMOKO SAKOMURA, Assistant Professor of Art History
LARRY SILVER, Visiting Professor of Art History
NJIDEKA AKUNYILI, Visiting Assistant Professor of Studio Art (part time) ${ }^{5}$
ALLAN EDMUNDS, Visiting Assistant Professor of Studio Art (part time) ${ }^{5}$
JESSICA TODD HARPER, Visiting Assistant Professor of Studio Art (part time)
MARY PHELAN, Visiting Assistant Professor of Studio Art (part time) ${ }^{6}$
LAURA HOLZMAN, Visiting Instructor of Art History (part time)
MIN KYUNG LEE, Post-doctoral Fellow and Visiting Instructor of Art History
JUNE V. CIANFRANA, Administrative Assistant
${ }^{1}$ Absent on leave, fall 2011.
${ }^{2}$ Absent on leave, spring 2012.
${ }^{3}$ Absent on leave, 2011-2012.
${ }^{4}$ Absent on administrative leave.
${ }^{5}$ Fall 2011.
${ }^{6}$ Spring 2012.

## The Academic Program

The Art and Art History Department offers two majors: art history and art. The art history major consists of eight credits in art history and one credit in studio art. The art major consists of four credits in art history and seven credits in studio art.

## Course Major

## Art History

All art history majors, course and honors, are required to take nine credits to fulfill major requirements. Four of these must be the following:

1. One credit in studio art
2. ARTH 002 Western Art (students are encouraged to take this course early in their major program)
3. One course on art outside the western tradition.
4. ARTH 020 Majors Workshop

The remaining five credits will consist of three other art history courses and one 2 -credit art history seminar. For those majors considering going on to graduate school in art history it is strongly advisable to choose a series of courses that will provide you with geographical and historical breadth.
The Comprehensive Requirement
During the senior year, course majors will be given a short list of works of art or architecture drawn from the different geographic areas and
historic periods. From this list, students will choose one work to investigate in preparation for writing an essay situating it within its critical interpretive context, addressing broad questions of method and theory as well as the work itself.

## Studio Art

All art majors, in both Course and Honors Programs, are required to take 11 courses to fulfill major requirements:

1. Seven credits of studio art:

STUA 001 Foundation Drawing, (or, STUA
0018 First-Year Seminar: Making Art)
Studio art course in a 2-D medium
Studio art course in a 3-D medium
One studio art elective
Junior Workshop (spring semester of junior year)
STUA 030 Senior Workshop 1
STUA 040 Senior Workshop 11
2. Four credits of art history, which must include ARTH 002 Western Art.
3. Studio art majors can complete an art history minor as well with the completion of three art history credits in addition to those required by their studio art major.
Notes:

- Five credits in studio art, including the distribution in 2-D, 3-D, and Junior Workshop must be completed before entry to STUA 030 Senior Workshop 1.

The 2-D, 3-D, and advanced credit requirements must be taken at Swarthmore.

- Students are encouraged to consult with professors and advisers about art history selections relevant to their interests.
- The senior art major is required to mount a one-person exhibition in the College gallery representing a culmination in their studio work. This exhibition and accompanying artist statement, of no less than 2500 words, is the comprehensive examination for the art major. Senior exhibitions are scheduled during the last few weeks of the spring semester each year.
- There is no course minor in studio art.


## Course Minor

Art History Minor
The course minor in art history will consist of five credits in art history; four of the five credits must be taken at Swarthmore. Studio art majors can complete an art history minor with the completion of three art history credits in addition to those required by their studio art major.

## Honors

## Honors in Art History

Requirements for admission to the Honors Program do not differ from those for admission to the course major. Once admitted to the honors major, students will be expected to maintain an average of $\mathrm{B}+$ or better in all courses in art history.

## Major

1. An honors major in art history requires three two-credit preparations, consisting of three 2credit seminars. The normal prerequisite for any art history seminar is 2 credits of previous art history course work. Each seminar will be examined in a three-hour written examination and an individual 30-minute oral examination. 2. An honors major in art history must fulfill the requirements for a 9 -credit course major including ARTH 020 Majors Workshop.

## Minor

An honors minor in art history will take one two-credit seminar, and must have taken at least two other courses in art history. Only one of those credits can be a transfer credit.

## Honors in Studio Art

Requirements for admission to the Honors Program do not differ from those for admission to the course major. Students will be expected to maintain an average of $\mathrm{B}+$ or better in all courses in studio art.

## Major

1. An honors major in art will present 2 preparations in studio art and 1 preparation in art history.
2. Each of the two studio preparations will consist of two paired studio courses. The examiner of each preparation will receive the syllabus for both courses and slides representing the body of work produced in them and will examine the student in an individual oral examination of 30 minutes.
a. One preparation pair will consist of STUA 030 Senior Workshop 1 and STUA 040 Senior Workshop 11.
b. The second pair might consist of an intermediate and an advanced course in a specific medium, or two courses with a different approach to the same medium, (ex: Pottery and Ceramic Sculpture, Drawing and Life Drawing), or, two related courses, (ex: Ceramic Sculpture and Sculpture, Drawing and Photography, Drawing and Works on Paper, Drawing and Painting)
All preparations for honors must be approved in advance by the department.

## Notes:

- Studio courses taken at an institution outside of Swarthmore cannot count towards an honors studio preparation.
- Only courses taught by regularly teaching faculty in studio art can be applied toward a preparation. Courses taught by regularly returning adjuncts might be applied pending department approval.
- Honors preparations approved in the sophomore year must be adhered to. Changes to the academic program as they relate to honors preparations, must be approved by the department.

3. The preparation in art history will consist of one 2 -credit seminar.
a. The prerequisite for any art history seminar is two previous credits in art history, including ARTH 002.
b. All majors in art, whether course or honors, must do 4 credits of art history work. Studio faculty may recommend particular art history courses as most relevant to a student's studio interests.
4. Honors candidates in art must fulfill the course major requirements. The prerequisite for all studio work, unless waived, is STUA 001.
The distribution requirements for 2-D and 3-D for the honors major in studio art are the same as those in course.
5. Honors study in studio art is comprised of a culminating exhibition of the student's studio work, with an accompanying artist essay of 3,750 to 5,000 words. Some of this work may
figure in the selections of work presented for one or both of the course pairs described above, but the rationale for inclusion in the exhibition will differ. The artist essay will be sent to both examiners of studio preparations. A revision of a paper written previously for the art history preparation, will be sent to the art history examiner.
a. The senior honors study essay will differ from the artist essay written by course students in that it will integrate the preparations in studio and art history.
b. For honors majors, STUA 040 will count outside the major for purposes of calculating the 20 -course rule, since it serves as senior honors study. It will be listed on the transcript not as STUA 040 but as Senior Honors Study.
c. If a student drops out of Honors after the drop/add period in the last semester, the Senior Honors Study credit will receive a grade of NC. Senior Workshop 11 (STUA 040), assuming it had been successfully completed in the spring, will then be listed on the transcript with the appropriate grade.
d. Warning: if a student drops out of honors, Senior Workshop 11 no longer counts as outside the major, but as within. A student who has taken 12 other credits within the department, and who is graduating with the minimum of 32 credits will then have 13 in the major and only 19 outside. Honors studio art majors should be especially careful to take enough credits outside the department if they contemplate withdrawing from honors.

## Minor

1. An honors minor in studio art will present to the honors examiners one studio preparation consisting of STUA 030 Senior Workshop 1 and STUA 040 Senior Workshop 11.
2. An art minor in studio art must meet the same course requirements as the course major in studio art (see above).
3. During the spring semester of the senior year a minor will write a 2,500 word artist essay to be sent to the examiner, along with the relevant syllabi and slides for the two-credit preparation.

## Major Application Process

Requirements for admission to the majors:

## Art History

1. Overall average of C or better in all courses taken during the two semesters preceding the time of application.
2. Completion of at least two courses in art history at Swarthmore with grades of B or
better. For a double major the grade minimum is also B .

## Studio Art

1. Overall average of C or better in all courses taken during the two semesters preceding the time of application. For a double major the overall average must be B.
2. Completion of at least one course in art history and one course in studio art at Swarthmore with grades of B or better.
3. A student may be asked to present a portfolio as evidence of ability to see, describe, and analyze visual phenomena critically.

## Art Department Majors and the 20Course Rule

It is a college requirement that 20 of the 32 credits required for graduation must be outside the major. This means that one can take no more than 12 courses in the major, unless one graduates with more than 32 credits, in which case the surplus can also be in the major. The major in art history requires nine credits of work, while the major in art requires 11 credits of work. A student could take three more credits in art history or one more credit in studio art before the 20 -course rule could impact course selection.
For art history majors, the one required credit of studio art course work counts toward the major, but additional credits of studio art count as outside credits. Thus, an art history major graduating with 32 credits could take no more than three additional art history credits beyond the eight art history credits that are required for the major. But, an art history major could take as many more studio credits as desired.
For art majors, both art history and studio art credits count as within the major. If graduating with 32 credits, an art major would take the required four art history and seven studio credits and could take up to one more credit in art history and/or studio art (for a total of 12 in the major). Studio majors who pursue an art history minor can take three additional art history courses and these will count outside the studio major. A studio art major graduating with 32 credits could not take more than eight studio credits.

## Advanced Placement Credit

Credit for an AP 5 will be given upon completion of an art history course in the department.

## Transfer Credit

A maximum of two transfer credits will count toward the major, either from study abroad or other U.S. institutions. Students transferring
from another institution should consult with the art history coordinator regarding their specific situation.

## Off-Campus Study

The Art and Art History Department strongly encourages those with an interest in art and its history to consider incorporating study abroad-either during a summer or a regular academic term-into their Swarthmore program. Important examples of art and architecture are scattered throughout the world, and the encounter with works still imbedded in their original context is vital to an understanding of their historical and contemporary significance. Past experience has shown, however, that art courses in most study abroad programs fall considerably below the academic standards of comparable courses at Swarthmore. Students who are interested in bettering their chances of gaining a full Swarthmore credit for a course taken in a foreign program are advised to meet with either the Studio Art Coordinator and/or the Art History Coordinator, before leaving the campus.
Note: Study abroad for junior art history majors should take place in the fall of the junior year because the required junior workshop course is in the spring of the junior year.

## Art History

## ARTH 001C. First-Year Seminar: Making Art History

Are works of art direct extensions, pure reflections, or unique expressions of an individual artist's genius, fragile by implication and susceptible to destruction from overanalysis? Or are works of art (as well as the definition just offered) cultural artifacts produced under specific material and social conditions, and fully meaningful only under extended analysis? Must we choose? And are these questions themselves, and the talk they generate or suppress, yet another manifestation of the Western European and American commodification of art, its production, and its consumption? Such questions will underlie this introduction to the goals, methods, and history of art history. Focusing on works drawn from a variety of cultures and epochs, as well as on the art historical and critical attention those works have attracted, students will learn to describe, analyze, and interpret both images and their interpretations and to convey their own assessments in lucid writing and speaking.
Writing course.
1 credit.
Fall 2011. Cothren.

## ARTH 001D. First-Year Seminar: Architecture of Philadelphia

Virtually no other city in the Western hemisphere provides a richer cross-section of architecture over the past 350 years than Philadelphia. The city's material culture tells the story not just of this region but of our nation, from William Penn's utopian New World, to America's 19th-century economic and artistic flowering, to Philadelphia's importance as a mid-twentieth-century crucible of city planning and post-modern design. We will explore the built environment on foot as well as through photography, literature, journalism, and film.
Writing course.
1 credit.
Not offered 2011-2012.

## ARTH 001E. First-Year Seminar: Michelangelo and Renaissance Culture

 In this discussion-based first-year seminar, we will study the sculptures, paintings, architecture, poetry, drawings, and biographies of the Renaissance artist Michelangelo. We will investigate these in light of Michelangelo's patrons, audiences, and the larger cultural, political, and religious contexts in which these works were produced. We will also consider the ways in which these works have been analyzed over the centuries and how the biographies and myths of Michelangelo have been created and understood. In doing so, we will develop a critical understanding of the methods and terminology of the discipline of art history itself. Course projects include convening as a mock group of museum trustees to discuss whether the museum should purchase a sculpture that has recently been attributed to Michelangelo.Writing course.
1 credit.
Not offered 2011-2012. Reilly.

## ARTH 001F. First-Year Seminar: Interpreting Picasso

How should we understand the art of one of the most significant artists of the 20th century? Although long embraced by the history of art, Picasso's art still remains a challenge to its interpreters. This course looks at the sets of questions developed within the discipline of art history to understand this protean artist. Strategies addressed include formal analysis, biography, iconography, semiotics, social history, feminist critique, ethnography, and the history of exhibition and display. Emphasis will be placed on developing critical skills in oral and written formats.
Writing course.

1 credit.
Not offered 2011-2012. Mileaf.

## ARTH 001K. First-Year Seminar: Rembrandt and the Dutch Golden Age

Rembrandt van Rijn is considered by many to be the most important artist of the golden age of the Dutch Republic. In this discussion-based course we will study the paintings, prints, drawings, and correspondence of this remarkable artist. Topics will include how Rembrandt's art engaged with the political and social worlds of 17 th-century Netherlands and Flanders, as well as how his art addressed religion, gender, and the art market. We will examine, too, how Rembrandt and his works have been analyzed and mythologized over the centuries. Through all of these investigations we will also develop a critical understanding of the methods and terminology of the discipline of art history.
Writing course.
1 credit.
Not offered 2011-2012. Reilly.

## ARTH 001L. First-Year Seminar: From Handscrolls to Comic Books: Pictorial Narratives in Japan

Through examination of select pictorial narratives produced in Japan between the 12th century and the present, this first-year seminar introduces students to the basics of art historical research and analysis. We will look at the ways in which handscrolls, folding screens, and (comic) books employ image and text in addressing subjects such as romances, miracles, battles, and fantasies, and consider the roles and functions performed by pictorial narratives in society.
Writing course.
1 credit.
Not offered 2011-2012. Sakomura.

## ARTH 001M. First-Year Seminar: <br> Leonardo: Artist, Engineer, Architect, and Anatomist

Leonardo da Vinci was a great anatomist, engineer, architect and inventor whose drawings circulated around the courts of Europe. In this discussion-based course we will study the inventions, writings, paintings, drawings and biographies of this important Renaissance artist. We will consider the ways in which the works, biographies, and myths of Leonardo have been analyzed (and created) over the centuries. In doing so, we will develop a critical understanding of the methods and terminology of the discipline of art history itself.

Writing course.
1 credit.
Fall 2011. Reilly.

## ARTH 002. Western Art

This course provides an introduction to Mediterranean and European art from prehistoric cave painting to the 18 th century. We will consider a variety of media-from painting, sculpture, and architecture to ceramics, mosaic, metalwork, prints, and earthworks. The goal of this course is to provide a chronology of the major works in the Western tradition and to provide the vocabulary and methodologies necessary to analyze these works of art closely in light of the material, historical, religious, social, and cultural circumstances in which they were produced and received. We will give attention to the use and status of materials; the representation of social relations, gender, religion, and politics; the context in which works of art were used and displayed; and the critical response these works elicited.
1 credit.
Each semester. Cothren.

## ARTH 003. Asian Art

This course provides a thematic introduction to the arts of India, China, Korea, and Japan from prehistoric times to the present. Through explorations of select works of calligraphy, painting, prints, ceramics, sculpture, and architecture, this course aims to familiarize students with artistic vocabularies and conventions, sociocultural contexts of production and consumption, and tools of art historical analysis. Particular focus will be given to the interrelationships between art, religion, philosophy, and literature.
1 credit.
Fall 2011. Sakomura.

## ARTH 005. Modern Art

This course surveys European and American art from the late 18th century to the 1960s. It introduces significant artists and art movements in their social, political, and theoretical contexts. Attention will also be given to interpretive strategies that have been used to write the history of this art. Issues to be considered include definitions of modernism and modernity, constructions of gender, the rise of urbanism and leisure, the independent art market, and questions of originality and representation.
1 credit.
Fall 2011. Holzman.

## ARTH 012. The Architecture of Frank Lloyd Wright

Frank Lloyd Wright's career straddled two centuries and changed the course of architecture. We will examine his buildings and writings, from the time of his association with Louis Sullivan to the design of the Guggenheim museum and consider Wright's work in relation to the diverse currents of international modernism. Special attention will also be given to his houses and his influence on modern American domestic life.
1 credit.
Not offered 2011-2012.

## ARTH 013. Ancient Greek and Roman Art

This chronological survey will begin with a glance at the art of the Aegean and conclude with a study of the art and architecture of late Imperial Rome. We will consider issues such as mythology in daily ritual; the religious, social, and political functions of sculpture; the use of architecture as propaganda; and the invention of the ideal warrior, athlete, and maiden.
Writing course.
1 credit.
Not offered 2011-2012. Reilly.

## ARTH 014. Early Medieval Art and Architecture

In this introduction to European art and architecture from late antiquity to the 12th century, special attention will be given to the "Romanization" of Christian art under Constantine, the Celtic Christian heritage of the British Isles and its culmination in the Book of Kells, Justinianic Constantinople and Ravenna, the Carolingian Renaissance, Romanesque sculpture as ecclesiastical propaganda, and the efflorescence of monastic art under the Cluniacs and Cistercians.
1 credit.
Not offered 2011-2012. Cothren.

## ARTH 015. Architecture and Space in Pre-Modern China

This course emphasizes four issues in the history of architecture and urbanism in premodern China: (1) the development of traditional Chinese timber frames; (2) the emergence of architectural forms on the basis of different social identities, such as the Buddhist, Taoist, Confucian and literati cultures; (3) the spatial strategies of urban planning in imperial cities; and (4) the influence of traditional Chinese architecture on the form and structure of the architecture in Japan and Korea. Through visual analysis and critical reading, special attention will be given to how architectural and urban structures deliver political ideologies and
sanctify social relations, both symbolically and practically.
1 credit.
Spring 2012. Zuo.

## ARTH 019. Contemporary Art

This course takes a focused look at European and American art from 1945 to the present, a period during which most conventional meanings and methods of art were challenged or rejected. Beginning with the brushstrokes of abstract expressionism and continuing through to the bitmaps of today's digital art, we consider the changing status of artists, artworks, and institutions. Emphasis will be placed on critical understanding of the theoretical and historical foundations for these shifts.
1 credit.
Spring 2012. Holzman.

## ARTH 020. Majors Workshop

This foundation colloquium for art history majors will explore various approaches to the historical interpretation of the visual arts. Attention will be given to art historiographyboth theory and practice-through the critical reading and analysis of some important foundation texts of the discipline as well as more recent writings that propose or challenge a variety of old and new analytic strategies. Central to the course will be the research and writing of a paper interpreting a work of art or architecture available in the Philadelphia area, an exercise that will help majors develop a clearer sense of the sorts of questions that are central to their own interest in the historical study of visual culture.
Writing course.
1 credit.
Spring 2012. Sakomura.

## ARTH 021. African-American Art and Identity

This course analyzes constructions of AfricanAmerican identity as related to visual works of art by and of African Americans, from early colonial America to the present. The course incorporates a variety of social and historical issues, media and disciplines, and students are encouraged to consider art and artists through an interdisciplinary lens. Music, film, and literary sources will be presented in lecture. There is a special focus on art and artists from the Philadelphia area.
1 credit.
Not offered 2011-2012.

## ARTH 025. Native American Art

An overview of the arts of native peoples across the North American continent from the archaeological records of prehistory to the contemporary creations of painters and
sculptors working within an international "art world." Attention will be given to the theoretical, political, and methodological challenges inherent in the study of these indigenous arts and their interactions with other cultures and cultural viewpoints, past and present. Discussions will focus on issues of identity and ritual, artists and their audiences, archaeology and recovery, colonization and tourism.
1 credit.
Not offered 2011-2012. Cothren.

## ARTH 032. Crafting Nature: The Arts of Japanese Tea Culture

This course explores the rich cultural practice of chanoyu, the "Japanese tea ceremony," which emerged around the preparation of powdered green tea. We will examine the ritual, aesthetic, and institutional history of this practice from the 12 th century to the present and consider the various cultural formspainting, calligraphy, ceramics, architecture, garden design, religious ritual, performance, food preparation, and flower arrangement- that were integrated into and developed through chanoyu. Discussions will include the place of Zen Buddhism in the history of chanoyu, the role of chanoyu in Japanese aesthetic discourse and art collecting practices, and the impact of chanoyu on contemporary productions of architecture, lacquerware, metalware, and ceramics. We will learn the formal procedures of preparing tea (temae) and visit Shofuso, the Japanese House and Garden in Fairmount Park, Philadelphia.
Writing course.
1 credit.
Spring 2012. Sakomura.

## ARTH 033. Famous Places and Sacred Sites: The Art of Landscape in East Asia

 This course surveys the major traditions of landscape art in East Asia. We will explore the ways in which places and spaces are transformed into famous places and sacred sites and consider the critical role played by visual representation in this process. Major topics include the relationship between landscape and power, cultural memory, literature, mythology, seasonality, travel, and literati culture. We will examine the functions of landscape art in various cultural, geographical, and temporal contexts of East Asia and consider the complex processes of cultural dissemination and adaptation by looking at the reception of Chinese landscape painting tradition in Korea and Japan.1 credit.
Not offered 2011-2012. Sakomura.

## ARTH 034. East Asian Calligraphy

This course surveys the major calligraphic traditions of China, Korea, and Japan from 1200 B.C.E. to the present. In addition to analyzing the development and dissemination of calligraphic styles and the works of individual calligraphers, we will explore how calligraphy conveys meaning, how the history of calligraphy has been written, and how calligraphy has been used as a powerful tool for cultural and political commentary.
1 credit.
Not offered 2011-2012. Sakomura.

## ARTH 039. Contemporary Japanese Visual Culture

This course aims to familiarize students with the visual culture of contemporary Japan and its complex relationship to the traditional arts of Japan as well as to Western culture. Topics examined will include representations of gender, nature, tradition, history, nation, city and suburbia, tourism, food, commodity, and fashion. We will closely analyze and critique works in the print medium such as advertisements, graphic design, photography, magazines, and manga. We will also discuss examples and trends in Japanese product design and character design that have achieved global recognition, such as MUJI and Hello Kitty. 1 credit.
Fall 2011. Sakomura.

## ARTH 045. Gothic

This course will examine the formation of "The Gothic" around 1140 and its development and codification in the Ile-de-France to the middle of the 13th century; monasteries, cathedrals, and chapels; neo-platonism and the new aesthetic; "court-style" and political ideology; structural technology and stylistic change; patronage and production; contextualizing liturgy and visualizing dogma.
1 credit.
Not offered 2011-2012. Cothren.

## ARTH 050. Caravaggio, Rubens, and Rembrandt

In combination with the Philadelphia Museum's special exhibition in fall, "Rembrandt and the Face of Jesus," this course will examine the work of Rembrandt in depth after careful consideration of his two most important predecessors and models: Caravaggio and Rubens. Classes will combine both lecture/discussion and seminar format, with close inspections of select readings representing various methodologies. But the course will also address historical dimensions of forms and content (especially religious content in relation to the exhibition), and the diverse audiences of these three great painters in the art centers of

Rome, Antwerp/Brussels, and Amsterdam. Also special attention to Rembrandt as printmaker and draftsman.
1 credit.
Fall 2011. Silver.

## ARTH 051. Renaissance Art in Florence and Environs

An introduction to painting, sculpture, drawings, prints, and architecture produced in Florence and its environs from the late 14th to the 16th century. We will consider a full range of issues related to the production and reception of these works, including the representation of individuals, the state, and religion. We will also examine the context in which these works were used and displayed, art and anatomy, art and gender, the critical responses these works elicited, and the theories of art developed by artists and nonartists alike.
1 credit.
Not offered 2011-2012. Reilly.

## ARTH 065. Modern Architecture

This course traces the development of modern architecture and the built environment from the Industrial Revolution in Europe to the global present with an emphasis on the critical debates that informed its production, practice and reception. We will study architecture as a social process and formal practice through a variety of methodologies. Important themes include, technology and materials, form and function, the identity of the architect, public and private space, housing and
domesticity, monuments and informality, colonization and globalization.
Field visits will be an important element to the class.
1 credit.
Fall 2011. Lee.

## ARTH 066. Designing with Nature: Greenness and Sustainability in Architecture

This course will take up the challenges of greenness and sustainability in the built environment first by tracing the idea of "designing with nature" from Vitruvius and Alberti through the 20th century in Europe, America, Asia, and the Islamic world. Then we will unravel how these objectives are defined for designers in our time through public perceptions, tax incentives, LEED certification, and other forces, and how they are being achieved in current projects around the globe. 1 credit.
Not offered 2011-2012.

## ARTH 071. Global History of Architecture

This course provides an introduction to the fundamental elements of architectural forms, materials, and effects within a global framework. Following a broad historical line from prehistory to the mid-twentieth century, this introduction aims not only to acquaint students with architectural monuments around the world, but also to consider how a particular monument is constructed and defined in its production, use and reception. Students will develop a vocabulary and literacy of architecture and its representations, as well as a general grasp of the different methodologies used to analyze space and three-dimensional structures.
1 credit.
Spring 2012. Lee.

## ARTH 074. Studies in the History of Photography

This course will consider the theoretical implications of the invention of photography by taking a focused look at select moments in the history of this medium. What is meant by "the photographic?" And how have practitioners of photography asserted and/or challenged such a concept? Essays by Walter Benjamin, Roland Barthes, Susan Sontag, Rosalind Krauss, Martha Rosler, and others will form a foundation for discussions about specific artists, movements, and techniques. The class is organized around group discussions and is driven by student contributions.
1 credit.
Not offered 2011-2012. Mileaf.

## ARTH 076. The Body in Contemporary Art

This course examines the use of the body as a subject and medium in art of the past few decades. While poking, prodding, fragmenting, and displaying the bodies of themselves and others, recent artists have called into question everything from conventional uses of the nude to the viewer's own physical experience of art. Themes to be considered include the abject, health and sickness, global identities performance, masquerade, identity politics, and technology. This course will require careful reading of assigned texts, active participation in regular discussions, and frequent writing assignments.
1 credit.
Not offered 2011-2012. Mileaf.

## ARTH 077. The Art of Exhibition

This discussion-based course examines the art exhibition as a vehicle for communication of aesthetic, political, social, and theoretical convictions. Theories of exhibition and display
will be used as a framework for discussion of recent and historical case studies such as Sensation (The Brooklyn Museum, 1997); Freestyle (Studio Museum in Harlem, 2001); and Mirroring Evil (The Jewish Museum, 2002) or the 1921 International Dada Fair in Berlin. We will also consider how contemporary artists have used the exhibition as a subject or medium in their work. Class trips and speakers will draw practical connections for students as they work to organize their own exhibitions-either virtual or actual.
1 credit.
Not offered 2011-2012. Mileaf.
ARTH 096. Directed Reading
1 credit.
Staff.

## ARTH 180. Thesis

A 2-credit thesis normally carried out in the fall of the senior year. The topic must be submitted and approved by the instructor in charge before the end of the junior year.
2 credits.
Staff.

## Seminars

Unless otherwise noted, the prerequisite for all seminars is two courses in art history.

## ARTH 136. Word and Image in Japanese Art

This seminar explores the dialogue between text and image as manifested in visual representations of courtly culture in Japan from the 10th to the 18th century. Through select works of courtly narrative and poetry, such as the 11th-century classic The Tale of Genji, we will examine the complex and nuanced interactions of text, image, calligraphy, object, function, patronage, production, and consumption as shaped by the materiality of a range of media including handscrolls, folding screens, poem sheets, illustrated and printed books, lacquerware, textiles, and fans.
2 credits.
Fall 2011. Sakomura.

## ARTH 147. Visual Narrative in Medieval Art

This seminar examines how and why tendentious stories are told in pictures during the European Middle Ages and the various ways art historians have sought to interpret their design and function. After introductory discussions on narratology, the class focuses on an intensive study of a few important and complex works of art that differ in date of production, geographic location, viewing context, artistic tradition, and medium. In past years, these have included the Bayeux

Embroidery of ca. 1070, the stained-glass windows of the Parisian Sainte-Chapelle of ca. 1245, and Giotto's frescos in the Arena Chapel in Padua of 1303-1305.
2 credits.
Spring 2012. Cothren.

## ARTH 151. The Visual Culture of Renaissance Rome

From the 14th to the 17th century, Rome was transformed from a "dilapidated and deserted" medieval town to a center of spiritual and worldly power. This seminar will consider the defining role that images played in that transformation. In addition to studying the painting, sculpture and architecture of artists such as Fra Angelico, Bramante, Raphael, and Michelangelo, we will study the creation and use of objects such as banners, furniture, and temporary festival decorations. Topics will include papal reconstruction of the urban landscape; the rebirth of classical culture, art and the liturgy, private devotion and public ritual, and the construction of the artist as genius.
2 credits.
Spring 2012. Reilly.

## ARTH 164. Modern Art

Current discussions from multiple theoretical perspectives of artists such as Courbet, Manet, Degas, Gauguin, Cezanne, Picasso, and Pollock and the issue of "modernism" in 19th- and 20thcentury painting.
2 credits.
Not offered 2011-2012. Hungerford.

## ARTH 166. Avant-Garde: History, Theory, Practice

This seminar examines European and American avant-garde art from the first half of the 20th century. After theoretically and historically situating avant-gardism as a concept, we will focus on such early 20th-century movements as cubism, futurism, constructivism, dada, and surrealism. We will also consider historical debates surrounding the significance and legitimacy of avant-garde practice and contemporary discussions regarding the relevance-or even possibility-of avantgardism today. Of particular interest throughout the term will be artists' engagements with politics, mass culture, technology, and social change.
2 credits.
Not offered 2011-2012. Mileaf.

## ARTH 168. Dada and Surrealism

Signing a name, going into a trance, collecting dust, shopping in a flea market, dreaming, scribbling, and playing a game-all of these activities were investigated as methods of art
production by artists associated with Dada and surrealism in the early decades of the 20th century. This seminar examines not only these new modes of making art but also the artists' political, cultural, and theoretical reasons for developing them. By carefully reading primary and secondary texts, we consider the questions, aims, and desires of these revolutionary art movements as well as the methods of art history that have been conceived to address them.
2 credits.
Not offered 2011-2012. Mileaf.

## Studio Arts

## STUA 001. Foundation Drawing

This course is designed as an introduction to drawing as the basis for visual thinking and perception. The class will focus on concepts and practices surrounding the use of drawing as a visual language rather than as a preliminary or planning process. Whether students are interested in photography, painting, pottery, sculpture, installation or performance, the ability to design and compose visually is fundamental to their development. The course follows a sequence of studies that introduces students to basic drawing media and compositional elements while they also learn to see inventively.
This course is a prerequisite for all other courses in studio art unless waived by the instructor.
1 credit.
Each semester. Staff.

## STUA 001B. First-Year Seminar: Making <br> Art

This studio art experience is designed for firstyear artists in all media who have demonstrated through a portfolio presentation their knowledge of the elements of visual thinking, design, and composition. This course is similar in content to the foundation drawing class STUA 001. However, it will be more in depth, with more emphasis on individually designed studio and research projects. Portfolios of actual or photographed work must be submitted for evaluation during the freshman advising week prior to the start of the fall semester. Contact the department for details.
1 credit.
Fall 2011. Grider.

## STUA 005. Color Photography

This class is an introduction to the art and craft of color photography using the tools that are most widely practiced by artists today. Students work toward a final project using either a film or digital camera, processing images in Photoshop and outputting them on a professional-grade ink-jet printer. Weekly
critiques, photographer research projects, and at least one field trip to look at art make up the class. It is preferred, but not required, that students take STUA 006: Black and White Photography first.
Prerequisite: STUA 001 or consent of instructor.
1 credit.
Spring 2012. Harper.

## STUA 006. Black and White Photography

This class introduces students to the traditional craft of silver wet dark-room photography. Though black-and-white images can be created digitally, enough visual and technical complexity remains in silver gelatin printing that many artists continue to work in this timehonored medium long after the "digital revolution." Students use film cameras, film, and light-sensitive paper to create a final body of work. Weekly critiques, photographer research projects, and at least one field trip to look at art make up the class.
Prerequisite: STUA 001 or consent of instructor.
1 credit.
Fall 2011. Harper.

## STUA 007. Book Arts

Introduction to the art of the book. Included will be an investigation into typesetting and printing, binding, wood engraving, and alternative forms of book construction and design.
Prerequisite: STUA 001 or consent of instructor.
1 credit.
Spring 2012. Phelan.

## STUA 008. Oil Painting

Students will investigate the pictorial structure of oil painting and the complex nature of color. A thorough study of texture, spacial conventions, light, and atmosphere will be included.
Prerequisite: STUA 001 or consent of instructor
1 credit.
Fall 2011. Exon.

## STUA 009. Life Sculpture

Working from the perceptual observation and study of life forms, we will explore the sculptural principles and practice of life modeling in clay. Students will explore this subject in a broad range of historical stylesfrom the study of human anatomy to the more contemporary use of various life forms as source material towards abstraction. The earlier projects are centered on the study of the human
figure through self-portraiture. The later projects will encourage the explorations of other life forms-plants and animals. Two trips to local museums are scheduled as an integral part of the projects.
Prerequisite: STUA 001 or consent of instructor.
1 credit.
Fall 2011. Meunier.

## STUA 010. Life Drawing

Work in various media directed toward a clearer perception of the human form. The class is centered on drawing from the model and within this context. The elements of gesture, line, structure, and light are isolated for the purpose of study.
Prerequisite: STUA 001 or consent of instructor.
1 credit.
Fall 2011. Akunylli.

## STUA 011. Watercolor

This course is a complete exploration of watersoluble media with an emphasis on transparent, gum arabic-based watercolor. Other materials and techniques will include ink wash, gouache, silk colors, collage, handmade papers, matting, and pen making, using reeds and quills. When in the studio, the class will work from the figure and still life. The central motif, however, will be painting the landscape. Whenever possible, we shall work outdoors. Occasional field trips to locales other than the campus will be offered.
Prerequisite: STUA 001 or consent of instructor.
1 credit.
Not offered 2011-2012.

## STUA 012. Figure Composition

In this advanced course in painting and drawing the human form, emphasis will be given to the methods, thematic concepts, conventions, and techniques associated with multiple figure design and composition.
Prerequisite: STUA 008 and/or STUA 010. 1 credit.
Not offered 2011-2012.

## STUA 013. Sculpting Everyday Things

Covering a broad range of contemporary sculptural concepts and techniques as they apply to the making of the most common of functional objects-chairs, tables, lamps, and bowls. After study and drawing from trips to area museums, students will design a thematically related series of three functional forms, with the use of found objects as a starting point. Several different mediums may be explored, including clay and epoxy
modeling, plaster casting, woodworking, fabric work, and assemblage.
Prerequisite: STUA 001 or consent of instructor.
1 credit.
Spring 2012. Meunier.

## STUA 014. Landscape Painting

This course explores the vast array of interpretive approaches, and practical methods available to the artist interested in landscape painting. Each student will be introduced to methods and techniques that will be used in the field while painting directly from nature. Topics include atmospheric perspective, linear perspective, viewpoint, compositional structuring through shape and rhythm, and a thorough study of light through changing effects of color and tonality. Excursions into the urban, suburban, and rural landscape of southeastern Pennsylvania will be scheduled weekly. Oil paints will be the central medium of the class.
Prerequisite: STUA 001 or consent of instructor.
1 credit.
Not offered 2011-2012. Exon.

## STUA 015. The Potter's Wheel

This class focuses on a series of projects for the wheel to assist in developing proficiency, technique and ideas for both functional and sculptural form. Critiques and in class discussion are an important component of this experience. Students will be exposed to traditional and nontraditional solutions to the wheel thrown container through slide lectures, videos and guest artists. For beginners and experienced students.
Prerequisite: STUA 001 or consent of instructor.
1 credit.
Fall 2011. Carpenter.

## STUA 016. Projects for the Potter's Wheel

Projects for the Potter's Wheel is an upper level course for students interested in developing their experience on the potter's wheel. Projects will challenge the student both technically and conceptually. The objective is to build vision as well as skill through technically specific and theme based projects. The goal is to identify a direction and pursue it as a focused body of work for the entire semester. Gallery visits, slide lectures, a guest artist and demonstrations will supplement this experience.
Prerequisite of one semester of Potter's Wheel or comparable experience required.
1 credit.
Spring 2012. Carpenter.

## STUA 017. The Container as Architecture

This class focuses on designing and constructing container-based forms using clay as the primary medium. Using hand-building processes including slab, coil and cast forms students will develop architecturally imagined forms. Thematically conceived projects will allow students to explore problems in threedimensional design using a broad range of architectural references. The experience will be complimented with slide presentations, demonstrations and guest artists. Fall 2011 will be highlighted by student participation in a large outdoor architectural installation using traditional earthen building techniques
Prerequisite: STUA 001 or consent of instructor.
1 credit.
Spring 2012. Carpenter.

## STUA 018. Printmaking

The course will emphasize the manipulation of various design elements in the rendering of preferred subject matter of individual students in woodblock, linoleum, collograph and combinations of each process. History and contemporary trends will be explored in preparation for assignments. Occasional group critiques will be conducted to foster the sharing of ideas and skills. If the schedule permits, two field trips to Philadelphia print shops or related print exhibitions are planned.
Prerequisite: STUA 001 or consent of instructor.
1 credit.
Fall 2011. Edmunds.

## STUA 020. Advanced Studies

020A. Ceramics
020B. Drawing
020C. Painting
020D. Photography
020E. Sculpture
020F. Printmaking
These courses are designed to usher the intermediate and advanced student into a more independent, intensive study in one or more of the fields listed earlier. A discussion of formal issues generated at previous levels will continue, with greater critical analysis brought to bear on stylistic and thematic direction. All students are expected to attend, throughout the semester, a given class in their chosen medium and must make sure at the time of registration that the two class sessions will fit into their schedules. In addition to class time, students will meet with the professor for individual conferences and critiques.

This series of courses also serves as the Junior Workshop, a colloquium for junior studio art majors in the spring semester. Students will produce work within the classes offered as Advanced Studies. Regularly scheduled group and individual critiques with other junior majors and a faculty coordinator will occur throughout the semester, culminating in a group exhibition.
Note: Although this course is for full credit, a student may petition the studio faculty for a 0.5 credit semester.
Prerequisites: STUA 001 and at least one previous course in the chosen medium.
1 credit.
Each semester. Staff.

## STUA 021. Turning Corners, Drawing Architecture

The Beaux-Arts practice of "analytique"-a drawn, or sketched, tour of a building's unifying visual elements, proportional relationships, and structural details-will be the primary mode of inquiry in this course. Taking advantage of the great number of the fine examples of historical and contemporary architecture in this region, the class will take a series of field trips to a select group of local monuments to gather visual material. We will continue and build on the student's competency and understanding of linear perspective and free hand sketching, established in the prerequisite, while introducing new methods in site measuring and isometric drawing. Extensive use of watercolor and gouache will also be used, although previous experience in these techniques is not required, in order to articulate the decorative and light specific qualities of each building, and its surroundings.
Prerequisite: STUA 001 or consent from instructor.
1 credit.
Not offered 2011-2012. Exon.

## STUA 022. Color: Theory and Practice

Color functions in many ways in painting. The interaction of color may be used to create the illusion of light and space or to establish an expressive tone. Color can also operate on a symbolic level or be used to create a compositional structure. Using various drawing and painting media students will explore the ways which color can be manipulated. Assigned readings, critiques and group discussions will be included.
Prerequisite: STUA 001 or consent of instructor.
1 credit.
Not offered 2011-2012. Grider.

## STUA 024. Painting Materials and Methods

This course is designed to give a broad practical introduction to various painting media, tools, and techniques. An abbreviated history of each medium, significant changes to the process and practice, as well as specific tools and applicable techniques will be covered. The course will cover egg tempera, encaustic, distemper, oil, watercolor, gouache, and acrylic, from the raw materials to the final usable medium. Each medium will be addressed through an assigned project. Readings, critiques and group discussions will be included to provide further art historical context and concrete examples of materials issues confronted in class.
1 credit.
Fall 2011. Grider.

## STUA 025. Advanced Studies II

Continuation of STUA 020 on a more advanced level. This series of courses also serves as the Junior Workshop, a colloquium for junior studio art majors in the spring semester. Students will produce work within the classes offered as Advanced Studies. Regularly scheduled group and individual critiques with other junior majors and a faculty coordinator will occur throughout the semester, culminating in a group exhibition.
025A. Ceramics
025B. Drawing
025C. Painting
025D. Photography
025E. Sculpture
025F. Printmaking
Prerequisite: STUA 020.
1 credit.
Each semester. Staff.

## STUA 029. Junior Workshop

During the spring semester of the junior year and in preparation for the Senior Workshop I and II, studio art majors are required to take Junior Workshop as their advanced study. Nonmajoring advanced study students are also class participants. Working with a faculty coordinator, students will develop works with an emphasis on improving technically, conceptually and productively. Guest artists, studio visits and critiques will be integral to the workshop experience. Finally, works produced during the workshop will be exhibited in a group exhibition at the end of the semester. Because this required workshop takes place in the spring, it is recommended that off-campus study occur during the fall semester.
1 credit.
Spring 2012. Carpenter.

## STUA 030. Senior Workshop I

This course is designed to strengthen critical, theoretical, and practical skills on an advanced level. Critiques by the resident faculty members and visiting artists as well as group critiques with all members of the workshop will guide and assess the development of the students' individual directed practice in a chosen field. Assigned readings and scheduled discussions will initiate the writing of the thesis for the senior exhibition.
This course is required of senior art majors. 1 credit.
Fall 2011. Exon.

## STUA 040. Senior Workshop II

This course is designed to further strengthen critical, theoretical, and practical skills on a more advanced level. During the spring semester of the senior art major, students will write their senior artist statement and mount an exhibition in the List Gallery of the Eugene M. and Theresa Lang Performing Arts Center. The artist statement is a discussion of the development of the work to be exhibited. The exhibition represents the comprehensive examination for the studio art major. Gallery exhibitions are reserved for studio art majors who have passed the senior workshop and fulfilled all requirements, including the writing of the senior art major statement.
1 credit.
Spring 2012. Exon.

Coordinator: HAILI KONG (Modern Languages and Literatures, Chinese)<br>Anna Everetts (Administrative Assistant)<br>Faculty: Alan Berkowitz (Modern Languages and Literatures, Chinese) ${ }^{2}$<br>Pallabi Chakravorty (Music and Dance)<br>William O. Gardner (Modern Languages and Literatures, Japanese) ${ }^{2}$<br>K. David Harrison (Linguistics) ${ }^{3}$<br>Steven P. Hopkins (Religion)<br>Gerald Levinson (Music)<br>Lillian M. Li (History)<br>Bakirathi Mani (English Literature) ${ }^{1}$<br>Erin Mee (Theater) ${ }^{3}$<br>Tomoko Sakomura (Art History)<br>Tyrene White (Political Science)<br>Thomas Whitman (Music)<br>Lala Zuo (Modern Languages and Literatures, Chinese)

${ }^{1}$ Absent on leave, fall 2011.
${ }^{2}$ Absent on leave, spring 2012.
${ }^{3}$ Absent on leave, 2011-2012.

Asian studies is an interdisciplinary program that introduces students to the history, cultures, and societies of Asia-including principally China, Japan, and India. Courses are offered in the departments of art, economics, English literature, history, linguistics, modern languages and literatures (Chinese and Japanese), music and dance, political science, religion, sociology and anthropology, and theater.
As the largest interdisciplinary program at the College, Asian studies plays a significant role in many departments in the humanities and social sciences. Some students choose a major or a minor in Asian studies; many others study about Asia while majoring in political science, economics, history, religion, anthropology, languages and literatures, or other fields.
Studying Asia and gaining experience in the Asian world are important to understanding the global flows of peoples, cultures, technology, and business in today's world. Many students explore traditional art, literature, or religion, or perhaps politics (World War II or the Cold War). Others are attracted by broad spiritual practices (Zen meditation, for example), or economic issues (rural poverty or global business). Today - as the Asian American community expands and diversifies, and as Asian cultural and technological influences have become part of American life-learning about Asia is not so exclusively about the "other," but often about "self." To study Asia, then, is to trace the diverse strands of Asian cultures that have originated in different regional, national, and local traditions, but which have now become increasingly intertwined with contemporary global life.

## The Academic Program

The Asian Studies Program offers a major and a minor in course and honors. Students who declare a major in Asian studies construct individualized programs of study, with a focus on a comparative theme or on a particular country or region. Some examples of comparative themes are classical traditions in Asian literature and art, Buddhist studies, Asian nationalisms and the emergence of nationstates, and the political economy of Asian development. In all cases, the core of the major involves exposure to multiple regions and multiple disciplines.
Students interested in Asian studies are urged to consult the Asian studies website for up-to-date information on courses and campus events. Students should meet with the program chair in advance of preparing a sophomore paper. Advance planning is especially important for students contemplating the Honors Program and those planning to study abroad.

## Course Major

Asian studies invites students to make connections among courses that differ widely in content and method. When considering applicants to the major, the Asian Studies Committee looks for evidence of intellectual flexibility and independence. Students must have completed at least two Asia-related courses in different departments with grades of B or better to be accepted into the major.
The major in Asian studies consists of a minimum of ten (10) credits, with requirements and distribution as follows:
Geographic breadth. Coursework must include more than one of the regions of Asia (East, South, Northeast, and Southeast). This
requirement can be fulfilled by taking at least two courses that are pan-Asian or comparative in scope or by taking at least one course on a country that is not the principal focus of a student's program.
Disciplinary breadth. Courses must be taken in at least three different departments.
Core courses. At least one of the following courses must be taken:

ARTH 003. Asian Art
CHIN 016. Substance, Shadow, and Spirit in Chinese Literature and Culture
CHIN 023. Modern Chinese Literature
HIST 009A. Chinese Civilization
HIST 009B. Modern China
HIST 075. Modern Japan
JPNS 017. Introduction to Japanese Culture: The Cosmology of Japanese Drama
POLS 055. China and the World
RELG 008. Patterns of Asian Religions
RELG 009. The Buddhist Tradition
RELG 012 or 013. History, Religion, and Culture of India I or II
Intermediate and advanced work. A minimum of 5 credits must be completed at the intermediate or advanced level in at least two departments.
Asia language study. Asian language study is not required but is strongly recommended. Up to 4 credits of language study may be applied toward the major. For languages offered at Swarthmore (Chinese and Japanese), courses above the first-year level may count toward the major. For Asian languages not offered at Swarthmore, courses at the entry level may count toward the major if at least the equivalent of 1.5 credits is earned in an approved program.

## Thesis / Culminating Exercise

Students in the Asian studies course major have a choice of culminating exercises.
Thesis option. A 1- or 2-credit thesis, followed by an oral examination. A thesis must be supervised by a member of the Asian studies faculty. Students normally enroll for the thesis (ASIA 096) in the fall semester of the senior year.
Qualifying papers option. Students revise and expand two papers they have written for Asian studies courses in consultation with Asian studies faculty members.
Honors seminar option. Students take a 2credit honors seminar in an Asian studies topic in either their junior or senior year. (Note: A two-course combination or a course plus attachment will not satisfy this requirement.)
Grade-point average requirement. A student must have at least a C average in the course major.

## Course Minor

Students will be admitted to the minor after having completed at least two Asian studies courses in different departments with grades of B or better. The Asian studies minor in course consists of five courses, distributed as follows:
Geographic breadth. Coursework must cover more than one region of Asia. This can be accomplished by taking at least two courses that are pan-Asian or comparative in scope or by taking at least one full course on a country that is not the principal focus of a student's program.
Disciplinary breadth. Asia-related courses must be taken in at least two departments outside of the disciplinary major. Only one course may overlap the Asian studies minor and the disciplinary major.
Core courses. Students are required to include at least one course from the list of core courses (see above).
Intermediate or advanced work. At least 2 credits of work must be completed at the intermediate or advanced level.
Asian language study. Asian-language study is not required, but courses in Asian languages may count toward the course minor. For languages offered at Swarthmore (Chinese and Japanese), courses above the first-year level may count toward the minor. For Asian languages not offered at Swarthmore, courses at the entry level may count toward the minor if at least the equivalent of 1.5 credits is earned in an approved program.
Grade-point average requirement. A student must have at least a C average in the minor.

## Honors Major

To be admitted to the honors major, students should have completed at least two Asian studies courses in different departments with grades of $\mathrm{B}+$ or better.
The honors major in Asian studies consists of a minimum of ten (10) credits (including four honors preparations). The four preparations in an Honors Program must be drawn from at least two different disciplines.

## 1. Geographic and disciplinary breadth

 requirements. These are the same as those for the course major (see above).2. Core courses. Students are required to include at least one course from the list of core courses (see above).
3. Asian studies as an interdisciplinary major. All four fields for external examination must be Asian studies subjects. One of the fields may also count toward an honors minor in a department. The four preparations must be drawn from at least two different disciplines.
4. Grade-point average requirement. A student must earn at least a B+in all offerings applied to the honors major.

## Honors Minor

To be admitted to the honors minor, students should have completed at least two Asian studies courses in different departments with a grade of $\mathrm{B}+$ or above.
An honors minor in Asian studies consists of a minimum of 5 credits, distributed as follows:

1. Geographic breadth. There are two tracks within the minor:
a. Comparative Asian cultures-The selection of courses and the honors preparation should offer a comparative perspective on the traditional or modern cultures of Asia. Individual programs should be worked out in close consultation with the Asian studies coordinator. (Language study does not count toward this track.)
b. Focus on a single country or region-All courses in the program should focus on the same region or country. One or 2 credits of language study may be included.
2. Disciplinary breadth. Asia-related courses must be taken in at least two departments outside of the disciplinary honors major. Only one course may overlap the honors minor and the disciplinary honors major.
3. Core courses in the cultural traditions of Asia. Normally at least one of the five courses should be a core course.
4. Asian language study. Asian language study is not required, but courses in Asian languages may count toward the honors minor. For languages offered at Swarthmore (Chinese and Japanese), courses above the second-year level count toward the minor. For Asian languages not offered at Swarthmore, courses at the entry level may be counted if the equivalent of 1.5 credits is earned in an approved program.
5. Honors preparation. One preparation, normally a two-credit seminar, will be submitted for external examination.
6. Senior Honors Seminar for minors. The student will fulfill the requirements set for honors minors by the department offering the honors preparation.
7. Grade-point average requirement. A student must have at least a B+in all courses applied to the honors minor.

## Language Study

Swarthmore currently offers Chinese and Japanese language courses; other Asian languages may be studied at the University of Pennsylvania during the regular academic year, in summer-language programs, or abroad. For
languages offered at Swarthmore, courses above the first-year level count toward the major. For Asian languages not offered at Swarthmore, courses at the entry level may be approved if at least the equivalent of 1.5 credits is successfully completed in a program approved by the Asian Studies Committee.

## Off-Campus Study

Students with majors in Asian studies are strongly encouraged to undertake a period of study in Asia. The Asian studies faculty can recommend academically rigorous programs in several Asian countries. Study abroad is the ideal arena for intensive language study. Courses taken abroad may be applied toward the major, subject to the approval of the Asian studies coordinator. However, at least half of the credits in a student's Asian studies major or minor should be earned at Swarthmore.

## Life After Swarthmore

Students with a background in Asian studies have pursued a number of paths after graduation. Some have gone abroad to continue their studies, do research, or work in humanitarian or social service organizations. Others have gone directly to graduate school. Many eventually become teachers or professors. Others work in the arts, journalism, international law, business, finance, in the diplomatic corps, or in non-governmental organizations. Other Asian studies graduates pursue careers not directly related to Asia, in medicine or law, for example. All consider Asian studies to have been an important part of their liberal arts education.

## Courses

(See descriptions in individual departments to determine offerings for each semester.)

## Art (Art History)

ARTH 001L. From Handscrolls to Comic
Books: Pictorial Narratives in Japan (W)
ARTH 003. Asian Art
ARTH 032. Crafting Nature: The Arts of Japanese Tea Culture (W)
ARTH 033. The Art of Landscape in East Asia
ARTH 034. East Asian Calligraphy
ARTH 039. Contemporary Japanese Visual Culture
ARTH 136. Word and Image in Japanese Art

## Asian Studies

ASIA 093. Directed Reading
1 credit.
Staff.

## ASIA 096. Thesis

Writing course
1 credit.
Staff.

## ASIA 180. Honors Thesis

2 credits.
Staff.

## Chinese

CHIN 003B. Second-Year Mandarin Chinese CHIN 004B. Second-Year Mandarin Chinese CHIN 008/LITR 008CH. Reading Modern China Through Literary and Cinematic Text CHIN 009. First-Year Seminar: Heaven, Earth, and Man: Ways of Thought in Traditional Chinese Culture
CHIN 011. Third-Year Mandarin Chinese
CHIN 011A. Third-Year Mandarin Chinese Conversation
CHIN 012. Advanced Mandarin Chinese CHIN 012A. Advanced Mandarin Chinese Conversation
CHIN 016/LITR 016CH. Substance, Shadow, and Spirit in Chinese Literature and Culture CHIN 017/LITR 017CH. Legacy of Chinese Narrative Literature: The Story in Dynastic China
CHIN 018/LITR 018CH. The Classical Tradition in Chinese Literature
CHIN 019. First-Year Seminar: Singular Lives and Cultural Paradigms in Early and Imperial China
CHIN 020. Readings in Modern Chinese CHIN 021. Topics in Modern Chinese CHIN 023/LITR 023CH. Modern Chinese Literature
CHIN 025/LITR 025CH. Contemporary Chinese Fiction: Mirror of Social Change CHIN 027/LITR 027CH. Women Writers in 20th-Century China
CHIN 033/LING 033. Introduction to Classical Chinese
CHIN 035. Readings in Classical Chinese CHIN 055/FMST 055CH. Contemporary Chinese Cinema
CHIN 056/LITR 056CH. History of Chinese Cinema (1905-1995)
CHIN 063/LITR 063CH. Comparative Perspectives: China in the Ancient World CHIN 066/LITR 066CH. Chinese Poetry CHIN 069/LITR 069CH. Taste and Aesthetics in Chinese Cultural Traditions
CHIN 071/LITR 071CH. Invaded Ideology and Translated Modernity

CHIN 081/LITR 081CH. Transcending the Mundane: Taoism in Chinese Literature and Culture
CHIN 091/LITR 091CH. Special Topics in Chinese Literature in Translation
CHIN 092. Special Topics in Chinese Literature and Culture in Chinese
CHIN 103. Lu Xun and His Legacy in 20thCentury Chinese Literature
CHIN 104. Seminar in Chinese Poetry CHIN 105. Fiction in Traditional China: People and Places, Journeys, and Romances CHIN 108. The Remaking of Cinematic China: Zhang Yimou, Wong Kar-wai, and Ang Lee CHIN 109. Daoism

## Dance

DANC 021 . History of Dance: Africa and Asia DANC 025A/SOAN 020J. Dance and Diaspora DANC 028. Classical Indian Dance
DANC 046. Dance Technique: Kathak
DANC 049. Performance Kathak
DANC 072. Intercultural Performance Methods
DANC 079. Dancing Desire in Bollywood Films

## Economics

ECON 081. Economic Development*
ECON 181. Economic Development+

## English Literature

ENGL 009D. Nations and Migrations
ENGL 065. Introduction to Asian American Literature
ENGL 075. South Asians in America: Literature, Culture, Politics
ENGL 077. South Asians of Asian America

## History

HIST 009A. Chinese Civilization
HIST 009B. Modern China
HIST 009C. The Silk Road: China, India, Central Asia and Iran
HIST 075. Modern Japan
HIST 076. Law and Order in Chinese History
HIST 077. Orientalism East and West
HIST 078. Beijing and Shanghai: Tale of Two Cities
HIST 079. Women, Family, and the State in China
HIST 144. State and Society in China, 17502000

## Japanese

JPNS 003B. Second-Year Japanese
JPNS 004B. Second-Year Japanese

## Asian Studies

JPNS 012. Third-Year Japanese
JPNS 012A. Japanese Conversation
JPNS 013 Third-Year Japanese
JPNS 013A. Readings in Japanese
JPNS 017/LITR 017J/THEA 017. The World of Japanese Drama
JPNS 018/LITR 018J. Topics in Japanese
Literary and Visual Culture
JPNS 019. Topics in Japanese
JPNS 021/LITR 021J. Modern Japanese Literature
JPNS 023/ LITR 023J. Anime: Gender and Culture
JPNS 024/FMST 057. Japanese Film and Animation
JPNS 041/LITR 041J. Fantastic Spaces in Modern Japanese Literature
JPNS 045/LING 047. Japanese Language in Society
JPNS 051. Japanese Poetry and Poetics
JPNS 074/LITR 074J. Japanese Popular Culture and Contemporary Media
JPNS 083/LITR 083J. War and Postwar in Japanese Culture

## Music

MUSI 005. Patterns of Asian Dance and Music
MUSI 030. The Music of Asia
MUSI 049A. Performance: Balinese Gamelan

## Linguistics

LING 025. Language, Culture, and Society
LING 033/CHIN 033. Introduction to Classical Chinese
LING 047. Japanese Language in Society

## Political Science

POLS 046. Chinese Foreign Policy
POLS 055. China and the World
POLS 056. Patterns of Asian Development
POLS 058. Contemporary Chinese Politics
POLS 064. American-East Asian Relations*
POLS 073. Comparative Politics: Advanced
Topics in Chinese Politics
POLS 108. Comparative Politics: East Asia

## Religion

RELG 006B. Buddhist Ideology and Social Response
RELG 008. Patterns of Asian Religions
RELG 009. The Buddhist Traditions of Asia
RELG 012B.The History, Religion and Culture of India I
RELG 013. The History, Religion, and Culture of India II
RELG 030B. The Power of Images: Icons and Iconoclasts*

RELG 031B. Religion and Literature: From the Song of Songs to the Hindu Saints*
RELG 108. Poets, Saints, and Storytellers:
Religious Literatures of South Asia
Theater
THEA 008A. Intercultural Performance
Methods
THEA 017/ JPNS 017/LITR 017J. The World of Japanese Drama

* Cognate course. Counts toward Asian studies if all papers and projects are focused on Asian topics. No more than two may be applied to the course or honors major. No more than 1 credit may be applied to the honors minor.
+ Cognate seminar. No more than 1 credit may be applied toward the honors major. It does not count toward an honors minor.

SCOTT F. GILBERT, Professor ${ }^{2}$
SARA HIEBERT BURCH, Professor and Chair
JOHN B. JENKINS, Professor ${ }^{1}$
RACHEL A. MERZ, Professor
KATHLEEN K. SIWICKI, Professor
AMY CHENG VOLLMER, Professor
NICHOLAS KAPLINSKY, Associate Professor
JOSE LUIS MACHADO, Associate Professor
COLIN PURRINGTON, Associate Professor ${ }^{3}$
ELIZABETH A. VALLEN, Associate Professor
JASON DOWNS, Visiting Assistant Professor
JASON RAUSCHER, Visiting Assistant Professor
STACEY DOUGHERTY, Laboratory Instructor
WILLIAM GRESH JR., Laboratory Instructor
HEATHER HASSEL-FINNEGAN, Laboratory Instructor
PHILIP KUDISH, Academic Coordinator/Laboratory Instructor/Science Associate Coordinator
JOCELYNE MATTEI-NOVERAL, Laboratory Instructor
ERIN SCHLAG, Laboratory Instructor
DIANE FRITZ, Administrative Coordinator

[^2]At all levels of the biology curriculum, students are engaged in learning about the functions and evolution of diverse biological systems as well as the methods by which biologists study nature. There is much flexibility in the curriculum, allowing students to craft a path through the biology major that best suits their own interests. While fulfilling the requirements for the major, students are able to build a broad biological background by taking courses focused on different levels of biological organization, while also being able to concentrate on specialized areas of particular passion if they choose.

## Our goals for biology majors

A basic tenet of the department is that the best way to learn about biology is to do biology. Therefore, almost every course has weekly laboratories or field trips, where students learn to become biologists by making original observations, asking questions about life processes, solving problems and designing and testing hypotheses by performing experiments. Communication skills are emphasized in all biology courses, as students read and evaluate research articles in scientific journals, write laboratory reports according to the standards of professional scientific writing, participate in frequent opportunities for oral presentations and critical discussion, and work in research teams.
The curriculum prepares students to pursue careers in research or to apply their biology interests and knowledge to careers as diverse as medicine, governmental policy planning, science education, public health, and writing children's books. A number of departmental alumni have also chosen careers outside of
science, such as law and finance, where they report that the organizational, critical thinking, and communication skills that they learned as a biology major have been crucial for their success.

## The Academic Program

In addition to first-year seminars, the department offers four different types of courses. Students are introduced to the study of biology at Swarthmore by taking BIOL 001, Cellular and Molecular Biology, and BIOL 002, Organismal and Population Biology. Either course may be taken first. Courses numbered 003-009 do not have associated laboratories; usually BIOL 001 and BIOL 002 are prerequisites. Diverse intermediate-level courses, some offered in alternate years, allow students to choose coursework in areas of particular interest. These courses are numbered 010-039 and generally have BIOL 001 and BIOL 002 (or AP credit) as prerequisites. Some of these courses also require prior coursework in the Chemistry Department. Finally, twocredit seminars (with three-digit course numbers) have an intermediate-level course as a prerequisite and are usually taken by students in their junior or senior years.

## Majors and minors

The Biology Department offers a course major, course minor, honors major and honors minor. In addition, special majors in biochemistry and neuroscience are regularly offered in cooperation with the Chemistry and Biochemistry and Psychology departments, respectively. A student may choose an
interdisciplinary minor in environmental studies, which includes courses in the Biology Department. In addition, the department has also supported special majors as described below.

## Sample Paths through the discipline

As pointed out in the introduction, there are many paths to a biology major. Following are some ideas to keep in mind as you plan your schedule.
Getting started as a biology major: Many majors take BIOL 001 and/or BIOL 002 during their first year. These two courses may be taken in either order and it is not uncommon for prospective majors to take BIOL 002 during the spring semester of their first year, and BIOL 001 during the fall semester of their second year. Students who realize their interest in biology later have also taken both courses during their sophomore year and successfully completed the major in eight semesters. We generally encourage all students to take at least one of the introductory courses, even if they have AP credit. BIOL 001 is always offered in the fall semester, and BIOL 002 always in the spring semester.
We encourage majors to fulfill the mathematics and chemistry requirements for the major during their first two years. In particular, some intermediate level courses require CHEM 010 (or CHEM 003 and 004) and CHEM 022. Completion of those chemistry courses gives more flexibility in biology course choice. However, we are willing to work with students to craft the best path for each individual.
Continuing as a biology major: Because most intermediate level courses require both BIOL 001 and BIOL 002 (or AP credit), taking both courses before continuing on in the field usually serves students best. For planning purposes, most Group III intermediate-level courses are taught in the fall semester, and most Group I intermediate-level courses are taught in the spring semester. Some Group II courses are taught in spring, and others in fall.
The two-credit seminar course(s) you are most interested in taking may influence your other course choices. In addition to your own interests, prerequisites for seminars (which may consist of a specific intermediate-level course), faculty leave schedules, and study abroad considerations may constrain your course choice and schedule.
Some faculty strongly encourage students interested in doing research with them to take at least one course with them before working on a research project. It is important to talk to specific faculty members you are interested in working with to understand their specific requirements for work in their laboratory.

Completion of the biology major: Course
majors must pass the comprehensive exam (BIOL 097 Themes in Biology) during the fall semester of the senior year. Honors majors are required to enroll in at least one credit of BIOL 180 (often but not always in fall semester of the senior year), and in Senior Honors Study (BIOL 199), which is taken in the spring semester of the senior year.

## Course Major

## Acceptance criteria

a. Three courses (or advanced placement credit and two courses) in biology. If the student does not have AP or transfer credit, both BIOL 001 and BIOL 002 are required.
b. One semester of Organic Chemistry (CHEM 022). The prerequisite for CHEM 022 may consist of CHEM 010, CHEM 003 plus CHEM 004, or placement approved by the Chemistry and Biochemistry Department.
c. Swarthmore College credit for two courses in mathematics or statistics (not STAT 001 or MATH 003). Alternatively, students may complete calculus II (MATH 025). The Biology Department strongly recommends a course in statistics for majors.
d. Applicants must have an average grade of C (2.00) or better in BIOL 001 and BIOL 002 (or if AP credit is given, in the first two biology courses taken at Swarthmore). In addition, the applicant must have an average grade of C (2.00) or better in all courses taken in the Biology Department, and an overall average grade of C (2.00) or better in the Division of Natural Sciences and Engineering at Swarthmore College (biology, physics and astronomy, chemistry and biochemistry, mathematics and statistics, engineering, and computer science). Unpublished grades in biology for the first semester of the freshman year will be considered in the C average requirement; passing grades of CR in other courses in the Division of Natural Sciences and Engineering are acceptable.

## Requirements for graduation

e. Credit requirements: In addition to fulfilling all the requirements to be accepted as a biology major, the student majoring in biology must have completed by the end of the senior year a minimum of eight biology credits, two of which come from a seminar (numbered 110-139). Students may take a course or seminar in biology as CR/NC but are not encouraged to do so.
f. Distribution requirements: Students majoring in biology must pass at least one course in each of the following three groups: I. Cellular and Molecular Biology, II. Organismal Biology, and III. Population Biology. The digit in the tens place of the course number signifies
the group of the course (i.e., BIOL 020 is a Group II course and BIOL 114 is a Group I course).
i. Students majoring in biology may count only one course numbered 003009 toward the eight required credits. Courses numbered 003-009 do not meet the Group distribution requirement.
ii. BIOL 093 (Directed Reading) and BIOL 094 (Independent Research) count as credits toward the biology major but cannot be used as distribution requirements. No more than two credits in BIOL 093, BIOL 094 or BIOL 093 and BIOL 094 in combination may be used to satisfy the eight-credit requirement for the biology major.
iii. CHEM 038 (Biochemistry) may be counted as a Group I course. In this case, the CHEM 038 grade will be counted towards the biology GPA.
g. Seminar requirement: All biology majors are required to include at least one two-credit seminar (with a number greater than 100) in their courses in the major. A seminar in biology is defined as an advanced offering that uses primary rather than secondary source materials and encourages active student participation in presentation and discussion of materials. Note that all two-credit seminars have at least one intermediate level course (numbered 10-39) as a prerequisite; the particular prerequisites for seminars vary and should be considered during selection of intermediate level courses.
i. All seminars must be taken at Swarthmore College.
ii. A student may, with permission of the faculty instructor, take a seminar without the laboratory component. A seminar without the laboratory component becomes a BIOL 093 and does not meet the seminar requirement.
h. Comprehensive examination: All biology course majors must satisfy the general College requirement of passing a comprehensive examination given by the major department. In biology, this comprehensive examination is the lecture series BIOL 097, Themes in Biology. BIOL 097 is offered only in the fall semester and is usually taken by students during the fall of their senior year. This course features a series of visiting speakers who give presentations connected by an overarching theme that can be addressed from all areas of biology. It enables faculty and students to interact on an intellectually challenging project, allows students to think about a topic from a variety of levels of biological organization and gives students the opportunity to meet and
interact with a variety of distinguished biologists.
i. Students are required to take and complete the requirements of BIOL 097 but are not required to register for the course for credit. BIOL 097 does not count as one of the eight credits required for a major in biology, although it can be counted as one of the 32 credits required for graduation.
ii. Evaluation of a student's performance for this comprehensive examination will be Pass/No Pass and will be based on the questions prepared by each individual and team for each lecture, participation in discussions, hosting a guest speaker and the final presentation. For students enrolled in BIOL 097 for credit, Pass/No Pass on the comprehensive exam will be translated into Credit/No Credit for purposes of earning credit.
iii. Students who fail BIOL 097 fail the comprehensive exam and thus may not graduate. The Department will evaluate all such failures and decide on the appropriate action. Students will be notified of failure by the first day of classes in the spring semester of their senior year.
iv. If a student is given permission by the College to be away from campus during the fall semester of the senior year, the Biology Department faculty may give permission to the student to write a senior paper and enroll in BIOL 095, a Senior Project, to satisfy the College requirement of a comprehensive examination. Alternatively, the student may be given permission by the Biology faculty to enroll in Themes in Biology during the junior year if the student has planned in advance to be away during the fall semester of the senior year.

## Course Minor

Students who wish to minor in biology must complete six credits, at least four of which are to be taken at Swarthmore College. The GPA requirement to enter the minor is the same as for biology course majors 2.00 in BIOL 001 and BIOL 002, 2.00 in courses taken in the Biology Department, and 2.00 in all courses taken in the Division of Natural Sciences and Engineering. Both BIOL 001 and BIOL 002 are required (although one or both of these may be replaced by credit from an advanced placement examination after another biology course is completed; note that the department strongly encourages all students with AP credit to take at least one of the introductory courses). There are
no requirements for courses outside the department. There is no distribution requirement within the department for the minor. Only one course numbered 003-009 is allowed. Only one credit in BIOL 093 or BIOL 094 is allowed. CHEM 038 (Biochemistry) may be counted as one of the six biology credits

## Honors Major

## Acceptance criteria

a. The course requirements for an honors major in biology are the same as those for a course major in biology (see above).
b. Admission to the Honors Program in biology is based on academic record. Applicants to the Honors Program in biology must have a grade point average (GPA) of 3.00 in all courses taken in the Natural Sciences and Engineering Division at Swarthmore College and must obtain a grade of $B$ or better in all lecture courses and seminars used for the Honors Program. Applicants must also have a GPA of 3.00 in all biology courses. Unpublished grades in biology for the first semester of the first year will be considered in these requirements; passing grades of CR in other courses in the Division of Natural Sciences and Engineering are acceptable.
c. Students should list the anticipated fields of study, including two 2 -credit seminar courses, in their sophomore plan.
d. Students who are accepted into the program must select a research project and mentor by the middle of the junior year. Final approval of the student's Honors Program will occur during the fall semester of the senior year when the Final Honors Program Form is signed by the chairs of the participating departments.

## Requirements for graduation

a. Credit requirements for honors: In addition to fulfilling the requirements to be accepted as a biology honors major, the student majoring in biology must complete a minimum of eight biology credits. Students may take a course or seminar in biology as CR/NC but are not encouraged to do so. Students must earn a grade of B or better for all courses and seminars used for honors preparations. Honors students may not take Bio 097, Themes in Biology, for credit but are welcome and encouraged to attend the seminars.

## b. Distribution requirements for honors:

Students graduating with an honors major in biology must pass at least one course in each of the following three groups: I. Cellular and Molecular Biology, II. Organismal Biology, and III. Population Biology. The digit in the tens place of the course number signifies the group of the course (i.e., BIOL 020 is a Group II course and BIOL 114 is a Group I course).
i. The Biology Department faculty strongly encourage honors students to fulfill their group distribution requirements with intermediate- or seminar-level courses. Our experience has been that students with coursework at these levels have a more complete and deeper understanding of biology. In addition, students who alter their plans and withdraw from the Honors Program have much more flexibility in scheduling if they have already planned to fulfill the department distribution requirement with intermediate- or seminar-level courses. To mitigate the scheduling constraints imposed by the Honors Program, however, the following rules also apply to honors students:

1) BIOL 001 may be counted as a Group I course, or BIOL 002 may be counted as a Group III course for purposes of the distribution requirement for honors majors.
2) An honors major who has taken both BIOL 001 and BIOL 002 can use them to satisfy any one of the distribution requirements.
3) AP credit may not be used to satisfy the distribution requirement.
c. Seminar requirement for honors: All honors biology majors are required to complete at least two 2-credit seminars (those with a number greater than 100) for honors preparations. A seminar in biology is defined as an advanced offering that uses primary rather than secondary source materials and encourages active student participation in presentation and discussion of materials. Note that all two-credit seminars have a prerequisite course from the intermediate level (numbered 010-039); the particular prerequisites for each seminar should be considered during selection of intermediate level courses.
i. The two seminars used for honors preparations must be taken from different faculty members and must be taken at Swarthmore College.
d. Research (Thesis) requirement for honors: At least one, but not more than two, credits of thesis research (BIOL 180) are required. Thesis research will be graded by an External Examiner. The thesis research will be a substantial project carried out over 2 semesters, 2 summers, or 1 summer +1 semester.
i. The primary mentor for the thesis need not be a Swarthmore faculty member, but a Swarthmore faculty member must agree to be an on-campus mentor
ii. Students should plan on completing their research by the end of the fall semester of their senior year.
iii. The honors thesis has a page limit of 20 pages, not counting references, figures, figure legends or tables.
e. Senior Honors Study: Senior Honors Study (BIOL 199) is required for all honors majors in the spring semester of their senior year. This integrative/interactive program prepares each student to finalize and present his or her thesis work formally, in both oral and written forms. During the first few meetings of the semester, faculty members are available for consultation about data analysis. At mid-semester, students present posters of their projects to the faculty and other honors students for review. Comments from faculty and students on these posters will guide students in revising and polishing their written theses. SHS BIOL 199 is Credit/No Credit and the evaluation is done by the biology faculty.
f. Review of work for honors: The Biology Department will review the academic work of all candidates for the external examination at the end of the junior year and in November of their senior year. Progress on thesis research is assessed at the beginning of the fall semester of the senior year. At these times, the department may ask a candidate not to discontinue participation in the Honors Program.
Withdrawal from the Honors Program must occur by December 1 of the student's senior year. At that time, the student is responsible for consulting with the department about satisfying the comprehensive requirement for the major.
g. Honors examinations: Students will take two written examinations, one based on each of their seminar preparations. The biology written examinations will be closed-book, 3-hour exams. The oral exams are normally one-onone, but there are special circumstances under which a student may be examined by a panel of examiners. Oral examinations for seminar preparations are normally 45 minutes in length. The oral exams for thesis research are 60 minutes in length.

## Honors Minor

Biology minors in the Honors Program do not need to satisfy the distribution requirements of the major or take chemistry or mathematics unless required to do so for a specific preparation. Honors minors do not participate in Senior Honors Study. Applicants to the Honors Program in biology must have a GPA of 3.00 in all courses taken in the Divisions of Natural Sciences and Engineering, a GPA of 3.00 in all biology courses taken at Swarthmore College, and a grade of B or better in all lecture courses and seminars used for the Honors Program.

The program in biology for an honors minor requires at least four credits and usually consists BIOL 001 and BIOL 002, an intermediate level course (course number between 10 and 39) and a two-credit seminar (course number greater than 100).

## Application Process Notes for the Major or the Minor

In addition to the process described by the Dean's Office and the Registrar's Office for how to apply for a major, we also ask that you attend the departmental information meeting for sophomores. A copy of the Biology Student Handbook, which contains detailed information about courses and other aspects of the major, minor, and regularized special majors, is available online via a link from the departmental homepage at www.swarthmore.edu/biology.
Applicants from the sophomore or junior classes who have completed all the requirements with the appropriate grades are accepted as a course major in biology. Applicants from the sophomore class who are in the process of completing these requirements with the required GPA are accepted contingent upon successful completion of the missing courses. Others who will not complete these requirements by the end of the current semester are deferred until the requirements are met. All students who have applied for the major in biology and who have been accepted or deferred are assigned an adviser in the Biology Department.

## Special Majors and Minors

## Biochemistry

The Biology Department, in collaboration with the Chemistry and Biochemistry Department, offers a course major and an honors major in biochemistry. This major gives students the opportunity to gain a strong background in chemistry with special emphasis on the application of chemistry to biological problems. Approval and advising for this special major are obtained through the Chemistry and Biochemistry Department and details about the course and honors major can be found in the Chemistry and Biochemistry section of this catalog. The Biology Department encourages biochemistry majors to take both BIOL 001 and BIOL 002 as a number of intermediate level courses in biology require both courses as a prerequisite.
a. Honors biochemistry majors are expected to participate in Senior Honors Study (BIOL 199) only if the thesis research is done in the Biology Department.
b. Honors biochemistry majors must conduct thesis research with a Swarthmore faculty member.

## Neuroscience

The Psychology and Biology departments offer a course major and an honors major that combines work in the two departments in a way that allows students flexibility in choosing the focus of their Neuroscience major. Approval and advising for this special major is done through both departments and details about the course and honors major can be found in the psychology section of this catalog.

## Bioeducation

The special major in Bioeducation consists of six courses in biology. Students must complete at least one course in each group (I, II, and III) and one course in Evolution (BIOL 034). In addition to the six biology courses, students must complete CHEM 010 (or CHEM 003 plus CHEM 004) and CHEM 022, one year of mathematics (not MATH 001 or 003), and write a thesis to be supervised by faculty in the Biology and Educational Studies Departments. The special major in Bioeducation will include at least four education courses to be approved by the Educational Studies Department. Students should consult with the chair of the Educational Studies Department about further requirements for the Bioeducation special major. Approval and advising for this special major are through both the Biology and Educational Studies Departments.

## Environmental Studies

A minor in environmental studies consists of an integrated program of five courses plus a capstone seminar (ENVS 091), which a student takes in addition to a regular major. The details of the minor and courses offered may be found at www.swarthmore.edu/envs.xml. The five courses must include at least one course in environmental science/technology; at least one course in environmental social
science/humanities; and at least one more course from either of these two groups for a minimum of three courses from these two lists. Up to two of the five required courses may be chosen from the list designated adjunct and interdisciplinary courses. The capstone seminar is offered in the spring of the student's senior year. Advising for this program is by the chair of the Environmental Studies Committee.

## Other special majors

Individualized special majors may be constructed after consultation with the chairs and approval of the participating departments. The special major is expected to specify a field of learning that crosses departmental boundaries and can be treated as a sub-field within the normal departmental major.

Individualized special majors consist of at least 10 credits, but usually not more than 12. A more detailed explanation of the individualized special major is found in Chapter 7
"Educational Program." Previously approved special majors include Cognitive Science, Neuroscience, Environmental Science, Biostatistics and Biophysics.

## Thesis / Culminating Exercise

See Acceptance Criteria and Requirements for Graduation, Comprehensive Examination.

## Advanced <br> Placement/International Baccalaureate Credit

Both BIOL 001 and BIOL 002 are required for the biology major and minor. However, one or both of these courses may be replaced by credit from one of the advanced placement examinations listed below, which will be granted after one biology course with laboratory is completed in the department. One biology credit is awarded for a score of 5 on the advanced placement examination; a score of 6 or 7 on the International Baccalaureate; or A on the Higher Level of Biology, Advanced Level Examination, German Arbitur, Austrian Matura or French Baccalaureate exam. Note that the department strongly encourages all students with advanced placement credit to take at least one of the introductory courses.

## Transfer Credit

Credit for courses taken at an institution at which the student was previously matriculated may be counted toward the biology major. Courses will be evaluated on an individual basis to determine which departmental distribution requirements they meet.

## Off-Campus Study

The Biology Department faculty enthusiastically support study abroad for their majors. Majors may study abroad and earn credits that count toward the requirements for a biology major or, alternatively, participate in programs without earning biology credit, while still completing the major in eight semesters. By college regulation, we cannot guarantee a specific amount of credit in advance toward the Swarthmore degree for successful completion of academic work completed at other institutions, with the exception of regular semester coursework at Bryn Mawr, Haverford, and the University of Pennsylvania completed under the four-college arrangement.
Notwithstanding this restriction, our experience has shown that, with proper advance planning, study abroad is nearly always compatible with completion of the degree in eight semesters
(including the semester(s) spent abroad). Planning is the key to success, and students contemplating study abroad are urged to see the Off-Campus Study Adviser early in the planning process.
Prior to studying abroad, students should obtain preapproval and credit estimation from the faculty member with teaching and research interests most closely related to the proposed course. At this time, the faculty member will describe what course characteristics are important for obtaining Swarthmore College credit, how credit will be calculated upon completion of the program, and which departmental distribution requirements, if any, the courses are likely to fulfill.
Upon return, the student should present a transcript, syllabus of the course (including the number of hours in lecture and laboratory), class notes, laboratory directions, examinations, laboratory reports and any papers or other written work (but not the textbooks) to the Biology Department's Academic Coordinator, who will then determine which faculty member will be asked to award credit for the course. Courses without a laboratory will be awarded no more than one-half credit.

## Research and Service-Learning Opportunities

## Academic year opportunities

## Research

Students may receive academic credit for research carried out either on- or off-campus (BIOL 094). Students interested in doing research on campus should contact individual faculty members directly. For off-campus research credit in BIOL 094, the student must submit a one-page proposal to the department indicating 1) prior course work in the area of research, 2) previous technical experience in a laboratory, 3) the name and address of the director of the laboratory and the name of the person under whom the student will work directly, and 4) a short description of the proposed project and the methods to be used in the investigation. This proposal must be presented to the chair of the Biology Department, no later than one week before registration for the semester in which credit will be received.
There are also opportunities for students to be paid for research during the academic year. Individual faculty members should be contacted about the potential for positions in their laboratory.

## Academic Assistants

Each year approximately 10 students are selected to assist in the BIOL 001 and BIOL 002 laboratories. These students are selected for their academic excellence, laboratory expertise,
and ability to communicate with students. Each selected student assists in one laboratory per week and attends a weekly staff meeting for the course. BIOL 002 hires two or three additional students to staff evening computer clinics. Contact the laboratory coordinator for BIOL 001 or BIOL 002 for more information.
Approximately eight students are selected as Science Associates (SAs) for excellence in comprehension, communication and compassion. SAs attend all BIOL 001 and BIOL 002 lectures on Monday, Wednesday, and Friday mornings, meet weekly with the SA program coordinator and faculty lecturers throughout the semester, and facilitate small group problem-based learning in evening study sessions. Contact Philip Kudish for more information.
Dean's tutors in biology are hired on a rolling basis, to support student learning in BIOL 001 and BIOL 002. This is a flexible student position in which tutors meet one-on-one with students at mutually convenient times, typically for one hour per week. Contact Philip Kudish for more information.
Experienced students are hired as laboratory assistants, van drivers and/or study guides in several intermediate level courses, including Genetics, Marine Biology, and Neurobiology. Students are also hired to help with the care of organisms associated with various courses and research laboratories. The departmental administrative assistant, animal facility manager and greenhouse manager, as well as individual faculty members, may be contacted about these positions.
The department collaborates with the Chester Children's Chorus
(www.chesterchildrenschorus.org/) to support Science for Kids, a summer and academic year program focused on engaging children from the nearby Chester-Upland school district with experimental science. The academic year program meets on Saturdays while classes are in session and the College has funds from the Howard Hughes Medical Institute to pay Swarthmore students involved in the program.

## Student Committee for faculty searches

Each year the Biology Department conducts several searches for replacement faculty to teach courses when regular members of the department are on leave. In some years there is a search for a permanent or tenure-track position. Students are invited to serve on a Student Search Committee to interview and help select a candidate.

## Summer opportunities

## Research

Paid fellowships for summer research are offered by the Biology Department as well as other institutions. Funds are available for field
and laboratory research projects conducted onand off- campus. Information regarding the awards, application deadlines and downloadable applications are available on the Biology Department website. An information session is usually offered at the end of the fall semester to describe opportunities in more detail.

## Community service

The Biology Department collaborates with the Chester Children's Chorus
(www.chesterchildrenschorus.org/) to support Science for Kids, a summer and academic year program focused on engaging children from the nearby Chester-Upland school district with experimental science. The summer program commitment is $5-8$ hours per week for 5 or 6 weeks and can usually be integrated with a fulltime job or research position elsewhere on campus. Contact Liz Vallen or Jocelyne Noveral if you will be on campus for the summer and are interested in participating.

## Teacher Certification

The special major in bioeducation consists of six courses in biology. There must be at least one course in each group (I, II, and III) and one course in evolution. In addition to the six biology courses, students will take CHEM 010 (or CHEM 003 plus CHEM 004) and CHEM 022; MATH 025 or two courses in mathematics and statistics (not Math 001 or 003); and will write a thesis to be supervised by faculty in the Biology and Educational Studies Departments.
The special major in bioeducation will include six education courses to be approved by the Educational Studies Department. Students should consult with the chair of the Educational Studies Department about further requirements for the Bioeducation special major. Approval and advising for this special major are through both the Biology and Educational Studies Departments.

## Life After Swarthmore

## Graduate school

Many of our majors have gone on to graduate school in biology after completion of their degree. While some students attend graduate school immediately after graduation from Swarthmore, others work for at least a year or two before applying to graduate programs. This time between finishing at Swarthmore and graduate school can be used to gain more experience in biology, or to try out a new field. These experiences both strengthen your graduate school applications and help you to know what you are most interested in studying. One- or two-year jobs are available at a variety of research institutes, field stations, universities,
museums, government laboratories and companies.
The Biology Student Handbook contains specific suggestions for applying to graduate programs and Biology Department faculty are happy to talk with students about programs and projects. Note that graduate schools in biology pay Ph.D. students a stipend for research and/or teaching. In addition, a few prestigious fellowships (e.g., National Science Foundation Graduate Research Fellowship) are awarded to the student (not to the program), giving the recipient more flexibility and autonomy in their graduate program.

## Career options/opportunities

In addition to graduate school and professional school (medical, law, veterinary, business) there are many other job possibilities. The American Institute of Biological Sciences web page (www.aibs.org/careers/), which describes jobs open to people with a degree in biology, is a helpful resource. A degree in biology can lead to positions in the following areas:
Research: This could include laboratory work, fieldwork, or some combination of the two. Major employers include universities, research institutes, non-government organizations and companies (e.g., pharmaceutical, agricultural, biotechnology, food science).
Healthcare: Many doctors, dentists, nurses, veterinarians, laboratory technicians and other health care providers have backgrounds in the biological sciences. Other biologists utilize their background in disease prevention and control.
Environmental management: Park rangers, conservation biologists, zoo biologists, and land management specialists use their background in biology to develop and evaluate management plans to conserve natural resources.
Education: In addition to serving as university and college professors, some of our graduates teach in elementary and secondary schools, at museums and zoos, and at aquaria and nature centers. Biology majors also author newspaper and magazine articles, and may contribute to textbooks as writers, editors or illustrators.
Other ideas: Our graduates have obtained jobs in politics and policy, in areas such as economic and biological impacts of land use practices, science advising on biomedical procedures, effects of climate change, and educating members of Congress about scientific issues. Other biology majors have found positions in forensics, bioinformatics and computational biology. Finally, some majors have had careers in investment banking, consulting and law.

## Courses

Biology course numbers reflect study at different levels of organization-General Studies (001-009), intermediate courses in

Cellular and Molecular Biology (010-019), Organismal Biology (020-029), Population Biology (030-039), Seminars in Cellular and Molecular Biology (110-119), Seminars in Organismal Biology (120-129), and Seminars in Population Biology (130-139).

## General Studies

## BIOL 001. Cellular and Molecular Biology

An introduction to the study of living systems illustrated by examples drawn from cell biology, biochemistry, genetics, microbiology, neurobiology, and developmental biology.
One laboratory period per week.
Natural sciences and engineering practicum.
Writing course.
1 credit.
Fall 2011. Staff.

## BIOL 002. Organismal and Population Biology

Introduction to the study of organisms emphasizing morphology, physiology, behavior, ecology, and evolution of whole organisms and populations.
One laboratory per week.
Natural sciences and engineering practicum.
Writing course.
1 credit.
Spring 2012. Staff.

## BIOL 004. The Biology of Food

In the class we will explore the biology and history of the food we eat. How, where and why were food species domesticated, and by whom? What are the wild species from which these foods were derived, and what are the morphological and genetic changes that occurred during domestication? We will also explore modern methods for improving food species, including high-tech traditional breeding and the creation of genetically modified foods.
Prerequisites: BIOL 001 or permission of the instructor.
1 credit.
Fall 2011. Rauscher.

## BIOL 006. History and Critique of Biology

The topics of this course focus on the history and sociology of genetics, development and evolution, science and theology, and feminist critiques of biological sciences.
Prerequisites: BIOL 001 and BIOL 002. 1 credit.
Not offered 2011-2012. Gilbert.

## Group I: Cellular and Molecular Biology (010-019)

## BIOL 010. Genetics

This introduction to genetic analysis and molecular genetics explores basic principles of genetics, the chromosome theory of inheritance, classical and molecular strategies for gene mapping, strategies for identifying and isolating genes, the genetics of bacteria and viruses, replication, gene expression, and the regulation of gene activity. Major concepts will be illustrated using human and nonhuman examples.
One laboratory period per week.
Prerequisite: BIOL 001 or permission of the instructor.
Natural sciences and engineering practicum. 1 credit.
Spring 2012. Jenkins.

## BIOL 014. Cell Biology

A study of the ultrastructure, molecular interactions, and function of cell components, focusing primarily on eukaryotic cells. Topics include protein and membrane structure, organelle function and maintenance, and the role of the cytoskeleton.
One laboratory period per week.
Prerequisites: BIOL 001 and BIOL 002, and previous or concurrent enrollment in CHEM 022 ; or permission of the instructor.
Natural sciences and engineering practicum. 1 credit.
Spring 2012. Vallen.

## BIOL 016. Microbiology

This study of the biology of microorganisms will emphasize aspects unique to prokaryotes. Topics include microbial cell structure, metabolism, physiology, genetics, and ecology. Laboratory exercises include techniques for detecting, isolating, cultivating, quantifying, and identifying bacteria. Students may not take both BIOL 016 and BIOL 017 for credit. One laboratory period per week.
Prerequisites: CHEM 022; BIOL 001 and BIOL 002 or by permission of the instructor. Natural sciences and engineering practicum. 1 credit.
Next offered spring 2013. Vollmer.

## BIOL 017. Microbial Pathogenesis and the Immune Response

A study of bacterial and viral infectious agents and of the humoral and cellular mechanisms by which vertebrates respond to them. Laboratory exercises include techniques for detecting, isolating, cultivating, quantifying, and identifying bacteria. Students may not take both BIOL 016 and BIOL 017 for credit.

One laboratory period per week.
Prerequisites: CHEM 022; BIOL 001 and BIOL 002 or by permission of the instructor.
Natural sciences and engineering practicum. 1 credit.
Spring 2012. Vollmer.

## Group II: Organismal Biology (020-029)

## BIOL 020. Animal Physiology

An examination of the principles and mechanisms of animal physiology, ranging from the subcellular to the integrated whole animal in its environment. Possible topics include metabolism, thermoregulation, endocrine regulation, nutrient processing, and muscle physiology.
Prerequisites: BIOL 001 and BIOL 002. CHEM 010 is recommended.
Natural sciences and engineering practicum. 1 credit.
Next offered fall 2012. Hiebert Burch.

## BIOL 021. Comparative Vertebrate Anatomy

A system by system examination of vertebrate morphology with an appreciation for the variation offered by the diversity of vertebrate forms. While morphology or physical form is the focus, each anatomical system is presented within a context of function and evolution. Laboratory exercises will involve dissection. One laboratory period or field trip per week. Prerequisites: BIOL 001 and BIOL 002. Natural sciences and engineering practicum. 1 credit.
Fall 2011. Downs.

## BIOL 022. Neurobiology

A comprehensive study of the basic principles of neuroscience, ranging from the electrical and chemical signaling properties of neurons and their underlying cellular and molecular mechanisms to the functional organization of selected neural systems.
One laboratory period per week.
Prerequisites: BIOL 001 and CHEM 010.
Natural sciences and engineering practicum. 1 credit.
Spring 2012. Siwicki.

## BIOL 024. Developmental Biology

This analysis of animal development will combine descriptive, experimental, and evolutionary approaches. Laboratories will involve dissection and manipulation of invertebrate and vertebrate embryos.
One laboratory period per week.
Prerequisites: BIOL 001 and BIOL 002.

Natural sciences and engineering practicum. 1 credit.
Fall 2011. Gilbert.

## BIOL 025. Plant Biology

This course is an exploration of the diverse field of plant biology. Topics will include growth and development, reproduction, genetics and genome biology, evolution and diversity, physiology, responses to pathogens and environmental stimuli, domestication, agriculture, and applications of plant genetic modification. Laboratories will introduce organismal, cellular, molecular, and genetic approaches to understanding plant biology.
One laboratory period per week.
Prerequisites: BIOL 001 and BIOL 002.
Natural sciences and engineering practicum. 1 credit.
Spring 2012. Kaplinsky.

## BIOL 026. Invertebrate Biology

The evolution, morphology, ecology, and physiology of invertebrate animals. One laboratory period per week; some all-day field trips.
Prerequisites: BIOL 001 and BIOL 002.
Natural sciences and engineering practicum. 1 credit.
Next offered fall 2012. Merz.
Group III: Population Biology (030-039)

## BIOL 030. Animal Behavior

An exploration of principles and mechanisms of animal behavior using an evolutionary approach, ranging from neurons and development of individuals to groups interacting in their natural environment. Possible topics include: how genes and environment affect behavior, antipredator behavior, migration, mating systems, parental care, human behavior.
One laboratory per week emphasizes observation of live animals in field and at zoo; one all day field trip possible.
Three to 6 hours of field work per week.
Prerequisite: BIOL 002.
Natural sciences and engineering practicum. 1 credit.
Not offered 2011-2012.

## BIOL 034. Evolution

This course focuses on how and why populations change over time. Other topics, such as evolutionary rates, speciation, phylogeography, and extinction provide a broader view of evolutionary processes. One laboratory period or field trip per week. Prerequisites: BIOL 001 and BIOL 002.

Natural sciences and engineering practicum. 1 credit.
Spring 2012. Staff.

## BIOL 035. History of Life

An exploration of the evolutionary history responsible for the incredible diversity of organisms on earth today. An understanding of this history will be developed through study of geological processes, reconstruction of evolutionary relationships, and a familiarity with the fossil record. Readings and discussion of primary literature will supplement the course material.
One laboratory per week.
Prerequisites: BIOL 001 and BIOL 002.
1 credit.
Not offered 2011-2012. Downs.
BIOL 036. Ecology
The goal of ecology is to explain the distribution and abundance of organisms in nature through an understanding of how they interact with their abiotic and biotic environments. Students will gain ecological literacy and practice by studying processes that operate within and between hierarchical levels or organization such as individuals, populations, communities, and ecosystems. All this knowledge will be applied to understand the current global changes occurring in nature as a result of human activities.
Three to 6 hours of laboratory and/or fieldwork in the Crum Woods per week, in addition to at least one field trip per semester.
Prerequisites: BIOL 002 or permission of the instructor.
Natural sciences and engineering practicum. 1 credit.
Fall 2011. Machado.
BIOL 039. Marine Biology
Ecology of oceans and estuaries, including discussions of physiological, structural, and behavioral adaptations of marine organisms.
One laboratory per week; several all-day field trips.
Prerequisites: BIOL 001 and BIOL 002.
Natural sciences and engineering practicum. 1 credit.
Fall 2011. Merz.

## Independent Studies

## BIOL 093. Directed Reading

A program of literature study in a designated area of biology not usually covered by regular courses or seminars and overseen by a biology faculty member.
0.5 or 1 credit.

Fall or spring semester. Staff.

## BIOL 094. Research Project

Qualified students may pursue a research program for course credit with the permission of the department. The student will present a written report to the biology faculty member supervising the work.
0.5 or 1 credit.

Fall or spring semester. Staff.

## BIOL 094A. Research Project: <br> Departmental Evaluation

Students carrying out a BIOL 094 research project will present a written and oral report on the project to the Biology Department.
0.5 credit.

Fall or spring semester. Staff.
BIOL 180. Honors Research
Independent research in preparation for an honors research thesis.
Fall or spring semester. Staff.

## Senior Comprehensive Examination

BIOL 095 and BIOL 097 are not part of the 8credit minimum in biology.

## BIOL 095. Senior Project

With the permission of the department, a student may write a senior paper in biology to satisfy the requirement of a comprehensive examination for graduation.

## BIOL 097. Themes in Biology

Invited scientists present lectures and lead discussions on a selected topic that can be engaged from different subdisciplines within biology. Serves as the senior comprehensive and examination; it is required of all biology majors in course.
Fall 2011. Staff.

## Honors Study

BIOL 199 is not part of the 8 -credit minimum in biology.

## BIOL 199. Senior Honors Study

An interactive, integrative program that allows honors students to finalize their research thesis spring semester.
1 credit.
Spring 2012. Staff.

## Seminars

## BIOL 110. Human Genetics

In this exploration of the human genome, the topics to be discussed will include patterns of human inheritance; classical and molecular
strategies for mapping and isolating genes; the metabolic basis of inherited disease; the genetic basis of cancer; developmental genetics; complex-trait analysis; the genetic basis of human behavior; and ethical, legal, and social issues in human genetics.
Attendance at medical genetics rounds and seminars at the University of Pennsylvania School of Medicine is required.
Prerequisite: BIOL 010 or permission of the instructor.
Natural sciences and engineering practicum. 2 credits.
Not offered 2011-2012. Jenkins.
BIOL 111. Developmental Genetics
This year's topic will focus on ecological developmental biology: how development is constrained and managed by environmental influences. Topics include phenotypic plasticity, polyphenisms, developmental symbioses, endocrine disruption, and the possible ways that such plasticity can generate evolutionarily novel structures. The laboratory will use molecular techniques to look at gene expression in the developing turtle shell.
One laboratory per week.
Prerequisites: BIOL 024 or permission of the instructor.
Natural sciences and engineering practicum. 2 credits.
Not offered 2011-2012. Gilbert.

## BIOL 114. Symbiotic Interactions

This seminar will focus on the molecular basis of plant-microbe, animal-microbe, and possibly microbe-microbe symbioses. In addition to studying specific systems, common themes and pathways will be analyzed and discussed (nutrient exchange, suppression of the immune response, specificity of host-symbiont recognition, etc.). Readings will be primarily from the research literature. Laboratory projects will use molecular techniques and likely focus on the sea anemone Aiptasia and its symbiotic, photosynthetic dinoflagellate, Symbiodinium.
One laboratory per week.
Prerequisites: CHEM 022, and any Group I or Group II biology course.
Natural sciences and engineering practicum. 2 credits.
Fall 2011. Vallen.

## BIOL 115E. Plant Molecular GeneticsBiotechnology

The course will investigate the technological approaches that plant scientists are using to address environmental, agricultural, and health issues. Topics will include biofuels, nutritional engineering, engineering disease and stress resistance, bioremediation, and the production
of pharmaceuticals in plants. This course consists of one discussion and one laboratory per week. Laboratory projects will include independent and ongoing research.
One laboratory per week.
Prerequisites: BIOL 001, BIOL 002, and BIOL 025 or permission of instructor.
Natural sciences and engineering practicum. 2 credits.
Not offered 2011-2012. Kaplinsky.

## BIOL 116. Microbial Processes and Biotechnology

A study of microbial mechanisms regulating metabolism and gene expression in response to natural and experimental stressors. Technical and ethical applications of these concepts in biotechnology will be addressed.
Independent laboratory projects.
Prerequisite: BIOL 016 or BIOL 017 or permission of the instructor.
Natural sciences and engineering practicum.
Writing course.
2 credits.
Fall 2011. Vollmer.

## BIOL 119. Genomics and Systems Biology

Fundamental questions in biology are being answered using revolutionary new technologies including genomics, proteomics, metabolomics, systems biology, modeling, and large scale protein and genetic interaction screens. These approaches have fundamentally changed how scientists investigate biological problems and allow us to ask questions about cells, organisms and evolution that were impossible to address even five years ago. Readings will include animal, plant, fungal, and bacterial literature. Laboratory projects will incorporate genomic and molecular approaches.
One laboratory per week.
Prerequisite: BIOL 001 and BIOL 002 or the equivalent and one Group I or Group II biology course.
Natural sciences and engineering practicum. 2 credits.
Fall 2011. Kaplinsky.

## BIOL 123. Learning and Memory

Neural systems and cellular processes involved in different types of learning and memory are studied through reading and discussion of research literature.
Independent laboratory projects.
Prerequisite: BIOL 022 or permission of the instructor.

Natural sciences and engineering practicum. 2 credits.
Fall 2011. Siwicki.

## BIOL 124. Hormones and Behavior

This course will focus on endocrine regulation of animal behaviors, including reproduction, aggression, stress, sickness, parental care, and seasonality, with an emphasis on critical reading of primary literature.
Independent laboratory projects.
Prerequisites: BIOL 001 and 002 or the equivalent and one of the following: BIOL 020, 022 , or permission of the instructor.
Natural sciences and engineering practicum. 2 credits.
Fall 2011. Hiebert Burch.

## BIOL 126. Biomechanics

Basic principles of solid and fluid mechanics will be explored as they apply to the morphology, ecology, and evolution of plants and animals.
Prerequisites: BIOL 001 and 002 or the equivalent and one other Group II or Group III biology course.
Natural sciences and engineering practicum. 2 credits.
Spring 2012. Merz.

## BIOL 134. Plant Evolution and Adaptation

Plant evolution from the perspective of diverse adaptations such as carnivory, parasitism, pollinator attraction, and light-seeking tropisms. This seminar will also cover adaptations that influence plant species' abilities to respond to human-induced change such as global warming and soil contaminants. Readings from the recent primary literature will be supplemented with selections from Charles Darwin's books on botanical topics.
Independent laboratory and field projects. Prerequisite: Any course numbered BIOL 025 or higher.
Natural sciences and engineering practicum. 2 credits.
Not offered 2011-2012. Purrington.

## BIOL 137. Biodiversity and Ecosystem Functioning

Can the current decline in global biodiversity alter the functioning and stability of ecosystems? The answer to this question can be reached by evaluating the ecological consequences of changing patterns in biodiversity, through either extinction or addition of species. We will review the relative or specific role of extrinsic factors (climate, disturbance, soils, etc.), genetic, taxonomic, and
functional diversity in ecosystem functioning using both experimental and natural evidence. Prerequisite: Any biology course numbered BIOL 026 or higher. Students with preparation outside biology should seek permission of the instructor.
Natural sciences and engineering practicum. 2 credits.
Spring 2012. Machado.

## BIOL 138. Paleontology

The extraordinary diversity of life is the product of the ongoing processes of speciation and extinction. An understanding of the fossil record is essential to the formulation of robust hypotheses about evolutionary history and the relationships that tie together all forms of life. This seminar will use independent research projects and a synthesis of primary literature to highlight the key role that paleontological data play in a range of biological research pursuits. Prerequisites: BIOL 001 and 001 , and any one Group II or Group III course; or permission of the instructor.
Natural sciences and engineering practicum. 2 credits.
Spring 2012. Downs.

Coordinator: ANTHONY FOY (English Literature) Anna Everetts (Administrative Assistant)<br>Committee: Timothy Burke (History)<br>Sydney Carpenter (Studio Art)<br>Anthony Foy (English Literature)<br>Sharon Friedler (Dance)<br>Nina Johnson (Black Studies, Sociology and Anthropology)<br>Cheryl Jones-Walker (Black Studies, Educational Studies) ${ }^{1}$<br>Keith Reeves (Political Science)<br>Micheline Rice-Maximin (Modern Languages and Literatures, French)<br>Peter Schmidt (English Literature)<br>Christine Schuetze (Sociology and Anthropology)<br>Sarah Willie-LeBreton (Black Studies, Sociology and Anthropology)<br>Carina Yervasi (Modern Languages and Literatures, French)

${ }^{1}$ Absent on leave, fall 2011.

The purpose of the Black Studies Program is to introduce students to the history, culture, society, and political and economic conditions of black people in Africa, the Americas, and elsewhere in the world. To explore new approaches-in perspectives, analyses, and interdisciplinary techniques-appropriate to the study of black experience.
Black studies has often stood in critical relation to the traditional disciplines. Its scholars have used traditional and nontraditional methodological tools to pursue knowledge that assumes the peoples and cultures of Africa and the African diaspora are central to understanding the world accurately. The courses in the Black Studies Program at Swarthmore enhance the liberal arts tradition of the College, acknowledging positivist, comparative, progressive, modernist and postmodernist, postcolonial, and Afrocentric approaches.

## The Academic Program Course Minor

Students must successfully complete BLST 015 Introduction to Black Studies, usually in freshman or sophomore year.
Students must earn a grade-point average of 3.0 or above in black studies coursework in order to be accepted into the program.

## Honors Minor

All students participating in the Honors Program are invited to define a minor in the Black Studies Program. Honors minors in black studies must complete a two-credit preparation for their honors portfolio to be submitted to external examiners. The following two options apply:

1. A two-credit honors thesis written under program supervision (counts as one course toward program requirements), or
2. A two-credit approved black studies honors seminar.
Honors minors must meet all other requirements of the interdisciplinary minor in course.

## Requirements and Preparation for Honors

 MinorsThe 2-credit honors thesis must include work done for the interdisciplinary minor and should entail some unifying or integrative principle of coherence. In addition, an honors thesis must also include substantial work (normally 50 percent or more), drawing on a discipline that is outside of the student's major. The Black Studies Committee must approve the proposal for the 2-credit honors thesis, normally during the fall of the student's senior year.
After consultation with the major department, minors may draw on these preparations to enhance or, where appropriate, to integrate their completed or ongoing senior honors study for the major. Work in the Black Studies Program may be represented in the honors portfolio sent to the external examiner by the inclusion of an essay designed to enhance and/or integrate work done in two or more courses, a revised and enriched seminar paper or a term paper from a Black Studies Program course, a video or audio tape of a creative performance activity in dance or music, or other approved creative work.

## Special Major

Students preferring more intensive work in black studies are welcome to design a special major by consulting with the program's coordinator, usually during sophomore year.

## Thesis / Culminating Exercise

Students may complete a 1-credit course thesis (BLST 091) as part of a black studies minor or special major. Permission will be granted only after consultation with the Black Studies Coordinator and committee. Approval must be secured by the spring of junior year.

## Application Process Notes for the Major or the Minor

Students in any department may add an interdisciplinary minor in the Black Studies Program to their departmental major by fulfilling the requirements stated subsequently. Applications for admission to the black studies interdisciplinary minor should be made in the spring semester of the sophomore year to the program coordinator. All programs must be approved by the Committee on Black Studies.

## Life After Swarthmore

Students with a background in black studies have pursued a number of paths after graduation. Some have worked in research, or social service organizations. Others have gone directly to graduate school. Many eventually become teachers or professors. Others work in the broadcasting, arts, journalism, international law, business, finance, or in non-governmental organizations. All consider black studies to have been an important part of their liberal arts education.

## Courses

Courses in the Black Studies Program are listed below. Courses of independent study, special attachments on subjects relevant to black studies, and courses offered by visiting faculty that are not regularly listed in the catalog may also qualify for credit in the program, subject to the approval of the Black Studies Committee. Students who wish to pursue these possibilities should consult with the program coordinator.
The following courses may be counted for credit in the Black Studies Program. Descriptions of the courses can be found in each department's course listings in this catalog.

## Black Studies

## BLST 015. Introduction to Black Studies

This course introduces students to the breadth and depth of the discipline in the Black Studies Program, using primary sources. It begins with an examination of current debates that define theory, method, and goals in black studies. It also examines the movement from the more object-centered Africana studies to subject- and agentic-oriented black studies that occurred as a
result of the U.S. civil rights and anti-colonialist movements in Africa, the Caribbean, and Europe. The course examines the challenges that were levied against traditional academic disciplines with the rise of anti-racist scholarship. It briefly examines the conversation between American, Caribbean, and African postcolonialists, and it allows students to delve into some of black studies' most current and exciting scholarship, with a focus on the United States.
1 credit.
Fall 2011. Johnson.
BLST 031. Documentary of Utility: Documentary Filmmaking Approaches in Africa and the African Diaspora (Cross-listed as FMST 031)
When culture develops in direct relation to political movements-which is often the case for documentary film in Africa, the African Diaspora, and the developing world-the idea of "utility" can be as important a criterion as "form" and "content." This course will provide an historical examination of the "documentary of utility," analyzing films by John Akomfrah (Ghana/U.K.), Linda Bryant (U.S.), Angèle Diabang Brener (Senegal), Raquel Gerber (Brazil), Raoul Peck (Haiti), Jean Rouch (France), and Jean-Mari Teno (Cameroon), among others. Along with exploring issues of aesthetics and structure, we will try to understand the larger context in which these works emerged.
1 credit.
Fall 2011. Massiah.

## BLST 032. Documentary Film Practicum (Cross-listed as FMST 032)

Filmmaker and Lang Visiting Professor Louis Massiah will instruct students in research-based documentary production. Students will work collaboratively to produce short video essays. Students will be asked to begin topic readings over winter break, and principle production will be scheduled during the spring recess. The prerequisite is coursework in political science, history of Third World nations, or extensive reading on the subjects of colonization and/or post-colonialism. Although desirable, no prior filmmaking experience is required. Interested students should arrange a meeting with the professor prior to December 15.
1 credit.
Spring 2012. Massiah.

## BLST 059. The Black Freedom Struggle: From Civil Rights to Hip-Hop

(Cross-listed as HIST 059)
This course is devoted to the study of the black efforts to achieve political, social and economic equality within the United States through protest. Students will investigate the links between protest efforts in the era of World War II, the nonviolent and radical phases of the modern civil rights movement and the development of a new culture of protest in the last quarter of the 20th century. In addition to studying historical texts, students will analyze various forms of protest media such as Black Radio Days, cartoons, paintings and plays of 1960s Black Arts Movement and the poems, lyrics, and graphic art of early hip-hop. 1 credit.
Not offered 2011-2012. Dorsey.
BLST 091. Thesis
Writing course.
1 credit.
Each semester. Staff.

## BLST 092. Seminar in Black Studies

 1 credit.Not offered 2011-2012.

## BLST 093. Directed Reading

1 credit.
Each semester. Staff.

## BLST 180. Honors Thesis

2 credits.
Each semester. Staff.

## Art

ARTH 021. African-American Art and Identity
ARTH 023. African Art
STUA 018. Print Making in Color
Dance
DANC 009. Music and Dance of Africa
DANC 021. History of Dance: Africa and Asia
DANC 043. African Dance I
DANC 049. Performance Dance: Repertory, Section 3: African
DANC 053. African Dance II
DANC 071. Afro-Caribbean Drumming Circle
DANC 078. Dance/Drum Ensemble

## Economics

ECON 073. Race, Ethnicity, and Gender in Economics
ECON 081. Economic Development
ECON 082. The Political Economy of Africa
ECON 171. Labor and Social Economics
ECON 181. Economic Development

## Educational Studies

EDUC 067. Identities and Education
EDUC 068. Urban Education

## English Literature

ENGL 009S. First-Year Seminar: Black
Liberty, Black Literature
ENGL 061. Fictions of Black America
ENGL 062. Black Autobiography
ENGL 063. Black Philadelphia
ENGL 068. Black Culture in a "Post-Soul" Era
ENGL 119. Black Cultural Studies Seminar

## French

FREN 038. Littératures francophones et cultures de l'Immigration en France
FREN 043. Fictions d'enfance
FREN 045. Etudes francophone
FREN 045C. Le monde francophone: Caribbean literatures and culture
FREN 045D. Le monde francophone: African Cinema
FREN 046. Poésies d'écritures françaises
FREN 054. Francophone Cinema:
Configurations of Space in Postcolonial Cinema
FREN 056. Ces femmes qui écrivent/Reading French Women
FREN 077. Prose Francophone: littérature et société
FREN 091. Poétique de la mémoire caraïbe FREN 110. Histories d'Isles
FREN 111. Le Désir colonial: représentations de la différence dans l'imaginaire
FREN 112. Ecritures francophones: fiction et histoire dans le monde francophone
FREN 114. Théâtre d'écritures françaises
FREN 115. Paroles de femmes
History
HIST 007A. African American History, 16191865
HIST 007B. African American History, 1865Present
HIST 008A. West Africa in the Era of the Slave Trade, 1500-1850
HIST 008B. Mfecane, Mines, and Mandela: South Africa From 1650 to the Present HIST 051. Race and Poverty in the United States
HIST 053. Black Women in the Civil Rights Movements
HIST 059. The Black Freedom Struggle: Civil Rights to Hip Hop
HIST 085. African Cities and Their History
HIST 086. The Image of Africa
HIST 087. Development and Modern Africa: Historical Perspectives

## Black Studies

HIST 089. Environmental History of Africa
HIST 137. Slavery: 1550-1865
HIST 138. Black Communities in the United States
HIST 140. The Colonial Encounter in Africa

## Linguistics

LING 052. Historical and Comparative
Linguistics

## Literatures

LITR 075F. Haïti, the French Antilles, and Guyane in Translation

## Music

MUSI 003. Jazz History
MUSI 003A. Jazz Today: USA, Europe and the African Heritage
MUSI 005B. African Music in a
Transcontinental Context
MUSI 061. Jazz Improvisation
MUSI 071. Afro-Caribbean Drum Circle
MUSI 078. Dance/Drum Ensemble

## Political Science

POLS 017. American Political Thought
POLS 033. Race, Ethnicity, and Public Policy
POLS 034. Race, Ethnicity, Representation, and
Redistricting in America
POLS 070B. Politics of Punishment
(instructor's permission required)
POLS 106. The Urban Underclass and Public
Policy (instructor's permission required)

## Religion

RELG 010. African American Religions
RELG 024B. From Vodun to Voodoo: African Religions in the Old and New Worlds RELG 025B. Black Women and Religion in the United States
RELG 109. Afro-Atlantic Religions

## Sociology and Anthropology

SOAN 003F. Culture and Religion in Africa
SOAN 003G. First-Year Seminar: Development and Its Discontents
SOAN 003 H . Introduction to Africa
SOAN 007B. Introduction to Race and Ethnicity in the United States
SOAN 007C. Sociology Through African
American Women's Writing
SOAN 010P. Race and Ethnicity in the United States
SOAN 020B. Urban Education
SOAN 023C. Anthropological Perspectives on Conservation
SOAN 033C. Political Cultures of Africa

SOAN 043D. Africa, Human Rights, and Social Conflict
SOAN 127. Race Theories

# Chemistry and Biochemistry 

ROBERT S. PALEY, Professor ${ }^{2}$<br>PAUL R. RABLEN, Professor and Chair<br>THOMAS A. STEPHENSON, Professor ${ }^{4}$<br>KATHLEEN P. HOWARD, Professor ${ }^{3}$<br>STEPHEN T. MILLER, Associate Professor ${ }^{3}$<br>ALISON E. HOLLIDAY, Assistant Professor<br>LILIYA A. YATSUNYK, Assistant Professor<br>CHRISTOPHER H. HENKELS, Visiting Assistant Professor<br>JOSH J. NEWBY, Visiting Assistant Professor<br>KEVIN D. WELCH, Visiting Assistant Professor<br>VIRGINIA M. HECK, Senior Lecturer<br>MARIA G. NEWPORT, Lecturer<br>CAROLINE A. BURKHARD, Laboratory Instructor<br>DONNA T. HALLEY, Laboratory Instructor<br>LORI P. SONNTAG, Laboratory Instructor<br>DAVID S. TRIMBLE, Instrument Coordinator<br>KATHRYN R. McGINTY, Administrative Assistant

${ }^{2}$ Absent on leave, spring 2012.
${ }^{3}$ Absent on leave, 2011-2012.
${ }^{4}$ Absent on administrative leave, 2011-2012.

The objective of the Chemistry and Biochemistry Department is to offer effective training in the fundamental principles and basic techniques of the science and to provide interested students with the opportunity for advanced work in the main sub-disciplines of modern chemistry.
The department offers a course major, honors major, course minor, and honors minor in chemistry. In addition, the department offers the following special majors: in collaboration with the Biology Department, a course major and an honors major in biochemistry; and in collaboration with the Physics and Astronomy Department, a course major and an honors major in chemical physics. We offer teacher certification in chemistry through a program approved by the state of Pennsylvania. For further information about the relevant set of requirements, please refer to the Educational Studies section.

## The Academic Program

## Course Sequence Recommendations

Students planning a major in chemistry or biochemistry should complete Chemistry $010 / 010 \mathrm{H}$ and 022 during their first year at Swarthmore. During the sophomore year students can take 032 and 038 , or 044 and 045 , if the physics and mathematics requirements for physical chemistry have been completed. In addition, students planning a major in Biochemistry should complete Biology 001 in their first two years at Swarthmore.
In the last two years, chemistry and biochemistry majors have some flexibility about the sequencing of the remaining requirements for the major. However, students
should note that completion of Chemistry $010 / 010 \mathrm{H}, 022$ and one semester of a 40 -level course constitute a minimum set of prerequisites for enrollment in any Chemistry and Biochemistry Department 100-level seminar. In addition, individual seminars carry additional prerequisites so students should plan ahead accordingly.

## Course Major

The course major in chemistry consists of eight required core courses, as well as their mathematics and physics prerequisites, plus a 100 -level elective seminar. All majors must complete the senior comprehensive requirement, as described in a later section.

## Requirements

| CHEM 010/010H | CHEM 022 |
| :--- | :--- |
| CHEM 032 | CHEM 038 |
| CHEM 043 | CHEM 044 |
| CHEM 045 | CHEM 046 |

At least one 100-level seminar
Ancillary Requirements (prerequisites for physical chemistry):

PHYS 003 and PHYS 004/004L (or 007,008)
MATH 034 (Several-Variable Calculus)

## Acceptance Criteria

All applications are reviewed by the entire department. We consider grades in all collegelevel courses in chemistry, biology, mathematics, and physics. Decisions will not normally be made until Chemistry 022 (Organic Chemistry I) is completed and significant progress has been made towards meeting the physics and mathematics prerequisite requirements for enrollment in physical
chemistry. An element in a student's acceptance as a major is our considered judgment of the student's potential for satisfactory performance in advanced course work and fulfillment of the comprehensive requirement.

## Course Minor

## Requirements

The course minor in chemistry has the following requirements:

1. The minor consists of five chemistry credits, plus any prerequisites necessary. The chemistry credits must include $010 / 010 \mathrm{H}, 022$, and 044 and two additional credits, at least one of which must be numbered 40 or higher. Chemistry 1 and research credits $(094,096,180)$ may not be used to fulfill the requirements for the minor.
2. At least four of the five credits must be earned at Swarthmore College.
3. The minor will not be entitled anything other than "chemistry." For example, there will be no minor in "organic chemistry" or "physical chemistry," etc.

## Acceptance Criteria

Applications are reviewed by the entire department, and decisions are made on the basis of the considered judgment of the faculty.

## Honors Major

## Requirements

The requirements are the same as for the course major, with the following differences:

1. Honors chemistry majors must take at least two seminars (instead of one). These seminars (and their associated prerequisites) will serve as two of the honors preparations in the major.
2. Honors chemistry majors must write a senior research thesis. The thesis represents the third honors preparation. Preparation for a Research Thesis within an Honors Program consists of enrollment in two credits of Chemistry 180 during the senior year. Except under extraordinary circumstances, students presenting a thesis for external examination will also spend the summer between their junior and senior years on campus initiating their research project.

## The Honors Exams for Majors and Preparations

The fields offered by the Chemistry and Biochemistry Department for examination by external examiners as part of the Honors Program are the topics of the 100 -level seminars. The department will offer at least three of these preparations (seminars) during each academic year.
All fields in chemistry (except the Research Thesis) will be examined in three hour written examinations prepared by External Examiners.

The Honors Research Thesis will be examined orally by the External Examiner chosen in that field. Honors oral exams for other preparations will be conducted by individual Examiners as well.

## Acceptance Criteria

Applications are reviewed by the entire department, and decisions are made on the basis of the considered judgment of the faculty. To be admitted as a major in the Honors Program, a student must present a minimum of two graded courses in chemistry taken at Swarthmore College. In addition, the department looks for indications that the student will participate actively in seminars and can successfully work in an independent manner. To be eligible, no grade in the department may be below a B- and the GPA in chemistry courses should be 3.0 or higher. A student previously accepted into the Honors Program but not maintaining this GPA in chemistry courses might be, by department decision, asked to withdraw from the Honors Program.

## Honors Minor

## Requirements

The honors minor in chemistry parallels the course minor, except that the program for an honors minors must include a seminar. The seminar serves as the basis of the honors preparation.

## The Honors Exam for Minors and Preparations

All of the fields available to majors are available for students wishing to minor in chemistry, with the exception of the Research Thesis. All minors must meet the same prerequisite requirements for seminars established by the Chemistry and Biochemistry Department majors.

## Acceptance Criteria

Applications are reviewed by the entire department, and decisions are made on the basis of the considered judgment of the faculty. To be admitted as a minor in the Honors Program in chemistry, a student must present a minimum of two graded courses in chemistry taken at Swarthmore College. In addition, the department looks for indications that the student will participate actively in seminars and can successfully work in an independent manner. To be eligible, no grade in the department may be below a B- and the GPA in chemistry courses should be 3.0 or higher. A student previously accepted into the Honors Program but not maintaining this GPA in chemistry courses might be, by department decision, asked to withdraw from the Honors Program.

## Special Major in Biochemistry

The biochemistry major combines work in both the Chemistry and Biochemistry Department and the Biology Department. The requirements for a biochemistry major include all the requirements for a chemistry major plus additional course work in biology.

## Requirements

| CHEM $010 / 010$ H | CHEM 022 |
| :--- | :--- |
| CHEM 032 | CHEM 038 |
| CHEM 043 | CHEM 044 |
| CHEM 045 | CHEM 046 |

At least one biochemically related 100 -level seminar in the Chemistry and Biochemistry Dept. (CHEM 106, 108 or 110)
Ancillary Requirements (prerequisites for physical chemistry):

PHYS 003 and PHYS 004/004L (or 007,008)
MATH 034 (Several-Variable Calculus)
Biochemistry majors must also complete either
(1) a biochemically related sophomore-level Biology course (with lab) and a biochemically related advanced Biology seminar (with lab) or (2) two biochemically related, sophomore-level biology courses (with labs).
Biochemistry-related courses offered in the Biology Department include: BIOL 010 (Genetics), BIOL 014 (Cell Biology), BIOL 016 (Microbiology), BIOL 017 (Microbial Pathogenesis and the Immune Response), BIOL 020 (Animal Physiology), BIOL 022 (Neurobiology), BIOL 024 (Developmental Biology) and BIOL 025 (Plant Biology). Please note the biology prerequisites for these courses and plan accordingly.
Biochemistry-related seminars offered in the Biology Department include: BIOL 110 (Human Genetics), BIOL 111 (Developmental Genetics), BIOL 114 (Symbiotic Interactions), BIOL 115 (Plant Developmental Biology), BIOL 116 (Microbial Processes and Biotechnology), BIOL 123 (Learning and Memory), and BIOL 124 (Hormones and Behavior). Please note the biology prerequisites for these courses and plan accordingly.

## Comprehensive Requirement

The comprehensive requirement for biochemistry majors is the same as for chemistry majors.

## Acceptance Criteria

Acceptance criteria are the same as for chemistry majors.

## Requirements for Honors Major in Biochemistry

The honors biochemistry major has the same set of requirements as the course biochemistry major, plus the requirement of four honors
preparations in at least two departments must also be met, as follows

1. Topics in Biochemistry (CHEM 108) or Biophysical Chemistry (CHEM 110) or Bioinorganic Chemistry (CHEM 106).
2. One biochemically oriented preparation from the Biology Department.
3. A two-credit biochemically oriented Research Thesis carried out under the supervision of faculty from the Chemistry and/or Biology Departments.
4. One additional preparation chosen from the Chemistry and Biochemistry Department or from biochemically related preparations offered by either the biology or psychology departments.

## Special Major in Chemical Physics

The chemical physics major combines course work in chemistry and physics at the introductory and intermediate levels, along with some advanced work in physical chemistry and physics, for a total of between 10 and 12 credits. Laboratory work at the advanced level in either chemistry or physics is required; math courses in linear algebra and multivariable calculus are prerequisites to this work.

## Requirements

In preparation for a major in chemical physics, students must complete by the end of the sophomore year: (1) CHEM 010/010H and 022;
(2) PHYS 005, 007, 008 (PHYS 003, 004 can substitute, but the $005,007,008$ sequence is strongly recommended); (3) further work appropriate to the major in either CHEM (044, 045, 043, and/or 046) or PHYS (014 and 050); (4) MATH 034. A chemical physics major will ordinarily include both semesters of physical chemistry (CHEM 044 and 045). A student may satisfy the requirement for laboratory work at the advanced level by completing a research thesis (CHEM 096 or 180), but in the absence of a research thesis, the major must include CHEM 043 or 046 or PHYS 082 in order to satisfy the requirement.
Example of a special major in chemical physics: CHEM 022, 043, 044, 045, 046, 105; PHYS 007, 008, 014, 050, 111, 113.

## Comprehensive Requirement

The comprehensive requirement for chemical physics majors is the same as for chemistry majors. Occasionally, however, and on a case-by-case basis, the department is willing to negotiate a "hybrid" colloquium series for students completing a chemical physics special major. In consultation with both departments (chemistry and biochemistry and physics and astronomy), the student may draw up a list of colloquia pertinent to the special major and
taken partly from the colloquium series of each department, and then participate in only these colloquia. However, in no event will the total number of talks for the year amount to fewer than the number of colloquia scheduled for the Chemistry and Biochemistry series.

## Acceptance Criteria

Acceptance criteria are the same as for chemistry majors, except that the faculty of both the chemistry and biochemistry and physics and astronomy departments are actively involved in the decision.

## Requirements for Honors Major in Chemical Physics

The Honors Chemical Physics Major has the same set of requirements as the Course Chemical Physics Major, plus the requirement of four Honors Preparations in at least two departments must also be met, as follows:

1. One preparation (seminar) chosen from the Chemistry and Biochemistry Department.
2. One preparation (seminar) chosen from the Physics and Astronomy Department.
3. A two-credit Research Thesis carried out under the supervision of faculty from the Chemistry and/or Physics Departments.
4. One additional preparation chosen from the Chemistry and Biochemistry Department or from the Physics and Astronomy Department.

## Thesis / Culminating Exercise

## Comprehensive Requirement

The senior comprehensive requirement in the Chemistry and Biochemistry Department consists of two components.
The first component revolves around the department's Colloquium Series. During the academic year, speakers from other institutions visit our campus and present colloquia about their research. Each speaker recommends a small amount of published background material, which students and faculty read in preparation for the visit. These materials also serve as the basis for a "preview session," during which a small group of students presents background and context for the speaker's research. All senior majors are required to (1) attend the preview sessions, (2) review the suggested readings, (3) participate as a presenter in at least one preview session during the year, and (4) attend the colloquium presentations themselves.
The department offers two routes for satisfying the second component of the comprehensive requirement:
a. Completion of a two-credit research thesis. The thesis must be based on research carried out during the senior year and, in most cases,
the preceding summer as well. Honors majors must choose this option.
b. Senior majors who do not write a research thesis must take a series of short exams administered throughout the academic year. These exams are based on the presentations made by speakers in the department's Colloquium Series and the literature readings that the speakers suggest. The following regulations will govern the exams:

1. The department will administer a minimum of 8 exams during each academic year.
2. An exam will generally be administered during the week following a speaker's presentation.
3. The exams will be designed such that prepared students should be able to answer the question(s) in 30 minutes or less.
4. Satisfactory performance on any 5 of the exams constitutes completion of this component of the comprehensive requirement.

## Advanced Placement/International Baccalaureate Credit

Students with a score of 5 on the Chemistry AP exam (taken their junior year in high school or later) or a score of 6 or 7 on the Higher Chemistry IB exam are given the option of placement into Honors General Chemistry (Chemistry 10H). First year students can use the Chemistry Placement Exam to place into Chemistry 10H in the absence of an AP/IB score.

## Transfer Credit

It is sometimes possible to receive Swarthmore credit for chemistry courses taken at other colleges and universities. If you wish to take a chemistry course on another campus and to receive Swarthmore credit for doing so, it is essential that you follow the proper procedure, and that you plan in advance. It is also important to realize that not all courses will be eligible for credit. See the following website for details: www.swarthmore.edu/x29341.xml.

## Off-Campus Study

The Chemistry and Biochemistry Department is eager to accommodate the study abroad aspirations of chemistry and biochemistry majors. However, substantial advance planning is required and interested students are encouraged to plan their Sophomore Paper carefully and consult with their academic adviser.

## Research

The Chemistry and Biochemistry Department offers opportunities for students to engage in collaborative research with faculty members. Each fall semester, the department hosts a series of short presentations by faculty members, outlining the research projects available. This meeting, normally held in November, serves as the starting point for student participation in research during the following summer and/or academic year.

## Academic Year Opportunities

The Department of Chemistry and Biochemistry offers three ways for students to engage in supervised research for academic credit, during the academic year:
a. CHEM 094 (research project). Students may enroll in this course for either a half credit or a full credit. A half credit implies a time commitment of 5-7 hours per week, while a full credit implies a time commitment of $10-15$ hours per week.
b. CHEM 096 (research thesis). A full year (two credits) of CHEM 096 corresponds to a research thesis for course majors.
c. CHEM 180 (honors research thesis). A full year (two credits) of CHEM 180 corresponds to a research thesis for honors majors.
All students who enroll for at least one full credit of research during an academic year are required to participate in the department's Colloquium Series and present a poster sometime during the academic year.

## Research Conducted in Other Departments

Students writing a research thesis as part of their plan to satisfy the comprehensive requirement in a chemistry, biochemistry, or chemical physics major (see above) sometimes elect to carry out their research with a faculty member in an allied department, such as biology, physics and astronomy, or engineering. In general, such students have two options for how to register for courses corresponding to the thesis:
Option 1: Use the appropriate chemistry courses (two credits of CHEM 096 for a course thesis, or two credits of CHEM 180 for an honors thesis).
Option 2: Use the course designations appropriate to the department in which the research is conducted. For research conducted with a biology faculty member, for instance, a student might enroll in one credit of BIOL 180 and one credit of BIOL 199 over the course of the senior year. The thesis must ultimately consist of at least two full credits.

## American Chemical Society Certification

Certification by the American Chemical Society (ACS) is useful for those who intend to pursue a career in chemical industry. In addition to the minimum chemistry major requirements, certification requires a second seminar and a research thesis through a full year of CHEM 096 or 180.

## Courses

## CHEM 001. Chemistry in Context: Applying Chemistry to Society

This course covers a series of real-world issues with significant chemical content. Topics will be drawn from areas such as environmental chemistry, energy sources, materials, and human health. The course seeks to develop in students the ability to make informed decisions about issues that intersect with technology. Students may not receive credit for CHEM 001 if they have previously received credit for CHEM 010 or CHEM 010H.
One laboratory period every second week. Natural sciences and engineering practicum. 1 credit.
Spring 2012. Henkels.

## CHEM 010. General Chemistry

A study of the general concepts and basic principles of chemistry, including atomic and molecular structure, bonding theory, molecular interactions, and the role of energy in chemical reactions. Applications will be drawn from current issues in fields such as environmental, biological, polymer, and transition metal chemistry. CHEM 010 is the normal point of entry for the chemistry and biochemistry curriculum.
One laboratory period weekly.
Natural sciences and engineering practicum. 1 credit.
Fall 2011. Henkels.
Spring 2012. Holliday.

## CHEM 010H. General Chemistry Honors Course

Topics will be drawn from the traditional general chemistry curriculum but discussed in greater detail and with a higher degree of mathematical rigor. Special emphasis will be placed on the correlation of molecular structure and reactivity, with examples drawn from such fields as biological, transition metal, organic, polymer, and environmental chemistry. Some familiarity with elementary calculus concepts will be assumed.
Class of 2014 and earlier: Can be taken only as a first-year student.

Class of 2015 and later: Can be taken as either a first or second year student.
One laboratory period weekly.
Prerequisite: A score of 5 on the Advanced Placement Chemistry Examination taken junior year in high school or later, a score of at least 6 on the International Baccalaureate advanced (higher level) chemistry examination or by performance on the departmental placement examination given the week prior to the start of classes of a student's first-year at Swarthmore.
Natural sciences and engineering practicum. 1 credit.
Fall 2011. Yatsunyk.

## CHEM 022. Organic Chemistry I

An introduction to the chemistry of some of the more important classes of organic compounds; nomenclature, structure, physical and spectroscopic properties; methods of preparation; and reactions of aliphatic and aromatic hydrocarbons, halides, and monofunctional oxygen compounds, with an emphasis on ionic reaction mechanisms. One laboratory period weekly.
Prerequisite: CHEM 010 or CHEM 010 H . Natural sciences and engineering practicum. 1 credit.
Spring 2012. Rablen.

## CHEM 032. Organic Chemistry II

A continuation of CHEM 022 with emphasis on more advanced aspects of the chemistry of monofunctional and polyfunctional organic compounds, multistep methods of synthesis, and an introduction to bio-organic chemistry. One laboratory period weekly.
Prerequisite: CHEM 022.
Natural sciences and engineering practicum. 1 credit.
Fall 2011. Paley.

## CHEM 038. Biological Chemistry

An introduction to the chemistry of living systems: protein conformation, principles of biochemical preparation techniques, enzyme mechanisms and kinetics, bioenergetics, intermediary metabolism, and molecular genetics.
One laboratory period weekly.
Prerequisite: CHEM 032.
Natural sciences and engineering practicum. 1 credit.
Spring 2012. Henkels.

## CHEM 043. Analytical Methods and Instrumentation

An introduction to the techniques and instrumentation used for the separation,
identification, and quantification of chemical species. Special emphasis will be placed on the means to select a technique and how to interpret and evaluate the resulting data. Topics will include sampling, statistical analysis, spectroscopy, mass spectrometry, and separation methods.
One laboratory period weekly.
Prerequisites: CHEM 022 plus two more semesters of college-level laboratory work in chemistry; at the discretion of the instructor, a semester of laboratory work in another discipline may substitute for one of the required semesters of chemistry laboratory.
Natural sciences and engineering practicum. 1 credit.
Fall 2011. Holliday. (class size limited)

## CHEM 044. Physical Chemistry: Atoms, Molecules and Spectroscopy

A quantitative approach to the description of structure in chemical and biochemical systems. Topics will include introductory quantum mechanics, atomic/molecular structure, a range of spectroscopic methods and statistical mechanics. Systems of interest will range from gas-phase single molecules to condensed-phase macromolecular assemblies.
One laboratory period weekly.
Prerequisites: CHEM 010/010H/;MATH 25 (or equivalent); and PHYS 003 and 004 (or 003, 004L, or 007, 008). Prior enrollment in MATH 034 (or equivalent) is recommended.
Natural sciences and engineering practicum.
1 credit.
Fall 2011. Newby.

## CHEM 045. Physical Chemistry: Energy and Change

A quantitative approach to the role that energy and entropy play in chemical and biochemical systems. Topics include states of matter, the laws of thermodynamics, chemical equilibria, electrochemistry, the thermodynamics of solutions and phases and chemical kinetics/dynamics. Examples will be drawn from both real and ideal systems in chemistry and biochemistry.
One laboratory period weekly.
Prerequisites: CHEM 010/010H/; PHYS 003, 004 (or 003, 004L, or 007, 008) and MATH 034 (or equivalent);
Natural sciences and engineering practicum.
1 credit.
Spring 2012. Newby.

## CHEM 046. Inorganic Chemistry

A study of the structure, bonding, and reactivity of inorganic compounds with emphasis on the transition metals. Included in the syllabus are

## Chemistry and Biochemistry

discussions of crystal and ligand field theories, organometallic chemistry, and bioinorganic chemistry. The laboratory component emphasizes the synthesis, spectroscopy, and magnetic properties of transition metal complexes including organometallic substances and ones of biochemical interest.
One laboratory period weekly.
Prerequisite: Four semesters of college chemistry with laboratory.
Natural sciences and engineering practicum. 1 credit.
Spring 2012. Yatsunyk.

## Seminars

Students should note that completion of CHEM $010 / 010 \mathrm{H} / 022$, and one semester of a 40 -level course constitute a minimum set of prerequisites for enrollment in any Chemistry and Biochemistry Department seminar. In unusual circumstances, the department will consider whether completion of work of comparable sophistication in another department can substitute for the requirement that a 40-level chemistry course be completed prior to enrollment in a seminar. Individual seminars carry additional prerequisites, as listed here.

CHEM 102. Topics in Organic Chemistry
This course will address selected advanced topics of current interest in the field of synthetic organic chemistry. Material will largely be drawn from the current research literature and will likely include such topics as the applications of stoichiometric and catalytic organometallic chemistry, the control of relative and absolute stereochemistry, the use of "organocatalysts," and carbohydrates. The total synthesis of architecturally challenging natural products will serve to highlight the application of these technologies.
Additional prerequisite: CHEM 032, CHEM 044,045 or 046.
1 credit.
Not offered 2011-2012.

## CHEM 103. Topics in Environmental Chemistry

This course will focus on the use of fundamental chemical principles to understand the source, distribution, impact, and possible remediation of anthropogenic pollutants in the environment. Discussions will center on environmental issues raised in both popular media and current scientific literature. Topics may include air pollution, greenhouse gases, ozone depletion, acid rain, and water and soil pollutants, such as heavy metals and pesticides.

Additional prerequisite: CHEM 043.
1 credit.
Spring 2012. Holliday.

## CHEM 105. Quantum Chemistry and Spectroscopy

Advanced consideration of topics in quantum mechanics including the harmonic oscillator, angular momentum, perturbation theory, and electron spin. These concepts, along with molecular symmetry and group theory, will be applied to the study of atomic and molecular spectroscopy.
Additional prerequisite: CHEM 044, MATH 34 (or equivalent). Some familiarity with linear algebra will be useful.
1 credit.
Not offered 2011-2012.

## CHEM 106. Topics in Bioinorganic Chemistry

This seminar will start with a brief review of the basic principles of inorganic and biological chemistry as well as an overview of relevant biophysical techniques. Materials will be drawn largely from the primary literature. Students will be challenged to read and evaluate scientific papers critically. The main topics of this course will have to do with the function and coordination of metals in biological systems: important cofactors and metal clusters that carry out catalysis and electron transfer reactions, metal homeostasis, metals in medicine, and the importance of inorganic model compounds to understand the function of biological systems. Additional prerequisites: CHEM 038 and CHEM 046.
1 credit.
Spring 2012. Yatsunyk.

## CHEM 108. Topics in Biochemistry

Physical methods used to study high-resolution biomacromolecular structure will be discussed, using examples from the primary literature. Techniques used to measure the forces stabilizing intramolecular and intermolecular interactions and their application to proteins will be included.
Recent developments in the rational design of ligands for biological receptors, based on results from the physical methods described previously, will be used to highlight the importance of diverse approaches to the study of biomolecular recognition.
Additional prerequisites: CHEM 038, CHEM
044 or 045
1 credit.
Fall 2011. Henkels.

## Chemistry and Biochemistry

## CHEM 110. Topics in Biophysical Chemistry

An introduction to the interdisciplinary field of biophysical chemistry in which biological systems are explored using the quantitative perspective of the physical scientist.
Prerequisite: CHEM 038, CHEM 044 or 045
1 credit.
Not offered 2011-2012.

## Student Research

All students who enroll in one or more research courses during the academic year are required to participate in the department's colloquium series and present the results of their work at a poster session during the academic year.

CHEM 094. Research Project
This course provides the opportunity for qualified students to participate in research with individual staff members. Students who propose to take this course should consult with the staff during the preceding semester concerning areas under study. This course may be elected more than once. Students may enroll in this course for either a half credit or a full credit. A half credit implies a time commitment of 5-7 hours per week, while a full credit implies a time commitment of 10-15 hours per week.
0.5 or 1 credit.

Each semester. Staff.

## CHEM 096. Research Thesis

Chemistry and biochemistry majors will be provided with an option of writing a senior research thesis as part of their comprehensive requirement. Thesis students are strongly urged to participate in on-campus research during the summer between their junior and senior years. A minimum of 2 credits of CHEM 096 must be taken during the last three semesters of the student's residence at Swarthmore.
1 credit.
Each semester. Staff.

## CHEM 180. Honors Research Thesis

An opportunity for students in the External Examination Program to participate in research with individual staff members. The thesis topic must be chosen in consultation with a member of the faculty and approved early in the semester preceding the one in which the work is to be done. A minimum of 2 credits of CHEM 180 must be taken during the last three semesters of the student's residence at Swarthmore.
1 credit.
Each semester. Staff.

ROSARIA V. MUNSON, Professor WILLIAM N. TURPIN, Professor and Chair GRACE M. LEDBETTER, Associate Professor JEREMY LEFKOWITZ, Assistant Professor DEBORAH SLOMAN, Administrative Assistant

The field of classics is devoted to the study of the ancient Greeks and Romans, especially (in this department) their languages, literatures, histories, religions, and philosophies. Since most advanced work in classics demands knowledge of the original languages, the department regards the teaching of the Greek and Latin texts as its central enterprise. Students who believe they have a genuine interest in some facet of the classical world will, ideally, begin studying Greek and Latin early in their college career.
It is also possible to study various sub-fields of the classics (and to minor in ancient history) without knowing the languages. Courses in ancient history, literature in translation, mythology, and philosophy assume no knowledge of either Greek or Latin and have no prerequisites. Furthermore, the courses in ancient history count as prerequisites toward advanced courses in the History Department and as part of a major in history.

## The Academic Program

Greek, Latin, or ancient history may be a student's major or minor subject in either the Course or the Honors Program. All three majors require advanced work in one of the original languages. It should be noted that there is no classical studies major, and that courses in English translation other than ancient history courses do not normally count towards a major. Acceptance into one of the majors is dependent on promising work in language courses (normally indicated by A's and B's) and an interest and ability in the study of literary, philosophical, or historical problems. Where there is a deficiency in the quality or quantity of prerequisite work, the department will still consider accepting or provisionally accepting a student who is willing to do extra preparation, for example, over the summer.

## Course Major

A major in Greek normally consists of at least eight credits in Greek beyond GREK 001-002 and at least three seminars. A major in Latin normally consists of at least eight credits in Latin beyond LATN 001-002 and at least three seminars. A major in ancient history consists of four ancient history courses (CLAS 031, 032, $042,044,056$, or 066); a one-credit attachment (a substantial independent project consisting of a thesis or a set of two or three related, shorter
papers) to any of those history courses; another attachment to a second course or else any other course in ancient history or classical civilization; and a Latin or Greek seminar. In addition: a second seminar in Latin or Greek can be substituted for two courses in translation. Admittance to seminars is based upon the student's ability to read Greek or Latin with the needed speed and comprehension. Those who intend to major or minor in Greek or Latin, or to major in ancient history, should complete the appropriate language courses numbered 011 and 012 (or their equivalent) as early as possible.
In their last semester, majors in the Course Program take a comprehensive exam, including a written exam on three fields (usually corresponding to seminars taken) and an oral exam given by members of the department.

## Course Minor

A Course minor in Greek or Latin will consist of five credits of work in either language above the first-year level, and must include at least one two-credit seminar. Minors are strongly encouraged to take more than one seminar. A course minor in ancient history will consist of four courses in ancient history, and an attachment to one of them. That attachment will be presented to members of the department for evaluation and oral examination.

## Honors Program in Classics

For a major in Greek or Latin, preparation for honors exams will normally consist of three seminars; students may take a fourth seminar in the major, but not for external examination. A student minoring in Greek or Latin will take one external examination based on one seminar. Minors are, however, strongly encouraged to take more than one seminar, in order to be adequately prepared for the examination.
For a major in Ancient History, one preparation will be a seminar in either Latin or Greek. The other two preparations can be another seminar in the same language and a course-plusattachment, or two courses-plus-attachments. Students minoring in ancient history will take three courses in ancient history and add an attachment to one of them. That course-plusattachment will be the preparation for the external exam. No ancient language is required for this minor.

Senior majors and minors will select one paper from each seminar to be sent to the external examiner for that seminar. The student is free to submit the paper with minor or major revisions or no revisions at all. The department suggests a word limit of 1,500-2,500 words as an appropriate guideline though there are no absolute limits (except the College senior honors seminar limit of 4,000 words). Majors will, therefore, submit three such papers, and minors will submit one. Senior Honors Study is not required for students whose Honors preparation is a course with an attachment. The portfolio sent to external examiners will contain the seminar papers, together with syllabi and related materials, if any, from the instructors. A combination of (three-hour) written and oral exams will be the mode of external assessment for seminars. For course-plus-attachment, examiners will receive the course syllabus and the written product of the attachment. The exam will be just an oral assessment.

## Thesis / Culminating Exercise

Course majors will take comprehensive examinations, written and oral, administered by the department.

## Advanced <br> Placement/International Baccalaureate Credit

The department will grant one credit for one or more grades of 5 on the Latin AP, or the IB equivalent.

## Off-Campus Study

A semester of off-campus study is usually possible for all majors in classics. The department is a member of the Intercollegiate Center for Classical Studies in Rome, and encourages students in their junior year to participate, preferably in the fall semester. The ICCS program offers traditional courses in Greek, Latin, Italian and renaissance and baroque art history, and a required two-credit course based on first-hand exposure to the archaeological and artistic monuments of the ancient world to be found in Rome, the Bay of Naples, and Sicily.

## Transfer Credit

Transfer credit is offered on the same basis as credit from off-campus study. Swarthmore students taking classes elsewhere should consult the chair for in advance on the amount of credit likely to be available, and, where necessary, to identify the appropriate department and division. As with study abroad,
students should retain all written assignments and present copies to the chair for assessment.

## Research

The department sometimes sponsors students in independent summer research, usually in cooperation with a faculty member. It regularly supports the summer study of Latin and Greek at other institutions, especially at the intermediate and introductory levels. In particular our students have had success with intensive summer courses in elementary Latin and Greek at Berkeley, CUNY, and University College, Cork. The department has also supported students participating in archeological excavations of classical sites, especially the Anglo-American Project at Pompeii (presently suspended but perhaps to be revived) and the SMU / Franklin and Marshall field school at Poggio Colla in Tuscany.

## Teacher Certification

The department is happy to cooperate with the Educational Studies Department in observing student teachers, especially of Latin.

## Life After Swarthmore

Perhaps about half of our majors, and some minors, go on to pursue careers as professional classicists, at both the college and secondary levels. Swarthmore students well prepared in both Latin and Greek are competitive candidates for excellent graduate programs in classics, and in related fields such as medieval studies, English, history, and archaeology. Students who come to one or both languages relatively late have had success in the Postbaccalaureate Program in Classics at the University of Pennsylvania. Others have successfully obtained teaching positions in secondary schools, both public and private; it is worth mentioning that there is a significant demand for teachers of Latin, particularly at the secondary level, and some states, including Pennsylvania, make it possible to teach Latin in public schools before obtaining professional certification.
Other majors have successfully pursued careers only tangentially related to classics, often after attending professional school. There are Swarthmore classicists in law, medicine, business, art, and music, and many other walks of life.

## Greek

## GREK 001-002. Intensive First-Year Greek

Students learn the basics of the language and are introduced to the culture and thought of the Greeks. The course typically ends with a short
dialogue of Plato. The course meets four times a week and carries 1.5 credits each semester. Students who start in the GREK 001-002 sequence must pass GREK 002 to receive credit for GREK 001.
Humanities. 1.5 credits.
Year-long course.
Fall 2011. Turpin/Munson. Spring 2012. Lefkowitz/Ledbetter.

GREK 010. Greek Prose Composition Extensive translation of English into Greek. Meets 1 hour per week.
Humanities. 0.5 credit.
Not offered 2011-2012.
GREK 011. Plato and Socratic Irony
This course will focus on the Socratic dialogues of Plato. Emphasis will be placed on the development of skill in reading and composing Greek but also on analysis of the characteristics and techniques of the Platonic dialogue form and Plato's philosophy. We will split our time between critical reading of sections of the dialogues; grammar, syntax, and vocabulary review; and discussion of topics touched on in the texts. GREK 011 is normally taken after GREK 002.
Humanities. 1 credit.
Fall 2011. Ledbetter.

## GREK 012. Homer's Iliad

This course examines the literary, historical, and linguistic significance of Homer's Iliad. Selections from the poem are read in Greek and the entire poem is read in translation.
Humanities. 1 credit.
Spring 2012. Munson.

## GREK 093. Directed Reading

Independent work for advanced students under the supervision of an instructor.
1 credit.

## Latin

LATN 001-002. Intensive First-Year Latin
Students learn the basics of the language, begin reading major classical writers, and are introduced to the culture and thought of the Romans. The course meets four times a week and carries 1.5 credits each semester.
Students must pass LATN 002 to receive credit for LATN 001 .
Humanities. 1.5 credits each semester.
Year-long course.
Fall 2011. Munson/Turpin. Spring 2012.
Ledbetter/Lefkowitz.

## LATN 009. Latin Prose Composition

Extensive translation of English into Latin. Meets 1 hour per week.
Humanities. 0.5 credit.
Not offered 2011-2012.

## LATN 011. Catullus and His World

After a review of grammar, students read and discuss some of the major poets of the Golden Age of Roman literature, primarily Catullus. The course emphasizes both language skills and literary criticism, focusing on the special characteristics and concerns of Roman poetry. Prerequisite: Normally taken after LATN 002 or 3 to 4 years of high school Latin.
Humanities. 1 credit.
Not offered 2011-2012.

## LATN 013. Tradition and Transformation in the Roman Empire

Selected readings by the poet Ovid. Topics will include the range of poetic genres in which Ovid wrote, the characteristics of his writing that remain stable across these different genres, and Ovid's relationship to the history and culture of the time in which he lived.
Prerequisite: LATN 011 or its equivalent.
Humanities. 1 credit.
Not offered 2011-2012.

## LATN 014. Medieval Latin

Readings are chosen from the principal types of medieval Latin literature, including religious and secular poetry, history and chronicles, saints' lives, satire, philosophy, and romances. Prerequisite: LATN 011 or its equivalent.
Humanities. 1 credit.
Not offered 2011-2012.

## LATN 015. Pleasure and Virtue in Rome

Selected readings in the Latin poetry of love and death. Authors may include Propertius, Tibullus, Sulpicia, and Ovid as well as some of the later elegists.
Prerequisite: LATN 011 or its equivalent.
Humanities. 1 credit.
Not offered 2011-2012.

## LATN 017. Latin Poetry and the Modernists

This course explores Latin poems influential in the creation of the modernist verse of, in particular, Ezra Pound and T.S. Eliot. The Latin texts are read in the original, for their own sake and in their own context. But we also explore the readings given them by the modernists, in an attempt to assess the uses and importance of their common literary tradition.

Prerequisite: LATN 011 or its equivalent. Humanities. 1 credit.
Not offered 2011-2012.

## LATN 019. Roman Imperial Literature

This course will consider selected poetry or prose from the Roman imperial period. Authors may include Vergil, Ovid, Seneca, Juvenal, Tacitus, or others. The course is appropriate for students who have done at least one college Latin course at the intermediate level and for some students who have done college-level Latin in high school. Students with no previous Latin courses at the college level should consult the department chair before enrolling.
Humanities. 1 credit.
Not offered 2011-2012.

## LATN 021. Republican and Augustan Latin Literature

We will read selections from Latin prose authors, particularly those associated with the civil war and the rise of the Augustan principate. Typical authors include Cicero, Caesar, Sallust, Livy, and Augustus himself. The course will view its texts in the context of both political and literary history.
Humanities. 1 credit.
Not offered 2011-2012.

## LATN 023. The Roman Novel

This course focuses on Petronius' Satyricon and/or Apuleius' Golden Ass. Besides reading extensively from the works themselves, we will consider what the genre "novel" means in Latin, what these works have to tell us about Roman society and language, and various other topics arising from the novels and from contemporary scholarship about them.
1 credit.
Spring 2012. Turpin.

## LATN 025. Latin Poetry and the English Renaissance

Ben Jonson said that Shakespeare had "small Latin and less Greek," but all products of the Elizabethan grammar schools were steeped in Latin literature. This course will explore some of their seminal Latin texts, including Ovid's Amores; Horace's Odes, and Vergil's Eclogues. We will also read some of the English poems most directly influenced by these Latin works, by poets such as Donne, Spenser, Marvell, Lovelace, Herrick, Rochester, and Milton.
Writing course.
1 credit.
Fall 2011. Turpin.

## LATN 093. Directed Reading

Independent work for advanced students under the supervision of an instructor.
1 credit.

## Ancient History

All of the courses in ancient history are distributions in social sciences. They also count as prerequisites for advanced courses in the History Department and as part of a major in history.

## CLAS 031. The Greeks and the Persian Empire

This course studies the political and social history of Greece from the Trojan War to the Persian Wars. We will examine the connections between Greeks and non-Greeks and their perceptions of mutual differences and similarities. Readings include Homer, Hesiod, the lyric poets (including Sappho), and Herodotus and Near Eastern documents.
Social sciences. 1 credit.
Not offered 2011-2012.

## CLAS 032. The Roman Republic

This course studies Rome from its origins to the civil wars and the establishment of the principate of Augustus (753-27 B.C.E.). Topics include the legends of Rome's foundation and of its republican constitution; the conquest of the Mediterranean world, with special attention to the causes and pretexts for imperialism; the political system of the Late Republic, and its collapse into civil war.
Writing course.
Social sciences. 1 credit.
Not offered 2011-2012.

## CLAS 042. Democratic Athens

Using diverse primary sources (Thucydides' Histories, tragedy, comedy, and others), this course explores several aspects of classical Athenian culture: democratic institutions and ideology, social structure, religion, intellectual trends, and the major historical events that affected all of these and shaped the Greek world in the fifth and early fourth centuries B.C.E. Writing course.
Social sciences. 1 credit.
Fall 2011. Munson.

## CLAS 044. The Early Roman Empire

A detailed study of the political, economic, social, and cultural history of the Roman world from the fall of the Republic through the Antonine Age (50 B.C.E.-C.E. 192). Ancient
authors read include Petronius; Apuleius; Suetonius; and, above all, Tacitus.
Writing course.
Social sciences. 1 credit.
Not offered 2011-2012.

## CLAS 056. Pagans and Christians in the Roman Empire

This course considers the rise of Christianity and its encounters with the religious and political institutions of the Roman Empire. It examines Christianity in the second and third centuries of the Common Era and its relationship with Judaism, Hellenistic philosophies, state cults, and mystery religions and concentrates on the various pagan responses to Christianity from conversion to persecution. Ancient texts may include Apuleius, Lucian, Marcus Aurelius, Porphyry, Justin, Origen, Lactantius, Tertullian, and the Acts of the Christian Martyrs.
No prerequisite exists, though CLAS 044 (Early Roman Empire) and RELG 004 (New Testament and Early Christianity) provide useful background.
Writing course.
Social sciences. 1 credit.
Spring 2012. Turpin.

## CLAS 066. Rome and Late Antiquity

This course will consider the history of the Roman Empire from its near collapse in the third century C.E. through the "conversion" of Constantine and the foundation of Constantinople to the sack of Rome by Alaric the Visigoth in 410 C.E. Topics will include the social, political, and military aspects of this struggle for survival as well as the religious and cultural conflicts between pagans and the Christian church and within the Church itself. Principal authors will include Eusebius, Athanasius, Julian the Apostate, Ammianus Marcellinus, Ambrose, and Augustine.
Writing course.
Social sciences. 1 credit.
Not offered 2011-2012.

## CLAS 093. Directed Reading

Independent work for advanced students under the supervision of an instructor. 1 credit.

## Literature in Translation

## CLAS 011. First-Year Seminar: Persuasion and Power in Ancient Greece

This course studies the craft of public speaking in ancient Greece and its role in the formation of a civic identity, democratic deliberation, and judicial proceedings. Readings will include the
authoritative utterances of Homeric heroes (Achilles in the Iliad), rhetorical displays of sophists and politicians (Gorgias, Antiphon, Pericles in Thucydides, Demosthenes), and court speeches (Lysias). We will also examine the first theoretical formulations by Plato, Aristotle, and others of the goals and instruments of rhetoric. We will also explore ancient exemplars in the light of modern political discourse.
Writing course.
Humanities. 1 credit.
Not offered 2011-2012.

## CLAS 013. First-Year Seminar: Mythology

This course examines selected myths in such major works of Greek and Latin literature as Homer's Iliad and Odyssey, the tragedies of Aeschylus, Sophocles, and Euripides, Virgil's Aeneid, and Ovid's Metamorphoses. Specific texts and images are treated both as individual stories and in relation to other texts and images that tell the same mythological tale. Primary texts are supplemented by modern theoretical readings in gender, psychology, and literary theory.
Writing course.
Humanities. 1 credit.
Not offered 2011-2012.
CLAS 014. First-Year Seminar: Mystery Religions and the Greek Philosophers What do ancient mystery religions teach us about spiritual transformation and contact with the divine? What were the secret rites of these religions? How do their mythological themes have universal value? Why are the language and themes of mystery traditions so central to the philosophical thought of Parmenides, Empedocles, and Plato? This seminar will study texts associated with Orphism, Pythagoreanism, the Eleusinian and Dionysian mystery cults, Isis and Osiris, and Presocratic and Platonic philosophy. Readings may include The Homeric Hymn to Demeter; Euripides' Bacchae; fragments of Parmenides and Empedocles; the Derveni Papyrus; Plato's Phaedo, Symposium, and Phaedrus; and Apuleius' Golden Ass. Topics discussed will include cosmology, mystical knowledge/ascent; philosophical method; allegorical interpretation; immortality of the soul; archetypal figures of mother/daughter and rebirth.
Writing course.
Humanities. 1 credit.
Fall 2011. Turpin.
CLAS 015. First-Year Seminar: Dante With Virgil, Beatrice, and Dante-poet as guides, we shall follow the Pilgrim on a journey of
despair, hope, and redemption. We shall read the Divine Comedy in its entirety, teasing out the poem's different levels of meaning and reconstructing Dante's world view in the context of Medieval culture: his thought on life, death, love, art, politics, history and God.
Writing course.
Humanities. 1 credit.
Not offered 2011-2012

## CLAS 019. First-Year Seminar: The Birth of Comedy

Investigate the origins of comedy in antiquity through a selection of plays by the four surviving comedians (Aristophanes, Menander, Plautus, Terence) along with a survey of comic theory, both ancient and modern. The history of the genre, its evolution, conditions of performance, and its cultural context will also be addressed, though the main focus will be on the nature of comedy and comic effects and on the specific workings of plays read in class together.
Writing Course.
Humanities. 1 credit.
Spring 2012. Lefkowitz.

## CLAS 020. Plato and His Modern Readers

(Cross-listed as PHIL 020)
Modern thinkers have ascribed to Plato some of the fundamental good and ills of modern thought. It has been claimed, for example, that Socrates and Plato distorted the entire course of Western philosophy, that Plato was the greatest political idealist, that Plato was the first totalitarian, that Plato was a feminist, and that Plato betrayed his teacher, Socrates. In this course, we will view Plato through the lens of various modern and postmodern interpretations (e.g., Nietzsche, Heidegger, Foucault, Irigaray, Rorty, Murdoch, Nussbaum, Vlastos) alongside a close analysis of ethical, metaphysical, and epistemological issues as they arise in the dialogues themselves.
Writing course.
1 credit.
Not offered 2011-2012.

## CLAS 025. Greek Myth and Opera

Greek myths have provided the subject matter for some of the most important and pivotal works in the history of opera and ballet. Just as Greek myth informs these arts, so too, opera and ballet transform these myths and the way they are viewed by modern audiences. New and daring productions of classical operas continue to transform both Greek mythology and its operatic incarnations. George Balanchine's Neoclassicism modernized ballet radically in the 20th century by drawing largely on Greek
myth and classical aesthetic structures. In this course, we will study the relevant primary classical sources for operas and ballets such as Handel's Xerxes, Gluck's Orfeo ed Euridice, Berlioz's Les Troyens, Strauss's Electra, Stravinsky's Oedipus Rex, Balanchine's Apollo, Agon, and Orpheus. At the same time, we will study the operas and ballets themselves in their cultural context, and in the course of their performance history, paying special attention to recent productions.
Humanities. 1 credit.
Not offered 2011-2012.

## CLAS 036. Classical Mythology

Greek myths are central to the study of the ancient world and have had an enormous influence on subsequent literature and other arts. This course examines selected myths in the works of major authors of Greek literature, including Homer, Aeschylus, Sophocles, and Euripides. The course will also cover several modern theoretical approaches to the study of myth.
Writing course.
Humanities. 1 credit.
Fall 2011. Lefkowitz.

## CLAS 040. Visions of Rome

This course provides an overview of cinematic responses to the idea of Rome, ancient and modern, city and empire, place and idea, from the silent era to the present day. We will spend some time comparing films set in Rome to ancient and modern representations of the eternal city in literary and other visual media. But our primary focus will be on the ways in which cinematic visions of Rome reflect evolving cultural, political, and social conditions on both sides of the Atlantic. Specific topics to be explored include the popularity of classical themes in early silent films; Rome on screen during the rise and fall of fascism; neorealism and the shifting landscape of the city; the politics of Hollywood epics; and the dialectic between conceptions of antiquity and modernity as reflected in cinema. Screenings of films by major Italian and Anglophone filmmakers, including Pastrone, DeMille, Rossellini, Visconti, Wyler, Pasolini, Fellini, Virzì, and other major directors. Readings of texts by Petronius, Juvenal, Byron, Hawthorne, Dickens, Freud, Yourcenar, Rohmer, Calvino, and Barthes.
Writing course.
1 credit.
Not offered 2011-2012.

## CLAS 060. Dante's Divine Comedy

We shall study the entire work and journey with the Pilgrim through the three realms of the world beyond. Special attention will be devoted
to Dante's re-reading of previous texts, from the Latin classics to the burgeoning vernacular literatures of his own time. We shall also attempt to reconstruct Dante's world view in the context of Medieval culture: his thoughts on life, death, love, art, politics, history, his personal story, and God.
Humanities. 1 credit.
Spring 2012. Munson.

## CLAS 091. Capstone Seminar: The Classical in Art and Literature

Layers of representation, interpretation, and theoretical frameworks filter our view of GrecoRoman antiquity, and continually reconfigure the meaning of the "classical." This seminar will examine the histories, texts, and works of art through which the classical tradition continues to anchor, undermine, legitimize, modernize, or mythologize art and literature. We will consider the ways that the history and theory of art, translations, opera, dance, feminism, psychoanalysis, anthropology, philosophy, and literature have employed and reshaped Greco-Roman texts, subject matter, and aesthetic structures. Topics and authors will include: Greek mythology in contemporary art and fiction, the figure of Oedipus (Sophocles, Freud, Girard, Stravinsky, Pasolini), classicism in the history of art and architecture (Michelangelo, Palladio, Jacques-Louis David, Thomas Jefferson, Picasso), constructions of the classical as western vs. eastern, postmodernism and the classics (Irigary, Foucault, Derrida), and classical myth in opera (Gluck, Strauss).

## 1 credit.

Not offered 2011-2012.

## CLAS 093. Directed Reading

Independent work for advanced students under the supervision of an instructor. 1 credit.

## Seminars

LATN 102. The Roman Emperors
This seminar explores Latin authors of the first and second centuries, with particular attention to their responses to the social and political structures of the period. Expressed attitudes toward the emperors range from adulation to spite, but the seminar concentrates on authors who fall somewhere in between, writing skeptically or subversively. Both prose writers (e.g., Tacitus, Suetonius, and Pliny) and poets (e.g., Lucan, Seneca, and Juvenal) may be included.
2 credits.
Not offered 2011-2012.

## LATN 103. Latin Epic

This seminar usually focuses on Vergil's Aeneid, although it may include other major Latin epics.
2 credits.
Not offered 2011-2012.

## LATN 104. Ovid's Metamorphoses

This seminar is devoted to the Metamorphoses, which is read against the background of Ovid's Roman and Greek literary predecessors.
Writing course.
2 credits.
Fall 2011. Lefkowitz.

## LATN 105. The Fall of the Roman Republic

This seminar examines Latin texts from the traumatic period of the Late Republic (70-40 B.C.E.). It focuses on the social and political crisis of the period as well as its connections with the artistic and philosophical achievements of the first great period of Latin literature. Authors may include Lucretius, Catullus, Caesar, Cicero, and Sallust.
2 credits.
Not offered 2011-2012.

## LATN 106. Tacitus

The seminar will read extensive excerpts from the Annals of Tacitus, usually including at least one complete book. Additional readings from the Histories and the Agricola may also be included. The principal questions addressed will include: Tacitus' accuracy and objectivity as a historian, the importance of rhetorical techniques on Tacitus' language and narrative, and the question of his attitude to particular emperors (Augustus, Tiberius, Claudius, Nero, Vespasian, and Domitian). Above all we will consider the question of Tacitus' ideas about the imperial system of government: to what extent did he think Romans should resist monarchy or tyranny, and to what extent should they adjust their morality to accommodate it? 2 credits.
Not offered 2011-2012.

## LATN 107. Horace

The seminar emphasizes the Odes and Epodes and their place in the tradition of Greek and Roman lyric poetry. Attention is also given to the Satires and Epistles, including the Ars Poetica, and to their importance for the history of satire and literary criticism. An effort is made to grasp the totality of Horace's achievement in the context of the Augustan Age.
2 credits.
Spring 2012. Turpin.

## LATN 108. Roman Comedy

This seminar is devoted to Plautus and Terence, whose adaptations of Greek plays are among the oldest surviving works of Latin literature. The primary focus will be on close study of the language and structure of the plays, but students will also become familiar with a range of critical and theoretical approaches to comedy. Specific topics to be explored include the production and performance of ancient drama; the Roman appropriation of Greek literary genres; representations of slaves, prostitutes, and other marginal figures on the comic stage; and the influence of Roman Comedy on postclassical European drama.
2 credits.
Not offered 2011-2012.

## GREK 111. Greek Philosophy and Religion

It has been said that, with the rise of Greek philosophy, change and revolution were finally seen to irrupt into the static structures of Greek religion. What exactly is the relationship between Greek philosophy and religion? Do the philosophers attempt to destroy traditional religion, or should we view them instead as transforming it? This seminar will study how thought about the divine develops in the Presocratics, Socrates, Plato, and Aristotle and how the philosophers' views more generally might be considered "religious." Topics will include theology, cosmology, eschatology, morality, and the good life; the tradition of the holy man; and philosophical schools as religious communities.
2 credits.
Not offered 2011-2012.

## GREK 112. Greek Epic

This seminar studies either the entirety of Homer's Odyssey in Greek or most of the Iliad. 2 credits.
Not offered 2011-2012.

## GREK 113. Greek Historians

This seminar is devoted to a study of Herodotus and Thucydides, both as examples of Greek historiography and as sources for Greek history. Writing course.
2 credits.
Fall 2011. Munson.

## GREK 114. Greek Drama

This seminar usually focuses on one play by each of the major tragedians-Aeschylus, Sophocles, and Euripides. Other plays are read in translation. The works are placed in their cultural setting and are discussed as both drama and poetry.

2 credits.
Spring 2012. Ledbetter.

## GREK 115. Greek Lyric Poetry

This seminar will focus on the development of archaic Greek elegy (Archilochus, Tyrtaeus, Solon, Xenophanes, Semonides, Theognis) monodic lyric (Sappho, Alcaeus, Anacreaon, and Simonides) and choral lyric (Pindar and Bacchylides), paying particular attention to lyric's dialogue with the epic tradition, the socalled rise of the individual, political and performative contexts, and modern interpretive approaches.
2 credits.
Not offered 2011-2012.

Coordinator: THEODORE B. FERNALD (Linguistics)<br>Committee: Alan Baker (Philosophy)<br>Frank Durgin (Psychology)<br>Daniel Grodner (Psychology)<br>Lisa Meeden (Computer Science)

The minor in cognitive science has been developed to guide the programs of those who are interested in the interdisciplinary study of the mind, brain, and language, with emphases on formal structure, biological information processing, and computation. The Cognitive Science Program is designed to emphasize guided breadth across various disciplines that contribute to cognitive science as well as depth within a chosen discipline.
A student may have many reasons for deciding to minor in cognitive science. Perhaps the simplest is to indicate and explore a particular interest in cognitive science. Whatever your major, a minor in cognitive science indicates a kind of specialized interest and developing expertise. It is our hope that this interest will be integrated with your major area of study, and we hope to help you formulate a plan of studies that sensibly achieves the requirements of the minor.

## The Academic Program

We conceive of cognitive science as a loose federation of six specific disciplines. The disciplines included are neuroscience, computer science (including computer engineering), linguistics, mathematics and statistics, philosophy, and cognitive psychology. To demonstrate breadth, students minoring in cognitive science are required to complete at least 5 credits across three of these six disciplines (see details and the list of courses). Students who wish to use 2 credits in mathematics and statistics as one of their disciplines for a cognitive science minor must choose 2 credits from a single sub-area of mathematics and indicate its relevance to at least one of the two other disciplines chosen for the minor. Minors must also show a particular strength or depth in one of the six disciplines.

## Course Minor

Six or 7 credits are required for the minor. One of these is a required introductory course, and the remaining 5 or 6 are to be distributed across three different disciplines as described subsequently.
In addition to fulfilling these breadth requirements, students must indicate one cognitive science field in which they have substantial depth of preparation. Such depth can be documented by completion of at least four
courses from within a cognitive science discipline (even if some of those courses are not directly related to cognitive science). Alternative curricular and extracurricular ways of fulfilling the depth requirement may be discussed with the coordinator.

## Honors Minor

To complete an honors minor in cognitive science, students must complete all requirements listed above. The honors preparation for the minor will normally be a 2 credit unit approved by the relevant department from courses listed for the minor. The minor preparation must be within a discipline that is not the student's honors major. Students are encouraged to develop an appropriate preparation in consultation with the coordinator.

## Special Major

A special major is possible. Please consult with the program coordinator to develop a special major plan. All minors and special majors must normally take COGS 001: Introduction to Cognitive Science.

## Thesis / Culminating Exercise

Minors who wish to get formal research experience may choose to complete a 1 -credit thesis in cognitive science during their senior year. Non-honors theses in cognitive science will normally be examined by Cognitive Science Committee members from within at least two different departments.

## Courses

## COGS 001. Introduction to Cognitive Science

An introduction to the science of the mind from the perspective of cognitive psychology, linguistics, neuroscience, philosophy, and artificial intelligence. The course introduces students to the scientific investigation of such questions as the following: What does it mean to think or to have consciousness? Can a computer have a mind? What does it mean to have a concept? What is language? What kinds of explanations are necessary to explain cognition?
1 credit.
Spring 2012. Grodner.

## COGS 090. Senior Thesis

The one-credit thesis project can be supervised by any of a number of faculty members associated with the departments in the program but should be approved in advance by the program coordinator. A thesis may be used to establish depth in an area and is normally a required component of a special major in cognitive science
1 credit.
Each semester. Staff.
The remaining 5 required credits are to be distributed evenly among three different disciplines of cognitive science. That is, 2 credits of listed courses from each of three of the six disciplines must be completed, with the exception that in one-and only one-of the three disciplines, a single "focus" course* may be used to meet the breadth requirement. The list of courses currently approved as cognitive science courses is rather selective because it is intended to focus students on the most essential cores of cognitive science within each discipline. For disciplines where there are courses designated as focus courses, at least one focus course must be taken to include that discipline in the minor. Many more courses, taught on campus, are closely relevant to cognitive science; this list is subject to periodic re-evaluation.

## Computer Science/Computer Engineering

CPSC 063. Artificial Intelligence (focus course) CPSC 065. Natural Language Processing
CPSC 081. Adaptive Robotics (focus course)
ENGR 028. Mobile Robotics

## Linguistics

LING 040/108. Semantics (focus course)
LING 043/106. Morphology and the Lexicon
LING 045/105. Phonology (focus course)
LING 050/109. Syntax (focus course)
LING 06X. Structure of a non-Indo-European
Language

## Mathematics and Statistics

The sub-areas of mathematics and their eligible seminars and courses are the following: Algebra: MATH 057/077, 058, 067, and 102. Analysis: MATH 034, 044, 053/073, 054, 063, 101, and 103.
Discrete Mathematics: MATH 029, 046, 059/079, and 069.
Geometry: MATH 055/75 and 106.
Statistics: STAT 011, 031, and 061; MATH
105 and STAT 111.
Topology: MATH 104.

## Neuroscience

BIOL 022. Neurobiology (focus course)
BIOL 123. Learning and Memory
PSYC 030. Physiological Psychology
PSYC 031. Cognitive Neuroscience (focus course)
PSYC 091. Advanced Topics in Behavioral Neuroscience
PSYC 130. Physiological Seminar

## Philosophy

PHIL 012/031. Logic/Advanced Logic (focus course)
PHIL 024/113. Theory of Knowledge
PHIL 026/116. Language and Meaning
PHIL 086/118. Philosophy of Mind (focus course)

## Psychology

PSYC 032. Perception (focus course)
PSYC 033. Cognitive Psychology (focus course)
PSYC 034/134. Psychology of Language/Psycholinguistics (focus course) PSYC 039. Developmental Psychology PSYC 042. Human Intelligence PSYC 133. Perception, Cognition, and the Embodied Mind
THEA 105. Theater Seminar: The Act of Spectatorship

* Focus courses are concerned with issues most central to cognitive science and are normally taught with this objective in mind.

Coordinator: HANSJAKOB WERLEN (Modern Languages and Literatures, German)<br>Committee: Alan Berkowitz (Modern Languages and Literatures, Chinese)<br>Jean-Vincent Blanchard (Modern Languages and Literatures, French) ${ }^{9}$<br>Elizabeth Bolton (English Literature)<br>Sibelan Forrester (Modern Languages and Literatures, Russian)<br>William O. Gardner (Modern Languages and Literatures, Japanese) ${ }^{1}$<br>Maria Luisa Guardiola (Modern Languages and Literatures, Spanish) ${ }^{1}$<br>Alexandra Gueydan (Modern Languages and Literatures, French) ${ }^{3,10}$<br>Kendall Johnson (English Literature) ${ }^{3}$<br>Haili Kong (Modern Languages and Literatures, Chinese)<br>Allen Kuharski (Theater)<br>Rosaria V. Munson (Classics)<br>Philip M. Weinstein (English Literature)

[^3]The Comparative Literature Committee, made up of the coordinator and faculty representing the departments of classics, English literature, modern languages and literatures, and theater, administers the comparative literature major. The basic requirement for the major is work in two literatures in the original language.
The major in comparative literature is designed for those students who have a love for literature and a strong desire to write and are interested in literary critical research. This major assumes a fair degree of discipline, independence, and self-motivation on the part of the student, especially in the development and writing of the thesis.

## The Academic Program

In planning a comparative literature major, students should look at course listings in the classics, English literature, and modern languages and literatures departments. In the classics and modern languages and literatures, only courses in the original language numbered 011 or above are counted as constituents of the comparative literature major. Of English courses numbered ENGL 008A-Z and 009A-Z, only one may be counted toward the major.

## Course Major

Ten credits in two or more literatures in the original languages, including a substantial concentration of work-normally four or five courses-in each of the literatures. The thesis (described later) does not count toward these 10 credits.
Students working entirely in languages other than English may propose one course in translation as a part of their program, as long as it is deeply relevant to their plan of study.

Students working in English and any language other than Chinese must do all of their work in the original languages. Because of the special demands of Chinese language and literature, students working in Chinese may propose a program based on attachments (in Chinese) to literature courses taught in translation.
A 1- or 2-credit thesis of 50 to 60 pages, covering work in at least two languages, planned in the spring of the junior year and submitted in the spring of the senior year, no later than April 30.
Before the end of the junior year, the student will submit to the committee an outline for the thesis and propose faculty advisers from appropriate departments. In some cases, the committee may ask that the thesis be written in whole or in part in the language of a literature studied other than English.
An oral comprehensive examination, 1 to 1.5 hours in length, at the end of the senior year, based on the thesis and courses and seminars that the major comprises.

## Honors Major

Four 2-credit preparations in at least two literatures in the original language, one of which is a thesis. One of the preparations may be used as an independent minor (in Russian or German studies, for instance) if the minor's departmental requirements have been met. Minors requiring unrelated preparations such as biology or psychology are not allowed. All four honors preparations are necessary components of the comparative literature honors major.
For each preparation, a 3-hour written examination prepared by the external examiner and a 30 -minute oral based on the contents of the written examination.

Successful completion of an advanced course in literature in each of the literatures of the student's program of study is a prerequisite for admission into the Honors Program. A minimum grade of $a \mathrm{~B}$ is required.

## Honors Minor

A 2-credit thesis of 50 to 60 pages, integrating preparations that have been done in two literatures in the original language.

## Thesis / Culminating Exercise

All majors will meet with members of the Comparative Literature Committee before the end of the junior year to review and assess the student's program. At this time, both course and honors majors will submit thesis proposals and propose faculty advisers.
The courses and seminars that compose the comparative literature major's formal field of study will naturally differ with each major. To give some sense of the range of possibilities available, a series of sample programs is offered.

## Application Process Notes for the Major or the Minor

Students applying for the major will submit to the comparative literature coordinator a proposal of integrated study that sets forth the courses and/or seminars to be taken and the principle of coherence on which the program of study is based. The student will also submit a 6to 10 -page writing sample from a previously completed course. The committee will review the proposal and the essay and advise the student.
Note: In lieu of a traditional course, the Comparative Literature Committee will consider proposals for one or more research papers written as course attachments as well as proposals to substitute an extended research paper for course credit.

## Sample: Comparative Literature Course Major

## Focus: The Black Atlantic Courses

ENGL 009S. First-Year Seminar: Black Liberty, Black Literature
ENGL 054. Core Course: Faulkner, Morrison, and the Representation of Race
ENGL 061. Core Course: Fictions of Black America
ENGL 062. Black Autobiography
FREN 012. Introduction aux études littéraires et culturelles françaises et francophones
FREN 045. Le monde francophone

FREN 057. Prose Francophone: Littérature et société
FREN 071. French Cultural and Critical Theory
FREN 110. Histoires d'iles
2-credit thesis.

## Sample: Comparative Literature Honors Major

## Focus: Modernism <br> Courses

ENGL 045. Core Course: Modern British Poetry
ENGL 053. Core Course: Modern American Poetry
GMST 020. Introduction to German Studies: Topics in German Literature and Culture GMST 091. Special Topics in German Studies

## Seminars

ENGL 115. Modern Comparative Literature
ENGL 116. American Literature
GMST 109. Rise of the Modern German Novel 2-credit thesis.

Sample: Comparative Literature Honors Minor<br>Background Courses<br>GMST 020. Introduction to German Studies: Topics in German Literature and Culture GMST 091. Special Topics in German Studies (plus attachment in German)<br>SPAN 022. Introducción a la literature española<br>SPAN 108. Jorge Louis Borges<br>2-credit thesis: Kant's influence on Hölderlin and Borges

LISA MEEDEN, Professor<br>TIA NEWHALL, Associate Professor<br>RICHARD WICENTOWSKI, Associate Professor and Chair<br>ANDREW DANNER, Assistant Professor ${ }^{3}$<br>CHARLIE GARROD, Visiting Assistant Professor<br>AMEET SONI, Visiting Assistant Professor<br>JEFFREY KNERR, System Administrator<br>BRIDGET M. ROTHERA, Administrative Assistant

${ }^{3}$ Absent on leave, 2011-2012.

Computer science is the study of algorithms and their implementation. This includes the study of computer systems; methods to specify algorithms (for people and computer systems); and the formulation of theories and models to aid in the understanding and analysis of the properties of algorithms, computing systems, and their interrelationship.
The computer science curriculum is designed to provide students with a flexible set of computing choices that can be tailored to satisfy various interests and depths of study. All courses emphasize the fundamental concepts of computer science, treating today's languages and systems as current examples of the underlying concepts. The computer science laboratory provides up-to-date software and hardware facilities.

## The Academic Program

The Computer Science Department offers course majors and minors and honors majors and minors. Students interested in any of these options are encouraged to meet with the chair of the Computer Science Department as early as possible in their college career. Students who are interested in a computer science major or minor are encouraged to take CPSC 021 , CPSC 033 and CPSC 035 sometime in their first four semesters at Swarthmore. The minor in computer science is designed for students who desire a coherent introduction to the core topics in the field. Students completing the minor will possess intellectual skills that are useful in many disciplines.

## First course recommendations

CPSC 021: Introduction to Computer Science presents fundamental ideas in computer science while building skill in software development. No previous experience with computers is necessary. This course is appropriate for all students who want to write programs. It is the usual first course for computer science majors and minors. Students with Advanced Placement credit or extensive programming experience may be able to place out of this course.
CPSC 033: Computer Organization assumes that the student has completed CPSC 021 or its equivalent. It is the best entry point for students
intending to be Computer Science majors or minors who already have extensive computing experience.
CPSC 035: Data Structures and Algorithms assumes that the student has completed CPSC 021 or its equivalent. It is an appropriate entry point for students with extensive computing experience.
Students who think they may qualify for CPSC 033 or CPSC 035 and have not taken CPSC 021 should see the instructor or department chair. Students or advisers who want more advice on placement in computer science courses should feel free to contact any computer science faculty member by phone or in person.

## Interdisciplinary recommendations

The department recommends that students with an interest in computer science should consider using MATH 027 (Linear Algebra) and/or MATH 029 (Discrete Math) to satisfy the math requirement for the major and minor. Statistics courses at the level of STAT 031 (Data Analysis and Visualization) or above can also be used to satisfy the math requirement. The Computer Science department offers three courses approved as cognitive science courses: CPSC 063 (Artificial Intelligence), CPSC 065 (Natural Language Processing) and CPSC 081 (Adaptive Robotics). Students with an interest in Cognitive Science are encouraged to consider COGS 001 (Introduction to Cognitive Science).
In addition to courses offered by computer science faculty, the department recommends that students with an interest in computer engineering consider courses offered by the Engineering department, including three courses that are cross-listed by the Computer Science department: CPSC 052 (Computer Architecture), CPSC 072 (Computer Vision) and CPSC 082 (Mobile Robotics).

## Course Major

The following are the requirements for a major in computer science:

1. Nine courses in computer science:
a. CPSC 021. (If exempted from CPSC 021 without AP credit, one additional course from item f . below must be substituted.)
b. CPSC 035 and CPSC 097.
c. One of CPSC 033 or CPSC 052.
d. One of CPSC 037 or CPSC 075
e. One of CPSC 041 or CPSC 046
f. Three of the following (must be different than the choices in parts, c, d and e): CPSC 040, CPSC 041, CPSC 044, CPSC 045, CPSC 046, CPSC 052, CPSC 063, CPSC 065, CPSC 067, CPSC 072, CPSC 075, CPSC 081, CPSC 082, CPSC 085, CPSC 087, CPSC 091, CPSC 093.
2. Two mathematics courses at the level of Linear Algebra or above (Discrete Math and Linear Algebra are recommended).

## Course Minor

The minor in computer science provides students with a well-rounded background in computer science sufficient to develop significant, creative applications and to keep up with the rapid changes in the field.
The following are the requirements for a minor in computer science:

1. Six courses in computer science.
a. CPSC 021. (If exempted from CPSC 021 without AP credit, one additional course from item f. below must be substituted.)
b. CPSC 035.
c. One of CPSC 033 or CPSC 052.
d. One of CPSC 037 or CPSC 075.
e. One of CPSC 041 or CPSC 046.
f. One of the following (must be different than the choices in part c, d, and e): CPSC 040, CPSC 041, CPSC 044, CPSC 045, CPSC 046, CPSC 052, CPSC 063, CPSC 065, CPSC 067, CPSC 072, CPSC 075, CPSC 081, CPSC 082, CPSC 085, CPSC 087, CPSC 091, CPSC 093.
2. One mathematics course at the level of Linear Algebra or above (Discrete Math recommended).

## Honors Major

An honors major in computer science will consist of two 2 -credit preparations, one 2credit research report or thesis, and a preparation in the student's minor.
The following will be submitted to external examiners for evaluation:

Two 2-credit preparations to be selected from the combinations of courses listed under Approved Preparations. Each of these 2-credit preparations will be examined by a 3-hour written examination and an oral examination.
The two 2-credit preparations must include four distinct courses. In certain circumstances, the Computer Science Department may be willing to consider other groupings of courses, seminars, or courses with attachments. If the
required courses and preparations would not satisfy a course major, additional computer science courses must be taken to meet course major requirements. In all cases, the Computer Science Department must approve the student's plan of study.

One research report or thesis to be read by an external examiner and examined in an oral examination.
At a minimum, this will involve a review of scholarly papers from the primary literature of computer science and the writing of a scholarly, scientific paper. The paper will report on a research experience involving the student and faculty (here or elsewhere). It is expected that most of the research or scholarly groundwork will be completed before the fall semester of the senior year, either by 1 credit of work in the spring semester of the junior year or full-time summer work. Students will register for at least 1 credit of thesis work to complete the work and write the paper in the fall of the senior year. It is recommended that the paper be completed by the end of the fall semester.

## Acceptance Criteria

To be eligible for an honors major in computer science, students must complete the following:

1. Have a B+ average in all computer science courses completed by the end of junior year.
These must include CPSC 021 and CPSC 035, and at least two of CPSC 033, CPSC 037, CPSC 041, CPSC 046 or CPSC 075.
2. Have demonstrated proficiency in mathematical argument and reasoning by the end of the junior year. Ordinarily, this proficiency will be assumed if the student has done one of the following:
a. Completed Discrete Mathematics and Linear Algebra with a grade of $\mathrm{B}+$ or better
b. Completed Linear Algebra Honors with a grade of $B$ or better
c. Completed Introduction to Real Analysis or Introduction to Modern Algebra with a grade of B- or better
3. Complete by the end of the senior year a set of courses that would qualify for an ordinary computer science major as well as CPSC 180 (Thesis).

## Honors Minor

An honors minor in computer science will consist of one 2-credit preparation, and completion of the student's major preparations. The following will be submitted to external examiners for evaluation:

One 2-credit preparation to be selected from the combinations of courses listed under Approved Preparations. This 2-credit

## Computer Science

preparation will be examined by a 3-hour written examination and an oral examination. The 2-credit preparation must include two distinct courses. In certain circumstances, the Computer Science Department may be willing to consider other groupings of courses, seminars, or courses with attachments. If the required courses and preparations would not satisfy a course minor, additional computer science courses must be taken to meet course minor requirements. In all cases, the Computer Science Department must approve the student's plan of study.

## Acceptance Criteria

To be eligible for an honors minor in computer science, a student must satisfy course requirements for a regular minor in computer science and in addition:

1. Have a B+ average in all computer science courses completed by the end of the junior year.
2. Take one 2 -credit preparation to be selected from the combinations of courses listed under Approved Preparations. An examiner will set both a 3-hour written examination and an oral examination for the preparation.

## Approved Preparations for the Honors Major and Minor

The following are the approved preparations. These may not all be available to all students because of the faculty's schedules.

Preparation
Algorithms and Theory
Intelligent Systems
Parallel and Distributed Systems
Natural Language Models
Robotics

Language Processing
Programming Languages and Compilers

Parallel Systems and Algorithms

Course Combinations
CPSC 041. Algorithms CPSC 046. Theory of Computation
CPSC 063. Artificial Intelligence
CPSC 081. Adaptive Robotics
CPSC 045. Operating Systems
CPSC 087. Parallel and Distributed Computing
CPSC 063. Artificial Intelligence
CPSC 065. Natural Language Processing
CPSC 081. Adaptive Robotics
CPSC 082. Mobile Robotics
CPSC 065. Natural Language Processing
CPSC 067. Information Retrieval
CPSC 037. Structure and Interpretation of Computer Programs CPSC 075. Compiler Design and Construction CPSC 041. Algorithms CPSC 087. Parallel and Distributed Computing

## Thesis / Culminating Exercise

Senior Conference is the comprehensive requirement for computer science course and honors majors. It provides an opportunity to delve more deeply into a particular topic in computer science, synthesizing material from previous courses.

## Application Process and Acceptance Criteria for Majors/Minors

In addition to the process described by the Dean's Office and the Registrar's Office for how to apply for a major, we also ask that students complete a departmental form outlining how they intend to fulfill the requirements for their intended major, minor, honors major or honors minor. Successful completion of at least two computer science courses including CPSC 035 is ordinarily
required to be admitted as a computer science major or minor. If after applying a student is deferred, he or she may be re-evaluated upon completion of additional computer science courses.

## Advanced Placement

Students who receive a 4 or 5 on the computer science Advanced Placement exam will be awarded one credit upon successful completion of one computer science course taken at Swarthmore. Students should consult with any computer science faculty member about placement. Students who are placed out of CPSC 021 with AP credit need to take only 8 additional courses in computer science to complete the major, and 5 additional courses in computer science to complete the minor.

## Off-Campus Study

Students planning to major or minor in computer science may opt to study abroad for one semester or a whole year. Because some advanced courses in computer science are offered in only alternate years, some selections will be unavailable to some students. The chair of the Computer Science Department should preapprove all courses of study abroad in advance of the student's departure. The department will credit appropriate courses based on sufficient evidence of work completed presented by the student upon returning to Swarthmore.

## Life After Swarthmore

## Graduate School

Students interested in graduate study in computer science will be well prepared with a computer science major. Some graduate programs will also accept students who have majored in mathematics or engineering and completed a sufficient number and selection of computer science courses. The choice of the appropriate major and computing courses will depend on the student's interests and should be made in consultation with the chair of the Computer Science Department. Other majors are also reasonable for students with special interests. For example, a major in linguistics or psychology might be appropriate for a student interested in artificial intelligence or cognitive science. In such cases, students should consult with the chair of the department as early as possible to ensure that they take the necessary mathematics and computing courses for graduate work in computer science.

## Courses

## CPSC 021. Introduction to Computer

 ScienceThis course presents fundamental ideas in computer science while building skills in software development. Students implement algorithms as programs in a high-level programming language. Introducing objectoriented programming and data structures allows students to construct correct, understandable, and efficient algorithms. CPSC 033 and CPSC 035 present a deeper coverage of these topics. CPSC 021 is appropriate for all students who want to be able to write programs. It is the usual first course for computer science majors and minors. Students with Advanced Placement credit or extensive programming experience may be able to place out of this course. Students who think that they may fall into this latter category should consult with any computer science faculty member.

Lab work required, programming intensive. No prerequisites.
Natural sciences and engineering practicum. 1 credit.
Each semester. Staff.
CPSC 033. Computer Organization
This course takes a bottom-up approach to answering the question of how a computer works. Topics include theoretical models of computation, bits, bytes and data representations, operations on data, digital logic structures, computer memory, assembly and machine code, hardware components, the stack, the operating system, compilers, and the C programming language. We examine the hardware and software components required to go from a program expressed in a high-level programming language to the computer actually running the program.
Prerequisites: CPSC 021 or equivalent. Lab work required.
Natural sciences and engineering practicum. 1 credit.
Fall 2011. Wicentowski.
CPSC 035. Data Structures and Algorithms
This course completes the broad introduction to computer science begun in CPSC 021. It provides a general background for further study in the field. Topics to be covered include object-oriented programming in $\mathrm{C}++$, advanced data structures (trees, priority queues, hash tables, graphs, etc.) and algorithms, and software design and verification. Students will be expected to complete several programming projects illustrating the concepts presented.
Prerequisite: CPSC 021 or equivalent. Discrete Mathematics is recommended.
Lab work required.
Natural sciences and engineering practicum. 1 credit.
Each semester. Staff.

## CPSC 037. Structure and Interpretation of Computer Programs

This course is a serious introduction to the study of computer programs and, through programs, some central ideas in computer science. By studying programs that make repeated and deep use of abstraction, students will learn how to generate precise specifications from vaguely formulated and perhaps partially understood descriptions. Topics to be covered include programming idioms and paradigms, recursion, information retrieval, binding and scope, interpreters, and compilers.
Prerequisite: CPSC 035.
Lab work required.

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1 credit.
Spring 2012. Wicentowski.

## CPSC 040. Computer Graphics

(Cross-listed as ENGR 026)
Computer graphics focuses on the creation and manipulation of digital imagery. We cover the modeling, rendering, and animating of geometric object in two (2D) and three (3D) dimensions. Topics include drawing algorithms for 2D geometric primitives (points, lines, polygons), geometric matrix transformations, projective geometry, geometric object representations, hidden surface removal, hierarchical modeling, shading, lighting, shadows, ray-tracing, procedural (nongeometric) modeling, texture mapping, and animation. Labs will explore various tools for rendering graphics, including pixel buffers, OpenGL, shading languages, and general purpose GPU computing.
Prerequisites: CPSC 035 required. Mathematics background at the level of Calculus and Linear Algebra is strongly recommended.
Lab work required.
Natural sciences and engineering practicum. 1 credit.
Spring 2013. Danner.

## CPSC 041. Algorithms

The study of algorithms is useful in many diverse areas. As algorithms are studied, considerable attention is devoted to analyzing formally their time and space requirements and proving their correctness. Topics covered include abstract data types, trees (including balanced trees), graphs, searching, sorting, NP complete optimization problems, and the impact of several models of parallel computation on the design of algorithms and data structures.
Prerequisites: CPSC 035 required. Discrete Mathematics is strongly recommended.
Lab work required.
1 credit.
Fall 2012.

## CPSC 044. Database Systems

This course provides an introduction to relational database management systems. Topics covered include data models (ER and relational model); data storage and access methods (files, indices); query languages (SQL, relational algebra, relational calculus, QBE); query evaluation; query optimization; transaction management; concurrency control; crash recovery; and some advanced topics (distributed databases, object-relational databases). A project that involves implementing and testing components of a relational database management system is a large component of the course.

Prerequisite: CPSC 035 required. One of CPSC 033 or CPSC 052 is recommended.
Lab work required.
1 credit.
Next offered when staffing permits.
CPSC 045. Operating Systems
(Cross-listed as ENGR 022)
This course is an introduction to the theory, design, and implementation of operating systems. An operating system is the software layer between user programs and the computer hardware. It provides abstractions of the underlying hardware that are easier to program, and it manages the machine's resources. The following topics will be covered: processes (including synchronization, communication, and scheduling); memory (main memory allocation strategies, virtual memory, and page replacement policies); file systems (including naming and implementation issues); I/O (including devices, drivers, disks, and disk scheduling); and security.
Prerequisite: CPSC 035 required. One of CPSC 033 or CPSC 052 is recommended.
Lab work required.
Natural sciences and engineering practicum. 1 credit.
Fall 2011. Newhall.

## CPSC 046. Theory of Computation

 (Cross-listed as MATH 046)This study of various models of computation leads to a characterization of the kinds of problems that can and cannot be solved by a computer. Solvable problems will be classified with respect to their degree of difficulty. Topics to be covered include formal languages and finite state devices; Turing machines; and other models of computation, computability, and complexity.
Prerequisite: CPSC 035 required. Discrete Mathematics is strongly recommended.
Lab work required.
1 credit.
Spring 2012.

## CPSC 052. Principles of Computer Architecture (See ENGR 025)

Prerequisites: One of ENGR 015, CPSC 033, or CPSC 035.
Natural sciences and engineering practicum. 1 credit.
Spring 2012.

## CPSC 063. Artificial Intelligence

Artificial intelligence (AI) can be defined as the branch of computer science that is concerned with the automation of intelligent behavior.

Intelligent behavior encompasses a wide range of abilities; as a result, AI has become a very broad field that includes game playing, automated reasoning, expert systems, natural language processing, modeling human performance (cognitive science), planning, and robotics. This course will focus on a subset of these topics and specifically on machine learning, which is concerned with the problem of how to create programs that automatically improve with experience. Machine learning approaches studied will include neural networks, decision trees, genetic algorithms, and reinforcement techniques.
Prerequisites: CPSC 035 required.
Lab work required.
Natural sciences and engineering practicum.
1 credit.
Fall 2011. Meeden.

## CPSC 065. Natural Language Processing

(Cross-listed as LING 020)
This course is an introduction to the fundamental concepts in natural language processing, the study of human language from a computational perspective. The focus will be on creating statistical algorithms used in the analysis and production of language. Topics to be covered include parsing, morphological analysis, text classification, speech recognition, and machine translation. No prior linguistics experience is necessary.
Prerequisite: CPSC 035 required.
Lab work required.
1 credit.
Fall 2012. Wicentowski.

## CPSC 067. Information Retrieval

This course will explore methods for searching and retrieving information from digital text sources. We will design and evaluate algorithms for automating document retrieval, document clustering, mail filtering, relevance feedback, data mining on the Web, Web robots, search engines, information extraction, question answering, and document summarization.
Prerequisite: CPSC 035 required.
Lab work required.
1 credit.
Spring 2013. Wicentowski.

## CPSC 072. Computer Vision

(See ENGR 027)
Prerequisites: ENGR 015 or CPSC 035
required. Linear Algebra is strongly recommended.

Natural sciences and engineering practicum. 1 credit.
Spring 2012.

## CPSC 075. Principles of Compiler Design and Construction (Cross-listed as ENGR 023)

This course introduces the design and construction of language translators for imperative, procedure-oriented programming languages. Topics covered include formal grammars, lexical analysis and finite automata, syntax analysis and pushdown automata, LL and LR parsing, semantic analysis and table handling, error detection and recovery, code generation and optimization, and compiler writing tools.
Prerequisite: CPSC 035 required. One of CPSC 033 or CPSC 052 is recommended.
Lab work required.
Natural sciences and engineering practicum.
1 credit.
Spring 2013.

## CPSC 081. Adaptive Robotics

This course addresses the problem of controlling robots that will operate in dynamic, unpredictable environments. In laboratory sessions, students will work in groups to program robots to perform a variety of tasks such as navigation to a goal, obstacle avoidance, and vision-based tracking. In lecture/discussion sessions, students will examine the major paradigms of robot control through readings from the primary literature with an emphasis on adaptive approaches.
Prerequisite: CPSC 035 or permission of the instructor.
Lab work required.
Natural sciences and engineering practicum.
1 credit.
Spring 2012. Meeden.

## CPSC 082. Mobile Robotics

(See ENGR 028)
Prerequisites: ENGR 015 or CPSC 035
required. Linear Algebra is strongly recommended.
Natural sciences and engineering practicum.
1 credit.
Fall 2011. Zucker.

## CPSC 087. Parallel and Distributed Computing

This course covers a broad range of topics related to parallel and distributed computing, including parallel and distributed architectures and systems, parallel and distributed programming paradigms, parallel algorithms, and scientific and other applications of parallel

## Computer Science

and distributed computing. In lecture/discussion sections, students examine both classic results as well as recent research in the field. The lab portion of the course includes programming projects using different programming paradigms, and students will have the opportunity to examine one course topic in depth through an open-ended project of their own choosing. Course topics may include: multi-core, SMP, MPP, client-server, clusters, clouds, grids, peer-to-peer systems, GPU computing, scheduling, scalability, resource discovery and allocation, fault tolerance, security, parallel I/0, sockets, threads, message passing, MPI, RPC, distributed shared memory, data parallel languages, MapReduce, parallel debugging, and parallel and distributed applications
Prerequisites: CPSC 035 required. CPSC 045 is recommended.
Lab work required.
1 credit.
Spring 2012. Newhall.

## CPSC 091. Special Topics in Computer

 ScienceSubject matter for CPSC 091 is generally dependent on group need or individual interest. The course is normally restricted to upper-level students and offered only when interest and staff availability make it practicable to do so.
Lab work required.
1 credit.
Staff.

## CPSC 093. Directed Reading and/or

## Research Project

A qualified student may undertake a program of extra reading and/or a project in an area of computer science with the permission of a staff member who is willing to supervise.

## CPSC 097. Senior Conference

This course provides honors and course majors an opportunity to delve more deeply into a particular topic in computer science, synthesizing material from previous courses. Topics have included data management systems (2010), computer perception $(2008,2009)$, computational geometry and geographic information systems $(2006,2007)$, computer security (2005), natural language processing (2004); advanced algorithms (2003); networking (2001, 2002); distributed computing (2000); evolutionary computation (1998 and 1999); complexity, encryption, and compression (1996); and parallel processing (1995). CPSC 097 is the usual method used to satisfy the comprehensive requirement for a computer science major and the senior honors study requirement for a computer science honors major.

Lab work required.
Writing course.
1 credit.
Fall 2011. Garrod.
CPSC 180. Thesis
CPSC 199. Senior Honors Study

JOHN P. CASKEY, Professor<br>STEPHEN S. GOLUB, Professor<br>ROBINSON G. HOLLISTER JR., Professor<br>PHILIP N. JEFFERSON, Professor ${ }^{1}$<br>MARK KUPERBERG, Professor ${ }^{1}$<br>ELLEN B. MAGENHEIM, Professor and Chair<br>STEPHEN A. O'CONNELL, Professor<br>LARRY E. WESTPHAL, Professor ${ }^{3}$<br>AMANDA BAYER, Associate Professor ${ }^{1}$<br>THOMAS S. DEE, Associate Professor ${ }^{3}$<br>ERIN TODD BRONCHETTI, Assistant Professor ${ }^{1}$<br>DAVID HUFFMAN, Assistant Professor<br>VERA BRUSENTSEV, Visiting Assistant Professor<br>THEODORE CRONE, Visiting Professor<br>JOSEPH HARGADON, Visiting Professor (part time)<br>LEONARD NAKAMURA, Visiting Professor (part time)<br>NANCY CARROLL, Administrative Assistant

${ }^{1}$ Absent on leave, fall 2011.
${ }^{3}$ Absent on leave, 2011-2012.

## The Academic Program

The economics curriculum is structured so that students achieve the following goals:

1. Learn and apply models and tools for analyzing economic processes, decisions, and institutions;
2. Analyze and evaluate public policy; and
3. Think critically about the outcomes of public and private economic institutions and systems domestically and globally.
The Economics Department offers a course major, honors major, and honors minor. A course minor is not offered.

## Course Major

## Requirements

ECON 001 or its equivalent is a prerequisite for all other work in the department. In addition, all majors in economics must satisfy a theory requirement by taking ECON 011 (Intermediate Microeconomics) and ECON 021 (Intermediate Macroeconomics). They must also satisfy a statistics requirement. The statistics requirement is typically satisfied by taking ECON 031 . It can alternatively be satisfied, however, by taking ECON 035 (which requires either ECON 031 or STAT 061 as prerequisite), by taking STAT 111 (which requires STAT 061), or by taking STAT 061 in combination with either STAT 011 or STAT 031. STAT 011 and STAT 031 alone are not sufficient.
In order to read the literature in economics critically, a knowledge of elementary calculus is extremely useful. Beginning with the 20122013 academic year, students will need to take MATH 015 (or receive MATH 015 credit or placement out of MATH 015 from the

Mathematics Department) prior to taking ECON 011 or ECON 021. Since ECON 011 and ECON 021 are required for the economics major, MATH 015 will be a requirement for the major. Students can take ECON 001, ECON 031, and other courses that do not have ECON 011 or ECON 021 as a prerequisite before they meet the MATH 015 requirement. Students can find further information regarding math placement and credit at:
www.swarthmore.edu/NatSci/math_stat/ap_pi.h tml.
In addition, the department very strongly recommends that students take either MATH 025 or 026 (Basic Calculus). MATH 027 (Linear Algebra), MATH 034 (Several Variable Calculus), and MATH 044 (Differential Equations) are valuable for those intending to focus on the more technical aspects of economics. Students planning to attend graduate school in economics should give serious thought to taking additional mathematics courses, including MATH 063 (Introduction to Real Analysis).
To graduate as a course major, a student must:

1. Have at least eight credits in economics.
2. Meet the theory and statistics requirements.

Note: Course students should take these courses before the second semester of their senior year to be prepared for the comprehensive examination. Note also that some seminars and courses have ECON 011, 021, and/or 031 as prerequisites.
3. In the senior year, pass the comprehensive examination given early in the spring semester.

## Comprehensive Examination

Course majors must pass the Comprehensive Examination which is given in January or February of each year and covers the theory and statistics requirements. The exam is given only once a year and students must take it at Swarthmore College. All students will take the examination in their senior year. The only exception is for students who are graduating early; those students can take the comprehensive exam in the spring semester prior to their final semester at Swarthmore.

## Acceptance Criteria The Course Program:

Except for students who have been granted advanced standing, applicants should have:

1. Completed at least two economics courses at Swarthmore.
2. Have an overall grade average of C or better.
3. Have a grade of $B$ or better in at least one economics course taken at Swarthmore.
4. Should not have any D's or NC's in any economics course. These conditions include the grade equivalent(s) for any course(s) taken Credit/No Credit. [Note: Regarding the "grade of B or better" requirement, a B in a course taken elsewhere may not suffice. Students who expect to satisfy the requirement with course work done at other schools should consult the chair about grade equivalencies ahead of time. For example, an A- is typically required in the case of a course taken in summer school.]
Students have one year from the date of their application to satisfy these requirements. Failure to do so within one year will mean rejection.
Students who wish to apply for a double major must submit a copy of their sophomore paper to both departments.

## Honors Major

Typically, a student who wants to major in the Honors Program first applies for the program through the sophomore paper. In the sophomore paper, the student should indicate the intention to apply for the Honors Program and should list all preparations that the student plans to take as part of that program. The student would usually take at least one preparation in the junior year. Approval of a student's Honors Program must be granted by the department. Changes of major and/or honors status can be made at any time by picking up forms and instructions in the Registrar's Office.

## The Honors Exam for Majors and Preparations

Honors majors in economics must complete 3 preparations. All preparations in economics consist of 2 credits. Most preparations involve
taking a 2 credit seminar, but some preparations may combine a course and a 1 credit seminar. A complete list of preparations, with their prerequisites, appears below.

## Culminating Exercise

External examiners will determine a student's Honors performance in an individual preparation based on a 3 hour written exam, an oral exam, and if applicable, a seminar paper. (Honors majors do not take the comprehensive exam given to course majors.)

## Acceptance Criteria

Applicants for an honors major should have satisfied all of the requirements for an economics course major and, in addition, should have a straight B or better grade average in economics courses. This condition includes the grade equivalent(s) for any course(s) taken credit/no credit.

## Honors Minor

## Requirements

Honors minors in economics must complete 1 preparation. Other than satisfying the prerequisites for that preparation, there are no other course requirements.

## Culminating Exercise

External examiners will determine a student's honors performance in an individual preparation based on a 3 hour written exam, an oral exam, and if applicable, a seminar paper. (Honors minors do not take the comprehensive exam given to course majors.)

## Acceptance Criteria

Applicants for a honors minor should have satisfied all of the requirements for an economics course major and, in addition, should have a straight $B$ or better grade average in economics courses. This condition includes the grade equivalent(s) for any course(s) taken credit/no credit.

## Application Process Notes for the Major

Normally, any student planning to major in economics, whether in the Course or Honors Program, applies for the major by submitting a sophomore paper in the spring of the sophomore year. (Except for students who have been granted advanced standing, applicants should have completed at least two economics courses at Swarthmore.) A student who will be away that semester should submit the paper before leaving at the end of the fall semester. In the sophomore paper, students should state their reasons for wanting to major in economics along with any associated considerations, and they should indicate the courses and seminars
essential to their plan of study. Through the paper, students are preregistered for seminars offered over the following two years; thus, students are strongly urged to select their seminars carefully. Moreover, if a student decides to change seminars, the department's administrative assistant should be informed as soon as possible, since entry into oversubscribed seminars is first-come, firstserved, with seniors in the Honors Program having absolute priority.

## Honors Preparations

ECON 101 Advanced Microeconomics (2 credits)

Prerequisites: ECON 011 and multivariable calculus (MATH 033, 034, or 035).
ECON 102 Advanced Macroeconomics (2 credits)

Prerequisites: ECON 011 and ECON 021, and multivariable calculus: MATH 033,034 , or 035 (or MATH 025 or 026 with permission of the instructor).
Recommended: MATH 043 or 044.
ECON 122 Financial Economics (2 credits)
Prerequisites: ECON 011, ECON 031 or ECON 035, and MATH 025 or higher calculus.
ECON 135 Advanced Econometrics (1 credit) and ECON 035 Econometrics (1 credit)

Prerequisites: ECON 035 and linear algebra (Math 027, 028, or 028S).
ECON 141 Public Economics (2 credits) Prerequisite: ECON 011. Recommended: ECON 021 and ECON 031 (or its equivalent).
ECON 151 International Economics (2 credits) Prerequisites: ECON 011 and ECON 021.
ECON 165 Behavioral Economics (2 credits)
Prerequisites: ECON 011, ECON 031, and MATH 015 (or a score of 5 in AP Calculus).
Recommended: multivariable calculus (MATH 033, 034, or 035).
ECON 171 Labor and Social Economics (2 credits)

Recommended: ECON 011.
ECON 181 Economic Development (2 credits) Prerequisites: ECON 011 and ECON 021. Recommended: ECON 031 (or its equivalent).

## Interdisciplinary Majors and Minors including Economics

Certain economics courses can be counted toward programs in Black studies, Asian studies, environmental studies, peace and
conflict studies, public policy, and gender and sexuality studies.

## Advanced Placement/International Baccalaureate Credit

Economics before Swarthmore: The
Economics Department offers a one-semester Introduction to Economics course (ECON 001) that is the prerequisite for all further study in economics.
The department does not give credit for work done in economics in secondary schools and it does not give credit for Advanced Placement exams. All students planning to study economics are required to begin with ECON 001 unless granted a waiver by the department. To receive a waiver, students must have a score of 5 on both the Microeconomics and Macroeconomics AP exams (or a 6 or 7 on the Economics Higher Level Exam of the International Baccalaureate, or an A on the British A Levels). This waiver does not count as a course credit. Students who receive the waiver cannot enroll in ECON 011 or 021 before taking at least one other economics course.
Work done at a college or university while attending secondary school is eligible for credit subject to the chairperson's normal discretion in giving credit for such work, but only if the work is credited on an official college or university transcript. With respect to satisfying the prerequisite requirements for other economics courses: either semester of a two-semester introductory course alone counts as the equivalent of ECON 001 but if only one of two introductory semesters is taken, the material covered in the other half must be accessed by auditing (subject to the instructor's approval) the relevant parts of ECON 001 or by taking the appropriate intermediate theory course (ECON 011 or ECON 021).

## Transfer Credit

Transferring economics credits: Students must consult the department chair before taking a non-Swarthmore course for credit. In turn, when formally requesting a credit transfer, students should always bring evidencesyllabus, papers, and examinationsconcerning the content of the course. Problems transferring credit typically arise in connection with courses offered in programs abroad that are labeled as economics though they are in fact courses in law, history, or political science; the department does not accept such credits as being within the domain of economics. It is usually sufficient for partial credit transfer if the course is taught by a qualified economist and is largely analytical in content, as are nearly all
courses in economics departments in American colleges and universities. Students contemplating a semester in Grenoble should be aware that the problems noted here often arise in the case of "economics" courses offered under the auspices of the Grenoble program. Transferring credit for introductory economics: Subject to the department's approval, students may transfer credit for introductory economics taken at other colleges or universities, whether taken in the context of a one or a two semester introductory course.
Transferring credits for business courses: Students can only apply one course in Accounting toward their 8 course requirement in economics. Business courses taken at the University of Pennsylvania or other universities beyond this cannot be counted toward the eight courses required for an economics major. They can be included as part of the 32 courses required for graduation. Students, however, can receive credit for no more than two such courses. The only exception to this rule is for students who take the equivalent of ECON 033 (Accounting) at another school; the course is not counted against the two allowed business credits, and can be counted as part of the 8 credits needed for the economics major. No credit is given for night school classes at Wharton.

## Teacher Certification

The College offers teacher certification in economics through a program approved by the state of Pennsylvania. For further information about the relevant set of requirements, please refer to the Educational Studies section of the Bulletin.

## Additional Matters

Recommended course sequence: Take ECON 001 in the freshman year. Take ECON 011, 021 , and 031 in the sophomore and junior years and certainly before the beginning of the senior year. For students contemplating graduate study in economics, take one or more of: ECON 101, ECON 102, and ECON 135, as well as the Mathematics and Statistics courses discussed at the beginning of this document.
Ranking for entry into seminars: Entry into oversubscribed seminars is first-come, firstserved for students in the Honors Program, with priority given to seniors, then to juniors. Any places remaining are allocated on the basis of first-come, first-served for students in the Course Program.
Double major in Economics and
Engineering: Double majors may count Operations Research (cross-listed as ECON 032 and ENGR 057) for both majors. It will appear
as ENGR 057 on the student's transcript if it is taken to satisfy engineering or both requirements.
Semester or year away: The Economics
Department will facilitate study abroad or elsewhere in the United States. Correspondingly, it has designed a major that can, without difficulty, be completed in no more than four semesters. Moreover, the department is quite liberal in approving transfer credits for courses offered by economics departments elsewhere. Students should, however, be aware of the following considerations: to graduate with an economics major from Swarthmore, a student must have taken at least two economics courses at Swarthmore and must pass the department's comprehensive exam.

## Courses

## ECON 001. Introduction to Economics

Covers the fundamentals of microeconomics and macroeconomics: supply and demand, market structures, income distribution, fiscal and monetary policy in relation to unemployment and inflation, economic growth, and international economic relations. Focuses on the functioning of markets as well as on the rationale for and the design of public policy. Prerequisite for all further work in economics. 1 credit.
Each semester. Staff.

## ECON 002. First-Year Seminar: Greed

 In 1776, Adam Smith wrote in The Wealth of Nations, "It is not from the benevolence of the butcher, the brewer, or the baker, that we expect our dinner, but from their regard to their own interest.... The individual intends only his own gain, and he is in this, as in many other cases, led by an invisible hand to promote an end which was no part of his intention. Nor is it always worse for society that it was no part of it. By pursuing his own interest he frequently promotes that of the society more effectually than when he really intends to promote it." This seminar investigates the degree to which selfinterest should be the organizing principle of economic and social organization.This course counts as 1 of the 8 economics credits needed to fulfill an economics major, but it does not take the place of ECON 001. It, therefore, cannot be used to fulfill the ECON 001 prerequisite for further work in the Economics Department.
Writing course.
1 credit.
Not offered 2011-2012.

## ECON 002A. First-Year Seminar: Emerging Market Economies: The BRICS 1900-2020

Will Brazil, Russia, India, and China be the most dominant economies in the world by 2050? Why is South Africa (S) in the group? We study the economic trajectories of these countries from roughly 1900, emphasizing the roles of domestic reforms and global markets in spurring human capital accumulation, industrial development, and economic growth. We ask how international organizations like the International Monetary Fund (IMF) and World Trade Organization (WTO) are accommodating the emergence of these countries, and what influence the BRICS are likely to exert on the global governance of trade, aid, finance, and the environment.
This course counts as 1 of the 8 economics credits needed to fulfill an economics major, but it does not take the place of ECON 001. It, therefore, cannot be used to fulfill the ECON 001 prerequisite for further work in the Economics Department.
1 credit.
Fall 2011. O'Connell.
ECON 005. Savage Inaccuracies: The Facts and Economics of Education in America
(Cross-listed as EDUC 069)
This course investigates the relationship between issues of resource allocation and educational attainment. It examines the facts about student achievement, educational expenditure in the United States, and the relationship between them. It studies such questions as: Does reducing class size improve student achievement? Does paying teachers more improve teacher quality and student outcomes? The course also investigates the relationship between educational attainment and wages in the labor market. Finally, it analyzes the effects of various market-oriented education reforms such as vouchers and charter schools. Eligible for PPOL credit.
Prerequisites: Any statistics course (or the consent of the instructor). EDUC 014 is strongly recommended.
1 credit.
Not offered 2011-2012.

## ECON 009. Creativity and Economics

Creativity-the creation of new products, from video games and paintings to computers and the human genome-has become increasingly central to the U.S. economy. Modern advanced economies invest as much in intangible assetsthe intellectual property associated with new products-as they do in traditional plant and equipment. In this course, we study creativity as
an economic activity, using new economic models that have been developed for intangibles and the new measures and welfare analyses that accompany them.
1 credit.
Fall 2011. Nakamura.

## ECON 011. Intermediate

## Microeconomics

Provides a thorough grounding in intermediatelevel microeconomics. The standard topics are covered: behavior of consumers and firms, structure and performance of markets, income distribution, general equilibrium, and welfare analysis. Students do extensive problem solving both to facilitate learning microeconomic theory and its applications.
Prerequisite (beginning 2012-2013): MATH 015.

1 credit.
Fall 2011. Magenheim.

## ECON 012. Game Theory and Strategic Behavior

How should you bargain for a used car or mediate a contentious dispute? This course is an introduction to the study of strategic behavior and the field of game theory. We analyze situations of interactive decision making in which the participants attempt to predict and to influence the actions of others. We use examples from economics, business, biology, politics, sports, and everyday life.
Eligible for PEAC credit.
1 credit.
Not offered 2011-2012.

## ECON 021. Intermediate Macroeconomics

The goal of this course is to give the student a thorough understanding of the actual behavior of the macroeconomy and the likely effects of government stabilization policy. Models are developed of the determination of output, interest rates, prices, inflation, and other aggregate variables such as fiscal and trade surpluses and deficits. Students analyze conflicting views of business cycles, stabilization policy, and inflation/unemployment trade-offs.
Prerequisite: Freshmen need the consent of the professor and, beginning 2012-2013, MATH 015.

1 credit.
Spring 2012. Kuperberg.

## ECON 022. Financial Economics

This course analyzes the ways that firms finance their operations. It discusses the organization and regulation of financial markets and institutions. It examines theories explaining
asset prices and returns, and it discusses the function and pricing of options and futures contracts.
Prerequisite: ECON 031, STAT 031, or STAT 061.

1 credit.
Fall 2011. Caskey.

## ECON 027. Antitrust Legislation and Regulation

This course provides an introduction to the interaction between economic theory and the political process from both a domestic and an international perspective. Topics include the provision of public goods, taxes and subsidies, competition in the marketplace, and the effects of market power and rent-seeking behavior on the political system. Emphasis throughout will be on the application of economic theory to current events.
1 credit.
Fall 2011. Brusentsev.
ECON 031. Introduction to Econometrics
This course provides an introduction to the theory and practice of applied quantitative analysis in economics. Following a brief discussion of probability, statistics, and hypothesis testing, this course emphasizes using regression analysis to understand economic relationships and to test their statistical significance. Computer exercises provide practical experience in using these quantitative methods.
1 credit.
Each semester. Hollister.
ECON 032. Operations Research (See ENGR 057)
1 credit.
Fall 2011. McGarity.

## ECON 033. Financial Accounting

This course is designed to provide students with an intermediate level study of corporate accounting theory and practice as it falls within the framework of United States generally accepted accounting principles (GAAP). A major focus of the course is how accounting provides information to various user groups so that they can make more informed decisions. In particular, students will learn the steps in the accounting cycle leading up to the preparation and analysis of corporate financial statements. Students are also exposed to some of the fundamental differences between federal tax rules and external financial reporting requirements and are made aware of the organizations that influence and contribute to the body of knowledge in financial accounting. Finally, ethical issues that may be confronted by the accountant are also discussed throughout
the course. (This course cannot be used to satisfy the College's distribution requirements.)
1 credit.
Spring 2012. Hargadon.

## ECON 035. Econometrics

Quantitative methods used in estimating economic models and testing economic theories are studied. Students learn to use statistical packages to apply these methods to problems in business, economics, and public policy.
Prerequisite: ECON 031 or STAT 061.
1 credit.
Fall 2011. Hollister.

## ECON 041. Public Economics

This course focuses on government expenditure, tax, and debt policy. A major part of the course is devoted to an analysis of current policy issues in their institutional and theoretical contexts. The course will be of most interest to students having a concern for economic policy and its interaction with politics.
Recommended: ECON 011.
Eligible for PPOL credit.
1 credit.
Spring 2012. Bronchetti.

## ECON 042. Law and Economics

The purpose of this course is to explore the premises behind the use of utilitarian constructs in the analysis of public policy issues. In particular, the appropriateness of the growing use of economic methodology will be examined through an intensive study of issues in property, tort, contract, and criminal law.
Recommended: ECON 011.
Eligible for PPOL credit.
1 credit.
Not offered 2011-2012.

## ECON 044. Urban Economics

The topics covered in this course include the economic decline of central cities, transportation policies, local taxation, theories of urban growth patterns, local economic development initiatives, and the economics of land use and housing.
Prerequisite: ECON 031, STAT 031, or STAT 061.

1 credit.
Spring 2012. Crone.

## ECON 051. The International Economy

This course surveys the theory of trade (microeconomics) and of the balance of payments and exchange rates (macroeconomics). The theories are used to analyze topics such as trade patterns, trade
barriers, flows of labor and capital, exchangerate fluctuations, the international monetary system, and macroeconomic interdependence.
Prerequisites: ECON 011 and ECON 021. Eligible for PPOL credit.
1 credit.
Spring 2012. Golub.
ECON 054. Global Capitalism Since 1920
This course will study global capitalism over the last century, focusing on the interplay between events, economic theories and policies. The issues to be examined include: financial market booms and busts; business cycles; inequality; the social welfare state; technological change and economic growth; and international trade and financial arrangements. The time period covers: the Roaring Twenties; the Great Depression, the post war Golden Age (1945-1973); the stagflation of the 1970s; the Thatcher-Reagan-Greenspan-Bush era of market liberalization (1980-2007); and the financial crisis and Great Recession of 2007-2010. Economic theories include: the classical laissez-faire view; Schumpeter's theory of "creative destruction"; Keynes and the "neo-classical synthesis" advocating a mixed economy; Minsky's theory of financial instability; Friedman, the efficientmarkets hypothesis, and the "new classical" critiques of government interventions; and emerging ideas in response to the present crisis. The course will chronicle and compare economic policy and performance of the United States, Europe, Japan, and the developing world (Asia, Latin America, Africa).
1 credit.
Fall 2011. Golub.

## ECON 063. Public Policies in Practice:

 Establishing What Works and for Whom Participants in this course will examine research on specific policy interventions designed to change outcomes for individuals, corporations, and communities. Particular focus will be on attempts to establish whether such policy interventions can cause changes in outcomes for individuals, corporations, or communities. In recent decades, random assignment/experimental designs have increasingly been applied to estimate the impact of changes in policies on employment, welfare, housing, education, policing, public health, and community development. Social policy experiments and alternative methods to examine cause and effect will be covered, with emphasis on actual examples from the previously mentioned fields. Specific issues in design, implementation of such studies, the analysis of results, and translation to the policy context will be reviewed. Students will meet with selected analysts who carry out these typesof studies. Students will do some analysis of data generated from quantitative studies of what works and for whom.
1 credit.
Spring 2012. Hollister.

## ECON 067. Experimental Economics

This course will cover some of the main research topics in economics that have been studied with laboratory and field experiments, such as behavior in competitive markets, provision of public goods, biases in individual decision-making, neural underpinnings of economic choice, and preferences regarding risk, time, and fairness. Students will be introduced to techniques for conducting economic experiments, and will design their own experiment as part of course assignments. Prerequisites: ECON 031, or STAT 011, or a score of 4 or 5 in AP Statistics.
Recommended: ECON 011.
1 credit.
Spring 2012. Huffman.

## ECON 073. Race, Ethnicity, and Gender in Economics

This course focuses on the role of difference in economic systems. In this course, we learn how to apply the theoretical and empirical tools of economics to analyze the economic status of women and of various racial and ethnic groups in the United States, and we explore the various sources of, and solutions to, persistent economic inequality. We also examine the roles of race, ethnicity, and gender in the development of economic theory and policy. Eligible for BLST, GSST, or PPOL credit.
Recommended: ECON 011.
1 credit.
Not offered 2011-2012.

## ECON 075. Health Economics

This course applies the tools of microeconomic analysis to the health care industry. We will analyze the determinants of demand for and supply of health care, including the relationship between demographic variables, health status, and health care consumption. The structure and behavior of the major components of the supply side will be studied, including physicians, hospitals, and insurance companies. The variety of ways in which the government intervenes in the health care sector-regulation, antitrust, social insurance, and direct provision-will be considered. Finally, we will study some more specialized topics, including the intersection of bioethics and economics, mental health economics, and international health system comparisons. Students will write a series of short papers, examining medical, economic, and
policy considerations related to a health problem or issue.
Writing course.
1 credit.
Not offered 2011-2012.
ECON 076. Environmental Economics
Introduction to basic concepts and methods used in evaluating environmental benefits and costs and in assessing mechanisms for allocating environmental resources among present and future uses, with due attention to seemingly noneconomic concerns. Specific topics include pollution and environmental degradation; use of exhaustible and renewable resources; management of air, water, and energy resources; sustainable economic growth; and international resource management.
Eligible for ENVS or PPOL credit.
1 credit.
Not offered 2011-2012.

## ECON 081. Economic Development

A survey covering the principal theories of economic development and the dominant issues of public policy. Topics include the determinants of economic growth and income distribution, the role of the agricultural sector, the acquisition of technological capability, the design of poverty-targeting programs, the choice of exchange rate regime, and the impacts of international trade and capital flows (including foreign aid).
Eligible for ASIA, BLST, PEAC, or PPOL credit.
1 credit.
Spring 2012. O’Connell.

## ECON 082. Political Economy of Africa

A survey of the post-independence development experience of Sub-Saharan Africa. We study policy choices in their political and institutional context, using case-study evidence and the analytical tools of positive political economy. Topics include development from a natural resource base, conflict and nation building, risk management by firms and households, poverty-reduction policies, globalization and trade, and the effectiveness of foreign aid.
Eligible for BLST, PEAC, or PPOL credit. 1 credit.
Spring 2012. O’Connell.

## ECON 099. Directed Reading

With consent of a supervising instructor, individual, or group study in fields of interest not covered by regular course offerings.
Fall or spring semester. Staff.

## Seminars

ECON 101. Advanced Microeconomics
Subjects covered include consumer and producer theory, optimization and duality, general equilibrium, risk and uncertainty, asymmetric information, and game theory. Prerequisites: ECON 011 and multivariable calculus (MATH 033, 034, or 035).
2 credits.
Spring 2012. Bayer.

## ECON 102. Advanced Macroeconomics

Subjects covered include microfoundations of macroeconomics, growth theory, rational expectations, and New Classical and New Keynesian macroeconomics. Extensive problem solving, with an emphasis on the qualitative analysis of dynamic systems.
Prerequisites: ECON 011, ECON 021, and multivariable calculus (MATH 033, 034 or 035, or MATH 025 or 026 with permission of the instructor).
Recommended: MATH 043 or 044.
2 credits.
Not offered 2011-2012.

## ECON 122. Financial Economics

This seminar analyzes the ways that firms finance their operations. It discusses the organization and regulation of financial markets and institutions. It examines theories explaining asset prices and returns, and it discusses the function and pricing of options and futures contracts.
Prerequisites: ECON 011, ECON 031 or ECON 035 , and MATH 025 or higher calculus.
2 credits.
Fall 2011. Caskey.

## ECON 135. Advanced Econometrics

Quantitative methods used in estimating economic models and testing economic theories are studied. Students learn to use statistical packages to apply these methods to problems in business, economics, and public policy. Students will also evaluate studies applying econometric methods to major economic issues. An individual empirical research project is required.
Prerequisites: ECON 035 and linear algebra (MATH 027, 028 or 028S).
1 credit.
Spring 2012. Jefferson.

## ECON 141. Public Economics

This seminar focuses on the analysis of government expenditure, tax, and debt policy. A major part of the seminar is devoted to an analysis of current policy issues in their institutional and theoretical contexts. The
seminar will be of most interest to students having a concern for economic policy and its interaction with politics.
Eligible for PPOL credit.
Prerequisite: ECON 011.
Recommended: ECON 021 and ECON 031 (or its equivalent).
2 credits.
Spring 2012. Bronchetti.

## ECON 145. The Labor Economics of Inequality in America

This seminar applies the tools of labor economics to study the determinants and consequences of economic inequality in the United States. Topics to be discussed include causes of and trends in U.S. earnings inequality, the economics of the family and household labor supply decisions, executive pay, lowwage labor markets, immigration, and discrimination. The course will also consider the role of progressive taxation and anti-poverty policies including welfare reform, public safety nets, and labor market training programs.
Prerequisites: ECON 011 and ECON 031. 2 credits.
Not offered 2011-2012.

## ECON 151. International Economics

Both microeconomics and macroeconomics are applied to an in-depth analysis of the world economy. Topics include trade patterns, trade barriers, international flows of labor and capital, exchange-rate fluctuations, the international monetary system, financial crises, macroeconomic interdependence, the roles of organizations such as the World Trade Organization and International Monetary Fund, and case studies of selected industrialized, developing, and transition countries.
Prerequisites: ECON 011 and ECON 021. Eligible for PPOL credit.
2 credits.
Spring 2012. Golub.

## ECON 165. Behavioral Economics

Economic theory is based on assumptions regarding the form of individuals' preferences, ability to optimize, weighting of probabilities in risky choice, and belief formation. This course is an introduction to behavioral economics, a field focused on making these behavioral assumptions more realistic. Strategies for improving realism include drawing on the relevant literature in psychology, conducting new experiments, or using existing field data. The course will cover, at an advanced level, topics in economics where research in behavioral economics has led to revision or questioning of aspects of standard economic theory, and to a better description of actual
economic behavior. For example, we will discuss the role of self-control problems in savings behavior, and the relevance of preferences for fairness for explaining the functioning of labor markets.
Prerequisites: ECON 011, ECON 031, and MATH 015 (or a score of 5 in AP Calculus)
Recommended: Multivariable calculus (MATH 033,034 , or 035).
2 credits.
Fall 2011. Huffman.

## ECON 171. Labor and Social Economics

Students discuss such topics as the organization of work within firms, labor market operations, unions and labor relations, unemployment and macroconditions, economic analysis education, health care, housing, and discrimination, determinants of income inequality, and government policies with respect to health, education, and welfare.
Eligible for BLST or PPOL credit.
Recommended: ECON 011.
2 credits.
Spring 2012. Hollister

## ECON 181. Economic Development

The economics of long-run development in Africa, Asia, and Latin America. We cover the leading theories of growth, structural change, income distribution, and poverty, with particular attention to development strategies and experience since World War II. Topics include land tenure and agricultural development, rural-urban migration, industrialization, human resource development, poverty targeting, trade and technology policy, aid and capital flows, macroeconomic management, and the role of the state. Students write several short papers examining the literature and a longer paper analyzing a particular country's experience.
Eligible for ASIA, BLST, or PPOL credit. Prerequisites: ECON 011 and ECON 021. Recommended: ECON 031 (or its equivalent). 2 credits.
Fall 2011. O'Connell.

## ECON 198. Thesis

With consent of a supervising instructor, honors majors may undertake a senior thesis for double credit.
Each semester. Staff.

K. ANN RENNINGER, Professor and Chair<br>LISA SMULYAN, Professor ${ }^{3}$<br>DIANE DOWNER ANDERSON, Associate Professor<br>FRANK D. GROSSMAN, Assistant Professor<br>CHERYL JONES-WALKER, Assistant Professor ${ }^{1}$<br>MARGARET INMAN LINN, Visiting Assistant Professor (part time)<br>ELAINE ALLARD, Visiting Instructor ${ }^{2}$<br>KAE KALWAIC, Administrative Assistant<br>CATHERINE DUNN, Placement and Clearance Coordinator

[^4]
## The Academic Program

The Educational Studies Department at Swarthmore engages students in the investigation of educational theory, policy, research and practice from a variety of disciplinary perspectives. We prepare students to work in educational research or policy, to enter the teaching profession and/or to do graduate study in educational studies or a related field. The department encourages undergraduates to think critically and creatively about the processes of teaching and learning and about the place of education in society. The department is also committed to preparing students to address education related needs in an era of rapidly increasing racial, ethnic and linguistic diversity and technological change to develop students' abilities to participate fully in civic, cultural and economic arenas. Both introductory and upper level courses in the department draw on theory and research in anthropology, economics, history, political science, psychology and sociology. Students interested in educational studies at Swarthmore may complete the requirements for teacher certification and/or design a special major in educational studies and another discipline in either the Course or Honors Program.

## Special Major

Students may undertake special majors in honors or course with educational studies and another discipline (e.g., art, biology, chemistry, computer science, English, history, linguistics, math, music, physics, political science, psychology, sociology and anthropology). There are no majors in educational studies. Special majors involving educational studies usually include 10 to 12 credits, at least five of which must be in educational studies.
For all special majors involving educational studies, both departments collaborate in advising the student, and a thesis or a comprehensive examination integrating work in the two fields is required. The prerequisite for all students doing a special major or minor is

EDUC 014: Introduction to Education. EDUC 016 and 017 are not counted as part of a special major.
Students designing a special major in biology and educational studies must take six courses in biology including at least one course in each group (I, II, and III) and one course in evolution. In addition to the six biology courses, students will take Introductory Chemistry, at least one semester of organic chemistry, and two semesters of college mathematics (not STAT 001 or MATH 003) or Calculus II (MATH 023 or 025), and will write a thesis supervised by faculty in the biology and educational studies departments.
Students designing a special major in English literature and educational studies must take five to six credits in English including a W course, at least one course in pre-1830 literature and at least one in post-1830 literature. Students will normally do a one-credit thesis or senior essay supervised in both English literature and educational studies.
Students designing a special major in history and educational studies must take six courses in history including one class in a field other than United States or Europe. One of the courses must be HIST 091 (fulfilling the senior comprehensive requirement), or, with the permission of both departments, students can complete a two-semester, two-credit thesis. Students will work with both an educational studies faculty member and the HIST 091 instructor to complete a one-credit senior research paper or a two-credit thesis.
Students designing special majors in linguistics and educational studies are expected to complete six linguistics courses, including a course or seminar in each of the following fields: sounds, forms, and meanings. Students also write a two-credit thesis, one credit usually done in the fall through LING 100 and one credit in the spring through EDUC 097, which integrates their study in educational studies and linguistics.

Students designing a special major in mathematics/statistics and educational studies are required to take seven courses in mathematics including either MATH 063 or 067 and one more course numbered above 044. Students will complete a one-credit thesis or project supervised in both educational studies and mathematics.
Students designing a special major in music and educational studies take a total of twelve credits in music and educational studies. Required courses include MUSI 011 and 012, MUSI and DANC 091, a musical repertory course, EDUC 014 and EDUC 021. Students must also choose two of the following: MUSI 018: senior comprehensive exam, senior thesis, or a service-learning project. The other courses are negotiated on an individual basis to meet the student's interests.
Students designing special majors in political science and educational studies are expected to take five to six political science courses including one in each of the following groups: American politics, comparative or international politics, and political theory (either POLS 011 or 012). Students do either an oral thesis or a one- or two-credit written thesis, which integrates their study in educational studies and political science.
Students designing special majors in psychology and educational studies are expected to take six psychology courses including three core courses in psychology (courses numbered in the 30s), PSYC 025, Research Design and Analysis, and EDUC 021, Educational Psychology. Students also complete either an integrated comprehensive project (PSYC 098 or EDUC 098) or a twocredit interdisciplinary thesis. Those students who plan to do both student teaching and a double credit thesis will usually begin thesis work during the spring of their junior year, complete their thesis in the fall, and student teach in the spring of their senior year.
Students designing special majors in sociology and anthropology and educational studies must take SOAN 012 M , Exemplary Studies and are expected to do a double credit thesis. Students who will also complete the requirements for teacher certification must 1) do their thesis during the spring of their junior year and one semester of their senior year or 2) do a large part of the thesis during the summer between junior and senior years and finish the thesis during the semester they do not student teach.

## Minors

The Educational Studies Department supports two kinds of minors:

- Teaching and field-based minor. Students complete at least five educational studies credits
that focus on educational practice and the integration of theory and practice in school placements. This minor will normally be done in conjunction with teacher certification. The credits that comprise this minor are Educational Psychology, Curriculum and Methods seminar, Practice Teaching (two credits) and one of the following: Teaching Young Diverse Learners, Adolescence or Psychology and Practice.
- Educational studies minor. Students take at least five credits in discipline-based educational studies courses. For this minor, students identify a focus and describe how two or more of the courses or seminars they propose for the minor are related to this focus. Possible foci include but are not limited to Educational Policy, Educational Psychology, School and Society, Urban Education, Environmental Education, Literacy, Gender and Education, and Special Education. EDUC 016 and 017 do not count toward an educational studies minor. Students pursuing a minor complete the requirements of the major department for the senior comprehensive exercise.


## Interdisciplinary Programs

Specific courses in educational studies can be used to meet requirements in black studies, environmental studies, public policy, and gender and sexuality studies. Please see the course listings for each program, or consult with the program coordinator.

## Honors Program

Educational studies offers an Honors Program as part of a special major and as a minor.

## Special Majors in Honors

Educational studies offers a special major honors option in conjunction with English, linguistics, political science, psychology and sociology and anthropology (and other departments with the approval of both educational studies and the second department). Special major Honors Programs will involve one and a half to three two-credit preparations in educational studies. The following options are possible: two and a half preparations in educational studies and one and a half in the other discipline, or one and a half preparations in educational studies and two and a half in the other discipline. (All special majors do a double credit thesis that integrates the two disciplines; the thesis receives one credit from each department.) Students applying to do honors work, as part of a special major must have taken Introduction to Education and at least two other educational studies courses and have an average grade of B+ in their educational studies courses before they will be accepted to the program.

Special major honors preparations in educational studies will consist of the following:

- Thesis. In every case the special major Honors Program will involve a two-credit thesis. This thesis will normally serve as the integrative piece of the special major, in which case the thesis will be supervised and read by faculty members in education and the other department.
- Two-credit educational studies seminar. In order to enroll in seminars, students need to take Introduction to Education and at least one of a specified list of educational studies courses as prerequisites. Each seminar has its own list of prerequisites.
- One-credit educational studies course, plus one-credit attachment or one-credit seminar. These preparations are designed by the student and a supervising faculty member.


## Honors Minors

Students completing a minor in educational studies will complete a total of five credits in Educational Studies, including Introduction to Education, two other educational studies courses and one of the following options. They will also be expected to have a B + average in their educational studies courses.
Honors minor preparations include:

- A two-credit seminar. In the case of the minor, students will be expected to do three courses in educational studies as prerequisites for taking a seminar, including Introduction to Education and any elective course(s) required for each seminar.
- A one-credit educational studies course and a one-credit attachment or one-credit seminar. Students choosing this option will have taken Introduction to Education and at least two other courses in educational studies in addition to the course and attachment.
All honors students (majors and minors) in educational studies write a short intellectual autobiography that is submitted to the honors examiner. No credit is attached to this paper, which is completed in the spring of the senior year.
External Exams
The External Exams will take one of two forms:
- Two-credit thesis and oral exam. The thesis will be sent to the examiner in April and students will participate in an hour-long oral exam in May. All examiners in the student's special major program will be invited to participate in the oral exam, if they desire.
- Analytic essay. In April, after receiving a copy of the syllabus for the two-credit preparations, examiners prepare an essay exam based on the syllabus. As part of this process,
they may send the students in the educational studies seminar or course/attachment a problem set, a case and/or additional readings relevant to the work they have undertaken in that preparation. In their written exam, students respond to the problem set or case materials in one or more of the essays.
All educational studies honors exams will be written in the Educational Materials Center. Students may have notes on the case or problem set with them while they are writing and may write for up to five hours. A 30-45 minute oral exam will follow in May.


## Application Process Notes for the Major or the Minor

Those interested in pursuing a major, minor, and/or teacher certification through the department should arrange a meeting with the chair of the department and/or talk with a faculty member whom they have had in class and arrange a meeting to discuss their plans. Following this, they complete a Sophomore Paper Cover Sheet (available through the Registrar's Office) that is submitted to the department stating their plans.

## Advanced Placement/International Baccalaureate Credit

AP and IB credits are not accepted by the department.

## Transfer Credit

Transfer credit is accepted once a student has completed the Introduction to Education course in the department, provided that a syllabus and course work is presented to the department for review. It is possible that only partial credit will be awarded for work submitted as transfer credit and that some additional work may be requested. Such a request would be discussed with the student.

## Off-Campus Study

Students requesting credit in educational studies for course or fieldwork done abroad (or at another institution in the United States) must take at least one course in educational studies at Swarthmore. This course may be taken before or after study abroad. Students may pursue such courses at any institution.
The department sponsors two study abroad programs. One is at the Cloud Forest School in Costa Rica (www.swarthmore.edu/x9200.xml), through which students can do a school-based internship, an intercultural credit of Spanish language instruction, and an independent study. The other program is through the University of Capetown, South Africa
(www.swarthmore.edu/x20601.xml), and it focuses on environmental issues and educational issues (e.g., literacy, equity, intersections between schools, communities, and the environment) in South Africa.

## Research and Service-Learning Opportunities

Bridging research and practice is a goal for courses and seminars in the department. Many courses and seminars have a fieldwork component to them, and the fieldwork component in each differs from the next in order to provide students taking courses in the department with a wide-range of experiences.
The Outreach Practicum course is offered every two years and is specifically designed to provide students with support for working in educational and community-based settings.

## Teacher Certification

Swarthmore offers a competency-based teacher preparation program that is transferable to most states for students who seek secondary certification from the Commonwealth of Pennsylvania. Individual student programs are designed with guidance from representatives from the discipline in which the student is being certified and members of the educational studies faculty. All students seeking certification must meet Swarthmore College's distribution requirements in the humanities, natural sciences and social sciences and the requirements for a major or special major.

## State requirements

Students in Pennsylvania must have completed 48 credit hours (or 12 Swarthmore College credits) to be admitted to the teacher certification program. Application for admission to the certification program is completed at the time that a student enrolls in Practice Teaching and the Curriculum and Methods Seminar. In order to be certified, students must attain an overall grade point average of 3.0. Applicants admitted to the certification program must also present evidence of having completed six credit hours, or the equivalent, in college level math courses and six credit hours, or the equivalent, in college level English courses before they graduate. In the case of the math requirement, courses outside of mathematics/statistics that fulfill the natural science division distribution requirements can be substituted. AP credit for scores of four or five in English literature, English composition, calculus AB or $\mathrm{AB} / \mathrm{BC}$ or statistics will be accepted as the equivalent credit for one Swarthmore College course. Math scores of 560 or better on the SAT II math level 1C or IIC exam and scores of 600 or better on the writing portion of the SAT reasoning
exam will be accepted as the equivalent of three credit hours in the respective areas.
In order to be certified each candidate must pass the specific PRAXIS exams required by Pennsylvania for their certification area. Students normally take these exams during their senior year, while they are practice teaching.

## Secondary certification

Swarthmore College offers competency-based teacher certification programs, approved by the State of Pennsylvania, in biology, chemistry, citizenship (for history, economics and political science majors), English, French, German, mathematics, physics, Russian, Spanish, social science (for psychology and sociology and anthropology majors), and social studies. In order to be certified, students must complete a major or its equivalent in their area of certification and take a total of seven and a half course credits in educational studies, including:

- Introduction to Education, EDUC 014
- Educational Psychology, EDUC/PSYC 021
- Adolescence, EDUC/PSYC 023
- Adolescents and Special Education (. 5 credit), EDUC 023a
- Special Education, EDUC 026
- Language Minority Education, EDUC 053
- Practice Teaching, EDUC 016 (2 credits)
- Curriculum and Methods, EDUC 017 (2 credits)
Introduction to Education, EDUC 014, should be taken by the end of sophomore year, if at all possible. Practice Teaching, EDUC 016, and the Curriculum and Methods Seminar, EDUC 017 , are regularly taken during the first or second semester of the senior year, or in a ninth semester after graduation. Students preparing for certification must attain a grade point average of B or above in their course work; in order to do Practice Teaching, they must have at least a B- in Introduction to Education and the recommendation of all educational studies faculty who have taught them. Formal admittance to the certification program follows registration in Practice Teaching and the Curriculum and Methods Seminar.
As part of the certification program, students practice teach for a minimum of 12 weeks and receive weekly supervision from a college faculty member. Placement for practice teaching is available in a range of public (urban and suburban) and private schools, including several Friends schools in the Philadelphia area.


## Elementary certification

Certification in elementary education is not offered by Swarthmore College. However, if students complete required courses at Swarthmore and 12 weeks of practice teaching in an elementary school, they can receive
certification through Eastern College, with which Swarthmore has a collaborative arrangement. Required courses for elementary certification include:

- Introduction to Education, EDUC 014
- Educational Psychology, EDUC/PSYC 021
- Developmental Psychology, PSYC 039 or Psychology and Practice, EDUC 121
- Teaching Young Diverse Learners, EDUC 042
- Language Minority Education, EDUC 053
- Special Education, EDUC/PSYC 026
- Practice Teaching, EDUC 016 (2 credits)
- Curriculum and Methods, EDUC 017 (2 credits)
- In addition, students take two additional elementary methods courses in Language Arts and Reading at Eastern College Summer School (from mid May-late June) for a total cost of \$3170 (rate, spring 2011).
Students pursuing elementary certification are also expected to demonstrate competence math, science, social studies, and language arts in their other course work and are urged to consult with the Chair of the department regarding course selections.


## Ninth semester program

Students who have completed all the requirements for certification in their discipline and in educational studies, except for Practice Teaching and the Curriculum and Methods Seminar, may apply to return following graduation to complete the teacher certification program during a ninth semester. During this semester, they take Practice Teaching and the Curriculum and Methods Seminar and pay for one course of tuition and student fees. They are not eligible for campus housing. Further information on the ninth semester option is available in the educational studies office.

## Additional Subject Area Requirements for Secondary Certification

Students should refer to Teacher Certification and Educational Studies Requirements for Secondary Teacher Certification for educational studies courses and general requirements for certification. The following sections describe additional specific subject area requirements for each area of certification.

## Certification in Biology

All students seeking certification in biology must complete the requirements of a biology major or a biology and educational studies special major. Students are also strongly encouraged to work as a Science Associate or lab assistant for a semester, contingent on the needs of the department.

For Biology majors, certification requirements include a minimum of eight biology courses (starting with BIOL 001: Cellular and Molecular Biology and BIOL 002: Organismal and Population Biology) and at least one course or seminar selected from each of the following groups: I. Cellular and Molecular Biology; II. Organismal Biology; III. Population Biology. One of the eight courses must be BIOL 034: Evolution. Students are required to also take at least one advanced course or seminar in biology. Student must satisfy the general college requirement of a senior comprehensive examination by completing BIOL 097.
In addition, all biology majors seeking certification must take Introductory Chemistry, at least one semester of Organic Chemistry, and two semesters of college mathematics (not STAT 001 or MATH 003) or Calculus II (MATH 023 or 025). Credit from AP courses or completion of the Mathematics Department's placement requirements is also acceptable. One semester of Statistics is strongly recommended, as well as PHYS 003: General Physics I or PHYS 004L: General Physics II: Electricity, Magnetism, and Optics with Biological and Medical Applications.
For special majors in biology and educational studies, certification requires BIOL 001 and 002; BIOL 010: Genetics or BIOL 014: Cell Biology; BIOL 026: Invertebrate Biology or BIOL 039: Marine Biology; BIOL 034: Evolution; BIOL 036: Ecology, CHEM 010 and 022 and two semesters of college math. Students will also take five credits in educational studies (see "Educational Studies Requirements for Secondary Certification"). Students must also complete a one or two credit special major thesis on biology pedagogical content knowledge.

## Certification in Chemistry

All students seeking secondary certification in chemistry will complete the requirements for a chemistry major, a biochemistry special major, or a chemistry and educational studies special major.
Students being certified are also required to assist in the instruction of a Swarthmore College introductory chemistry course laboratory, taught one afternoon per week for two semesters.
For Chemistry majors, the required subject area courses for chemistry certification include:
CHEM 010/010H: General Chemistry; CHEM
022: Organic Chemistry I; CHEM 032: Organic Chemistry II; CHEM 038: Biological Chemistry; CHEM 043: Analytic Methods and Instrumentation; CHEM 044: Physical Chemistry: Atoms, Molecules and Spectroscopy; CHEM 045: Physical Chemistry: Energy and Change; and CHEM 046: Inorganic

Chemistry. Students must also take a one-credit chemistry seminar (courses numbered 102110); PHYS 003: General Physics I and PHYS: 004 General Physics II (or the equivalent); MATH 015; MATH 025 ; and MATH 034. A senior comprehensive examination or thesis is also required.
For biochemistry special majors, the required subject area courses for chemistry certification include: CHEM 010/010H: General Chemistry; CHEM 022: Organic Chemistry I; CHEM 032: Organic Chemistry II; CHEM 038: Biological Chemistry; CHEM 043: Analytic Methods and Instrumentation; CHEM 044: Physical Chemistry: Atoms, Molecules and Spectroscopy; CHEM 045: Physical Chemistry: Energy and Change; and CHEM 046: Inorganic Chemistry. Students must also take CHEM 106: Topics in Bioinorganic Chemistry; CHEM 108: Topics in Biochemistry or CHEM 110: Topics in Modern Biophysical Chemistry. In addition, students must take PHYS 003: General Physics I and PHYS 004: General Physics II (or the equivalent); MATH 015 ; MATH 025 and MATH 033. Students must also complete either a biochemically related sophomore-level biology course and a biochemically related advanced biology seminar OR two biochemically related sophomore-level biology courses.
For Chemistry and Educational Studies Special Majors, the required subject area courses for chemistry certification include: CHEM 010/010H: General Chemistry; CHEM 022: Organic Chemistry I; CHEM 032: Organic Chemistry II; CHEM 038: Biological Chemistry; CHEM 044: Physical Chemistry: Atoms, Molecules and Spectroscopy; and two other chemistry credits, one of which must be numbered 040 or higher. In addition, students must take PHYS 003: General Physics I and PHYS 004: General Physics II (or the equivalent) and MATH 015 and MATH 025. Students must also complete a special major thesis on chemistry pedagogical content knowledge.

## Certification in English

All students being certified in English will complete an English major. The English major consists of a minimum of nine units of credit in the department, including at least three credit units in literature written before 1830 and three in literature written after 1830. In addition, English majors must complete the departmental comprehensive requirement: English 099's senior essay for Course majors or Senior Honors Study and Honors exams for Honors majors.
For certification in English, a student's program must include one course in American literature, one course in Shakespeare, and one course that includes global/multicultural literature.

Candidates are advised to choose a balanced program from a variety of different authors, genres and periods. In addition, students being certified must take Linguistics 001 and one course in the English 1 or 2 groupings of academic writing courses: ENGL 001A, ENGL 001C, ENGL 001F, or ENGL 002A. ENGL 001 C : Writing Pedagogy is especially recommended. ENGL 014: Old English/History of the Language is also strongly recommended. Highly recommended, but not required for prospective teachers: one course or more in theater, film/media, creative writing, poetry, or journalism (one of the English 070 courses), and/or critical and cultural theory.

## Certification in Foreign Language

All students seeking K-12 certification in Foreign Languages (French, German, Russian and Spanish) will complete a major in Modern Languages and Literatures or a special major in a modern language and literature and educational studies. This includes at least eight credits in advanced language, literature or culture courses (courses numbered 004 and above) and completion of a comprehensive examination or a thesis. Courses numbered 011 or above emphasize the study of literature and culture, as well as competence in the spoken and written language. (See the catalog for specific requirements for majors in the different languages). Students seeking certification are required to take EDUC 072: Foreign Language Teaching Pedagogy, which includes elementary fieldwork. In addition, all majors are required to spend at least a semester or summer abroad in a country that speaks the target language. Information about a variety of study abroad programs in French, German, Russian and Spanish speaking countries is available from the Off-Campus Study Office.
For a listing of specific requirements, Spanish and educational studies special majors should refer to the Spanish section of the catalog. Special majors in educational studies and French, German or Russian should consult with both department chairs regarding requirements.
The normal sequence of courses for a student preparing to teach a foreign language begins with courses in the language itself, which prepare the student to express him or herself fluently in writing and speaking. Exceptions to the initial course requirements are made for those who show initial competence in the language of specialization.
Students who pursue certification in a foreign language must also take LING 001 in order to develop the basic knowledge of language structures. Prospective teachers are also highly encouraged to supplement their language studies with work in other disciplines, such as history, art history, music, and sociology/anthropology, which enhance the
candidate's knowledge of the culture, history and geography of countries where the target language is spoken.
It is recommended that students seeking certification become foreign language tutors at the College and in the community. It is also recommended that they become Writing Associates in their target language. As preparation for K-5 teaching, students should consider taking EDUC 042: Teaching Diverse Young Learners.

## Certification in Mathematics

All students seeking certification in mathematics must either complete a mathematics major or a special major in mathematics and educational studies.
For a description of the mathematics major and its requirements, see the Mathematics and Statistics section of the catalog. In addition to the requirements listed there, all mathematics majors who seek certification must include the following among their electives: one semester of discrete mathematics (MATH 029, 059, 069, 079); one semester of geometry (MATH 055 or 075); and one semester of statistics or probability (STAT $011,031,061,111$ or MATH 105).
For certification, a special major in mathematics and educational studies must complete at least five credits in educational studies (see "Educational Studies Requirements for Secondary Teacher Certification") and seven credits in mathematics. Students must take or place out of one semester of each of the following math courses: first semester calculus (MATH 015); second semester calculus (MATH 025 or 026); linear algebra (MATH 027,028 or 028 S ); discrete mathematics (MATH 029, 059, 069, 079); geometry (MATH 055 or 075); modern algebra (MATH 67); and probability or statistics (STAT $011,031,061$, 111 or MATH 105). A one or two credit special major thesis on mathematical pedagogical content knowledge is also required.
For all students seeking mathematics certification, one semester of computer science (CPSC 021) is strongly recommended. In addition, students are strongly advised to take further mathematics courses emphasizing modeling and applications, and/or to take at least one course in the natural or social sciences in which mathematics is significantly used. They are also highly encouraged to do individual tutoring for a semester, tutor in the math clinic, seek a position as a PIRATE, and/or become involved with the Math Images Project. Students must have received a grade of C or better in all mathematics courses to receive mathematics certification.

## Certification in Physics

All students seeking certification in physics must complete a physics or astrophysics major or a special major in physics and educational studies or astrophysics and educational studies. In addition, they must serve as a lab assistant or science associate in PHYS 003 and 004 or 004L for at least one semester. Both are strongly recommended.
Students should review the major requirements in the Physics and Astronomy section of the catalog.
In the case of a special major, the following courses-all of which are required for the physics and astrophysics majors-are the minimum courses to meet the subject area requirements for certification in physics: PHYS 005: Spacetime, Quanta, and Cosmology; PHYS 007: Introductory Mechanics; PHYS 008: Electricity, Magnetism, and Waves (PHYS 003 and 004 may substitute, with the permission of department chair); PHYS 014: Introductory Quantum Physics; PHYS 050: Mathematical Methods of Physics (or MATH 030 or MATH 081); and PHYS 063: Procedures in Experimental Physics.
To gain a deeper knowledge of some subject areas, students must also take two of the following 100 level courses: PHYS 111: Analytical Dynamics; PHYS 112: Electrodynamics; PHYS 113: Quantum Theory; or PHYS 114: Statistical Physics. Students must also complete the senior comprehensive project. It is strongly recommended that certification candidates take Chemistry 010 and Biology 001 or 002. Finally, students are strongly encouraged to undertake a research project under the guidance of a faculty member, typically during the summer.

## Social Science Certification

Students completing certification in social science will complete a major in psychology or sociology/anthropology. (Students completing majors in economics, history or political science will complete social studies or citizenship certification.)
The psychology major consists of at least eight credits, four of which must be courses numbered in the 030 s and one of which must be PSYC 025: Research Design and Analysis. Majors must also complete STAT 011: Statistical Methods. Students must fulfill the senior comprehensive requirement (in addition to eight credits) or a two credit senior thesis, PSYC 096-097, as part of eight credits. For further information, refer to Psychology in the catalog.
The sociology/anthropology major consists of at least eight credits. All sociology/anthropology majors are required to
take SOAN 012: Exemplary Studies, and complete a two-credit senior thesis, a theory course and a methods course. For further information, refer to Sociology/Anthropology in the catalog.
The programs of all students seeking Social Science certification must include PSYC 001 : Introduction to Psychology and SOAN 012: Exemplary Studies. It is also recommended (but not required) that students take SOAN 028E: Methods of Social Exploration.
In addition, in order to be employed to teach Social Science in states other than Pennsylvania, it is strongly recommended that students also take the following: HIST 003A: Modern Europe, 1789 to 1918 or HIST 033B:
Modern Europe, 1890 to present (or comparable content); HIST 005A: United States to 1877 and HIST 005B: United States From 1877 to Present (or comparable content); ECON 001: Introduction to Economics; and Political Science 002: American Politics.

## Social Studies Certification

Students completing certification in social studies must major in one of the social sciences: economics, history, political science, psychology or sociology/anthropology. Students should refer to the appropriate catalog section for more information about major requirements. All social studies certification candidates must also include the following social science courses in their course of study: HIST 003A: Modern Europe, 1789 to 1918 or HIST 033B: Modern Europe, 1890 to present (or comparable content); HIST 005A: United States to 1877 and HIST 005B: United States From 1877 to Present (or comparable content); ECON 001: Introduction to Economics; PSYC 001: Introduction to Psychology; POLS 002: American Politics or POLS 024: American Constitutional Law; POLS 004: International Politics; a course covering the pre-1790 period; and SOAN 012: Exemplary Studies. It is recommended (but not required) that students take SOAN 028E: Methods of Social Exploration.
In addition, students majoring in history, political science and sociology/anthropology are required to take at least four social science courses outside of their major. Students majoring in economics or psychology are required to take six social science courses outside of their major.

## Citizenship Education Certification

Students completing certification in citizenship education will complete a major in history, political science, or economics. (Students majoring in sociology/anthropology or psychology will complete social science or social studies certification.)

The history major consists of at least nine credits, including at least one course or seminar from each of the following categories: (a) before 1750 , including relevant courses in Classics, and (b) outside of Europe and the United States, specifically Africa, Asia, Latin America and the Near East. In addition, majors will complete HIST 091, the Senior Research Seminar. For additional information, refer to History in the catalog.
The political science major consists of eight or more credits, including at least one course or seminar in each of the following three fields: (1) American politics, (2) comparative or international politics, and (3) political theory. In addition, majors will complete the senior comprehensive exam. For additional information, refer to Political Science in the catalog.
The economics major consists of at least eight credits, including the following: ECON 011: Intermediate Microeconomics; ECON 021: Intermediate Macroeconomics; and ECON 031 : Introduction to Econometrics or its equivalent. It is also highly recommended that students take MATH 015: Elementary Single-Variable Calculus and either MATH 025: Further Topics in Single-Variable Calculus or MATH 026: Advanced Topics. In addition, students must complete the senior comprehensive exam. For further information, refer to Economics in the catalog.
All students seeking certification in Citizenship Education are required to include in their course of study: HIST 003A: Modern Europe, 1789 to 1918 or HIST 033B: Modern Europe, 1890 to present (or comparable content); HIST 005A: United States to 1877 and HIST 005B: United States From 1877 to Present (or comparable content); ECON 001: Introduction to Economics; POLS 002: American Politics or POLS 024: American Constitutional Law; POLS 004: International Politics; and a history or classics course focusing on pre-1750 material.

## Courses

## EDUC 001C. The Writing Process: Pedagogy and Practice

(See ENGL 001C)
Fall 2011. Gladstein.

## EDUC 014. Introduction to Education

This course provides a survey of issues in education within an interdisciplinary framework. In addition to considering the theories of individuals such as Dewey, Skinner, and Bruner, the course explores some major economic, historical, psychological, and sociological questions in American education and discusses alternative policies and programs.

Topics are examined through readings, software, writing, discussion, and hands-on activity. Fieldwork is required. This course fulfills the prerequisite for further course work in educational studies and provides an opportunity for students to explore their interests in educational policy, student learning, and teaching. This course, or the first-year seminar EDUC 014F, is required for students pursuing teacher certification.
Writing course.
1 credit.
Each semester. Staff.

## EDUC 014F. First-Year Seminar: Introduction to Education

This seminar will draw on materials from the disciplines of psychology, sociology, philosophy, history, and political science to address questions about American education. Topics are examined through readings, software, writing, discussion, and hands-on activity. Fieldwork is required. This course fulfills the prerequisite for further coursework in educational studies and provides an opportunity for students to explore their interests in educational policy, student learning, and teaching. This seminar, or the EDUC 014 course, is required for students pursuing teacher certification.
Writing course.
1 credit.
Fall 2011. Staff.

## EDUC 016. Practice Teaching

This course involves supervised full-time teaching in either secondary or elementary schools for students pursuing teacher certification. Students pursuing certification must take EDUC 017 concurrently. (Singlecredit practice teaching may be arranged for individuals not seeking certification.)
2 credits.
Spring 2012. Grossman.

## EDUC 017. Curriculum and Methods Seminar

This seminar is taken concurrently with EDUC 016. Readings and discussion focus on the applications of educational research and theory to classroom practice. Course content covers: lesson planning; classroom management; inquiry-oriented teaching strategies; questioning and discussion methods; literacy; the integration of technology and media; classroom-based and standardized assessments; instruction of special needs populations; topics in multicultural, nonracist, and nonsexist education; and legislation regarding the rights of students and teachers. As part of the seminar, students take a series of special methods
workshops in their content area. Required for students pursuing teacher certification.
2 credits.
Spring 2012. Grossman.

## EDUC 021. Educational Psychology

(Cross-listed as PSYC 021)
This course focuses on issues in learning and development that have particular relevance to understanding student thinking. Research and theoretical work on student learning and development provide the core readings for the course. In addition, students participate in a laboratory section that involves consideration of learning and motivation in an alternative public school classroom and provides an introduction to research methods. Required for students pursuing teacher certification.
Prerequisite: EDUC 014 or permission of the instructor.
1 credit.
Fall 2011. Renninger.

## EDUC 023. Adolescence

(Cross-listed as PSYC 023)
In this course, students examine adolescent development from psychological, sociological, and life-span perspectives, reading both traditional theory and challenges to that theory that consider issues of race, class, gender, ethnicity, and sexual orientation. During the first part of the term, students explore various aspects of individual development (e.g., cognitive, affective, physiological, etc.). The second part of the semester focuses on the adolescent's experience in a range of social contexts (e.g., family, peer group, school, etc.). Required for students pursuing teacher certification.
Prerequisite: EDUC 014 or permission of the instructor.
1 credit.
Spring 2012. Staff.

## EDUC 023A. Adolescents and Special Education

In this half credit attachment to EDUC23, Adolescence, students will focus on meeting the needs of diverse adolescent learners. In particular, students will examine the unique psycho-social interactions between adolescents receiving special education services, their parents and the educators who work with them. Students will also explore strategies for addressing specific cognitive and academic needs of these adolescents in literacy, content area learning, and transitions out of school. Fieldwork is optional. Required for students pursuing secondary teacher certification.
Prerequisite: EDUC 026/PSYCH 026 (can be taken concurrently) or permission of the
instructor. EDUC 023 can be taken concurrently with EDUC 023A. Available as credit/no credit only. 0.5 credit.

Spring 2012. Staff.

## EDUC 026. Special Education: Issues and Practice

(Cross-listed as PSYC 026)
This course is designed to provide students with a critical overview of special education, including its history, the classification and description of exceptionalities, and its legal regulation. Major issues related to identification, assessment, educational and therapeutic interventions, psychosocial aspects, and inclusion are examined. Course includes a field placement. Required for students pursuing teacher certification.
Prerequisite: EDUC 014.
1 credit.
Spring 2012. Linn.

## EDUC 041. Educational Policy

This course explores issues in the design, implementation, and evaluation of educational policy at the federal, state, and local levels in light of the ongoing historical and cultural debates over educational policy. It will examine a range of current policy topics, including school finance, issues of adequacy and equity, the standards movement, systemic reform, testing and accountability, varieties of school choice, early childhood education, immigrant and bilingual education, and special education from the perspectives of several social science disciplines and political perspectives.
Prerequisite: EDUC 014.
1 credit.
Not offered 2011-2012.

## EDUC 042. Teaching Diverse Young Learners

This course explores the ways children learn in classrooms and construct meaning in their personal, community, and academic lives. The course is framed by theories of learning as transmissionist, constructivist, and participatory. Students will draw on ethnographies, research, their own learning histories, classroom observations, and positioning as novice learners to create optimal learning environments for diverse learners including but not limited to English-language learners, socioeconomically disadvantaged populations, culturally non-mainstream students, students with learning differences and disabilities, and students with socioemotional classifications. Fieldwork is required. Required for elementary certification.

Prerequisite: EDUC 014.
Writing course.
1 credit.
Not offered 2011-2012.
EDUC 045. Literacies and Social Identities
This course explores the intersections of literacy practices and identities of gender, race, class, religion, ethnicity, and sexual orientation within communities of practice. It includes but is not limited to school settings. Students will work with diverse theory and analytical tools that draw on educational, anthropological, historical, sociological, linguistic, fictional, visual, popular readings and "scenes of literacy" from everyday practice. Fieldwork includes a Learning for Life partnership, tutoring, or community service in a literacy program.
Prerequisite: EDUC 014 or permission of the instructor.
Writing course.
1 credits.
Not offered 2011-2012.

## EDUC 053. Language Minority Education

(Cross-listed as LING 053)
This course examines the multifaceted issues facing English learners in U.S. schools. Course topics include theories of second language acquisition and bilingualism, the history of bilingual education in the United States, educational language policies and the impact of the English-only movement, and practical approaches to teaching linguistic minority students. Course readings draw from relevant literature in sociolinguistics, language policy, language acquisition, educational anthropology, and language pedagogy. Through fieldwork and small group projects, students have the opportunity to explore issues particular to a language minority population of their choice. Required for students pursuing teacher certification.
Prerequisite: EDUC 014 or permission of the instructor.
1 credit.
Fall 2011. Allard.

## EDUC 054. Oral and Written Language

(See LING 054)
Prerequisite: LING 001, 040, 045, or 050.
1 credit.
Spring 2012. Napoli.

## EDUC 061. Gender and Education

This course uses historical, psychological, and social frameworks to explore the role of gender in the education process. It examines how
gender influences the experiences of teaching and learning and how schools both contribute to and challenge social constructions of gender.
Prerequisite: EDUC 014 or permission of the instructor.
Writing course.
1 credit.
Not offered 2011-2012.

## EDUC 064. Comparative Education

This course examines key issues and themes in education as they play out in schools and nations around the world. We will explore the roles of local, national, and international actors and organizations in the construction of educational goals and practice, using case studies and country studies to look for the interplay between local context and globalized movements in education. Topics will include immigration and schooling, equity, literacy, curriculum goals and constructs, teachers and teaching, and education in areas of conflict.
Prerequisite: EDUC 014.
1 credit.
Not offered 2011-2012.

## EDUC 068. Urban Education

(Cross-listed as SOAN 020B)
This course examines issues of practice and policy, including financing, integration, compensatory education, curricular innovation, parent involvement, bilingual education, highstakes testing, comprehensive school reform, governance, and multiculturalism. The special challenges faced by urban schools in meeting the needs of individuals and groups in a pluralistic society will be examined using the approaches of education, psychology, sociology, anthropology, political science, and economics. Current issues will also be viewed in historical perspective.
Prerequisite: EDUC 014.
1 credit.
Fall 2011. Grossman.

## EDUC 069. Savage Inaccuracies: The Facts and Economics of Education in America <br> (See ECON 005)

EDUC 014 is required to receive Educational Studies Department credit for this course.
1 credit.
Not offered 2011-2012.

## EDUC 070. Outreach Practicum

This course is offered in conjunction with the Lang Center for Civic and Social Responsibility. It is designed to support students involved in educational and community-based outreach in urban settings. Students' volunteer experiences will provide
text and case material for course work.
Historical grounding in the construction of cities in general, and Chester, PA, in particular, will be provided. Criteria for effective practices will be identified for the range of volunteer roles in community service projects.
Prerequisite: EDUC 014 recommended.
0.5 or 1 credit.

Spring 2012. Jones-Walker.

## EDUC 071. Introduction to Performing Arts Education: Music

 (See DANC 091 and MUSI 091)EDUC 014 is required to receive Educational Studies Department credit for this course. 1 credit.
Spring 2012. Whitman.

## EDUC 072.Foreign Language Teaching and Pedagogy

(See Modern Languages and Literatures)
0.5 credit.

Each semester. Yervasi.

## EDUC 091A. Special Topics

With permission of the instructor, qualified students may choose to pursue a topic of special interest in education through a field project involving classroom or school practice.
Available as a credit/no credit course only. 0.5 or 1 credit.

Each semester. Staff.

## EDUC 091B. Special Topics

With permission of the instructor, students may choose to pursue a topic of special interest by designing an independent reading or project that usually requires a comprehensive literature review, laboratory work, and/or field-based research.
0.5 or 1 credit.

Each semester. Staff.

## EDUC 091C. Special Topics (Music Education) <br> (See MUSI 091C)

Available as a credit/no credit course only. 0.5 credit.

Spring 2012. Whitman.

## EDUC 096-097. Thesis

1 or 2 credits, normally in conjunction with a special major.
Each semester. Staff.

## EDUC 098. Psychology and Educational Studies Thesis

1 or 2 credits, normally in conjunction with a special major.
Each semester. Renninger.

## Seminars

Honors seminars are open to all students. Priority is given to honors majors and minors.

## EDUC 121. Psychology and Practice

This seminar focuses on general developmental principles revealed in and applicable to contexts of practice as well as practical applications of research and theory in developmental psychology. Seminar foci include: (1) use of the literatures in developmental, educational, and social psychology and learning and cognitive science to identify key indicators for assessing changed understanding and motivation; (2) preparation of literature reviews on a topic of each student's choice; and (3) collaborative work on an evaluation research project addressing a "live" issue or problem identified by a local teacher, school, or community organization.
Prerequisites: EDUC 014 and 021.
Writing course.
2 credits (or 1 credit with permission of the instructor).
Not offered 2011-2012.

## EDUC 131. Social and Cultural Perspectives on Education

In this seminar, students examine schools as institutions that both reflect and challenge existing social and cultural patterns of thought, behavior, and knowledge production. Seminar participants study and use qualitative methods of research and examine topics including the aims of schooling, parent/school/community interaction, schooling and identity development, and classroom and school restructuring.
Prerequisites: EDUC 014 and an additional course in the 060s.
Writing course.
2 credits.
Not offered 2011-2012.

## EDUC 151. Literacy Research

This seminar explores theories and methods in the design and implementation of qualitative studies of literacy, evaluation of literacy programs and pedagogy, and study of literacy policies. Students review relevant literature and participate in a field-based collaborative research project or program evaluation. Prerequisites: EDUC 014 and an additional course in the 040-060s. Either EDUC 042 or 045 is highly recommended.
Writing course.
2 credits.
Not offered 2011-2012.

## EDUC 162. Sociology of Education

 (Cross-listed as SOAN 162)This seminar explores the countless connections between schooling and society. The seminar will look at educational policy and practice, applying prominent sociological perspectives to a broad array of educational and social problems. The seminar will examine schools as socializing institutions, the ways in which schooling influences social stratification, social mobility, and adult socioeconomic success. Topics will include unequal access to education, what makes schools effective, dropping out and persisting in school at various levels, ability grouping and tracking, and school restructuring. Fieldwork is required.
Theory course for SOAN majors.
Prerequisite: EDUC 014 and an additional course in the 060 s , or permission of the instructor.
2 credits.
Spring 2012. Grossman.

## EDUC 167. Identities and Education: Intersections and Interactions

This course explores intersections between identities of race, class, gender, sexual orientation and public education in the United States. Readings will draw on the fields of anthropology, legal studies, and cultural studies. Two central frameworks, Cultural Production and Critical Race Theory will guide consideration of how social structures inform the realities of schooling and how racial, classbased, gendered and sexual identities are formed with in the context of schools. Prerequisites: EDUC 014 and EDUC 068. 2 credits.
Not offered 2011-2012.

## EDUC 180. Honors Thesis

A 2-credit thesis is required for students completing special honors majors including education. The thesis may be counted for 2 credits in education or for 1 credit in educational studies and 1 credit in the other discipline in the student's Honors Program. 2 credits.
Each semester. Staff.

ERIK CHEEVER, Professor ${ }^{1}$<br>ERICH CARR EVERBACH, Professor<br>NELSON A. MACKEN, Professor<br>ARTHUR E. McGARITY, Professor<br>LYNNE ANN MOLTER, Professor and Chair<br>FARUQ M.A. SIDDIQUI, Professor<br>TALI MORESHET, Assistant Professor<br>MATTHEW A. ZUCKER, Assistant Professor<br>ANN RUETHER, Academic Support Coordinator<br>EDMOND JAOUDI, Electronics, Instrumentation, and Computer Specialist<br>GRANT SMITH, Mechanician

${ }^{1}$ Absent on leave, fall 2011.

The professional practice of engineering requires creativity and confidence in applying scientific knowledge and mathematical methods to solve technical problems of ever-growing complexity. The pervasiveness of advanced technology within our economic and social infrastructures demands that engineers more fully recognize and take into account the potential economic and social consequences that may occur when significant and analytically well-defined technical issues are resolved. A responsibly educated engineer must not only be in confident command of current analytic and design techniques but also have a thorough understanding of social and economic influences and an abiding appreciation for cultural and humanistic traditions. Our program supports these needs by offering each engineering student the opportunity to acquire a broad yet individualized technical and liberal education.

## The Academic Program

As stated in the introduction of this catalog, Swarthmore seeks to help its students realize their full intellectual and personal potential, combined with a deep sense of ethical and social concern.
Within this context, the Engineering Department seeks to graduate students with a broad, rigorous education, emphasizing strong analysis and synthesis skills. Our graduates will be well rounded and understand the broader impacts of engineering. They will have the skills to adapt to new technical challenges, communicate effectively, and collaborate well with others.
The Engineering Department and its students provide to the College community a unique perspective that integrates technical and nontechnical factors in the design of solutions to multifaceted problems.

## Objectives

Graduates with the bachelor of science degree in engineering are prepared to:

- Be flexible and resourceful, learn and apply new knowledge, and adapt successfully to novel circumstances and challenges.
- Communicate and work effectively with people with a broad variety of backgrounds at both a technical and nontechnical level.
- Apply engineering principles and methodology to the design and analysis of systems and to the solution of a wide variety of problems.
- Consider scientific, technologic, ethical, societal, economic, political and/or environmental issues in a local or global context.


## Course Major

Engineering majors must complete requirements from two categories: (1) 12 engineering credits and (2) 8 credits in math and science, normally 4 in math and 4 in science. No courses taken at Swarthmore and intended to satisfy these departmental requirements, except those taken fall semester in the first year, may be taken credit/no credit. The requirements are detailed below, with math and science discussed separately.

## Math requirement

To fulfill the math requirement for the engineering major, students must receive from the Mathematics and Statistics Department either placement or credit for: Elementary Single Variable Calculus (MATH 015); Further Topics in Single Variable Calculus or Advanced Topics in Single Variable Calculus (MATH 025 [025S] or 026); Several-Variable Calculus (MATH 033, 034, or 035); and Differential Equations (MATH 043 or 044). It is recommended that all students take Linear Algebra (MATH 027 or 028), particularly those with placement or credit for one or more math courses. Students are normally required to complete 4 credits in mathematics. The exception to this requirement is a student with fewer than 4 credits who has received credit for Linear Algebra (MATH 027 or 028), Several-

Variable Calculus (MATH 033, 034, or 035) and Differential Equations (MATH 043 or 044). Such a student may take a fifth science course in lieu of the fourth math credit.

## Science requirement

To fulfill the science requirement for the engineering major, students must receive credit for four science courses, and each one must be a natural sciences and engineering practicum. These courses should complement the student's overall program of study and must include (a) 1 credit in biochemistry, biology, or chemistry; and (b) placement or credit for 1 year of calculus-based physics (PHYS 003/PHYS 004, PHYS 007/PHYS 008, or the equivalent). To count toward the engineering major, the unspecified science credit(s) can come from astronomy, biology, (bio) chemistry, or physics, and must be acceptable for credit toward a minimal major in the offering department. A student may include PHYS 005 or ASTR 005 as part of the science requirement only if that course is taken in the first year. ASTR 016 may be used to fulfill this requirement, even though it is not designated as a natural sciences and engineering practicum course. It is recommended that students with an interest in computer engineering consider courses offered by the Computer Science Department.

## Engineering requirement

Students majoring in engineering are required to take seven engineering core courses; Mechanics (ENGR 006), Electric Circuit Analysis (ENGR 011), Linear Physical Systems Analysis (ENGR 012), Experimentation for Engineering Design (ENGR 014), Fundamentals of Digital Systems (ENGR 015), Thermofluid Mechanics (ENGR 041) and Engineering Design (ENGR 090). Mechanics is usually taken in the spring of the first year. Electric Circuit Analysis is usually taken in the fall of the sophomore year. Linear Physical Systems Analysis and Experimentation for Engineering Design are usually taken in the spring of the sophomore year. Fundamentals of Digital Systems can be taken in the fall of the sophomore, junior or senior year. Thermofluid Mechanics can be taken in the fall of the junior or senior year. Engineering Design (ENGR 090 ) is the culminating experience for engineering majors and must be taken by all majors in spring of senior year. Submission and oral presentation of the final project report in Engineering Design constitutes the comprehensive examination for engineering majors.

## Elective Program for course majors

Each student devises a program of advanced work in the department in consultation with his or her adviser. These programs normally include five electives. The choice of electives is
submitted for departmental approval as part of the formal application for a major in engineering during the spring semester of the sophomore year.
A student's elective program may or may not conform to some traditional or conventional area of engineering specialization (e.g., computer, electrical, mechanical, or civil). The department therefore requires each plan of advanced work to have a coherent, welljustified program that meets the student's stated educational objectives.
At most one Swarthmore course taught by a faculty member outside the Engineering Department can count as one of the 12 engineering credits required for the major.
Normally a maximum of 2.5 transfer credits that are preapproved by the Engineering Department will be accepted as partial fulfillment of the 12 engineering credits required for the major. Exceptions to this rule include students who transfer to Swarthmore and others with special circumstances; the amount of credit accepted in their cases will be determined on a case-by-case basis by the department chair.
Students should be aware that most lecture courses at other institutions carry only 0.75 Swarthmore credits, unless they include a full lab sequence. Students who want to use study abroad or domestic exchange work in partial fulfillment of the requirements for the minor should consult their academic advisers and the chair of the Engineering Department as early as possible to ensure that all requirements are met. The courses available for traditional elective programs include the following:

- Electrical engineering group. Electronic Circuit Applications, Physical Electronics, Electromagnetism, Communication Systems, Digital Signal Processing, VLSI Design, and Control Theory and Design. Students having an interest in digital systems might replace one or more of these courses with Principles of Computer Architecture or Computer Graphics.
- Computer engineering group. Principles of Computer Architecture, VLSI Design, Computer Graphics, Computer Vision, Mobile Robotics, Operating Systems, and Principles of Compiler Design and Construction. Students with an interest in computer hardware may include Electronic Circuit Applications, Physical Electronics, Digital Signal Processing, or Control Theory and Design.
- Mechanical engineering group. Mechanics of Solids, Engineering Materials, Fluid Mechanics, Heat Transfer, Thermal Energy Conversion, Solar Energy Systems, or Control Theory and Design.
- Civil and environmental engineering group. Basic preparation includes Mechanics of Solids,

Structural Theory and Design I, Soil and Rock Mechanics, and Water Quality and Pollution Control. Additional courses include Operations Research and Environmental Systems for those interested in the environment or urban planning, or Structural Theory and Design II for those interested in architecture or construction. Other recommended courses include Solar Energy Systems, and Fluid Mechanics.

## Course Minor

## Academic advising

Students interested in pursuing a minor must find a faculty member within the Engineering Department to advise them. If possible, this faculty member should have interests that overlap the area of the minor. Students who encounter difficulties in identifying an adviser should seek the assistance of the chair of the Engineering Department. Students who plan to minor in engineering should regularly consult their engineering advisers. The sophomore papers of engineering minors should indicate the plan to minor and the courses chosen to fulfill the minor.

## Requirements

A minimum of 5 credits in engineering is required, of which at least 2 but not more than 3 must be core courses (ENGR 006, 011, 012, 014, 015, or 041, but not ENGR 090). The remainder will be selected from elective course offerings within the department. Only those electives that count toward an engineering major can be counted toward a minor.
At most one Swarthmore course taught by a faculty member outside the Engineering Department can count as one of the 5 engineering credits required for the minor. Supporting work in mathematics, physics, chemistry, and computer science is necessary only when designated as a prerequisite to an individual engineering course.
No directed readings may be used as one of the 5 credits for the minor.
A maximum of 1 transfer credit that is preapproved by the Engineering Department will be accepted as partial fulfillment of the minor requirements. Transfer credits will not count for one of the two courses used to fulfill the core course requirement of the minor. Students should be aware that most lecture courses at other institutions carry only 0.75 Swarthmore credits, unless they include a full lab sequence. Students who want to use study abroad or domestic exchange work in partial fulfillment of the requirements for the minor should consult their academic advisers and the chair of the Engineering Department as early as possible to ensure that all requirements are met.

No culminating experience will be required. Only students pursuing the major in engineering may enroll in ENGR 090.

## Areas of study

Although packaged selections of courses will be suggested as options for those interested in an engineering minor, students may tailor their programs to meet individual needs and interests in consultation with their advisers.

## Honors Major

Students with a B+ average among courses in the Division of Natural Sciences and Engineering may apply for an honors major in engineering. This $\mathrm{B}+$ average must be maintained through the end of the junior year to remain in the Honors Program. A listing of preparations supported by existing engineering courses is appended. Credits from approved attachments or special topics courses may substitute for not more than 1 credit within any preparation.
Honors majors must complete the same requirements as course majors in engineering. In addition:
The honors major in engineering is a fourexamination program that includes three preparations in engineering (the major) and one minor preparation. Each area comprises 2 credits of work. The preparations may include ENGR 090 and/or one other core course.
The minor preparation must comprise at least 2 credits of work approved by any department or program outside engineering.
Each major candidate must accumulate 12 credits in engineering, including ENGR 090, and the same number of science and math credits as required of course majors.
If one of the major preparations includes ENGR 090, it must be paired with an appropriately related upper-level engineering elective or a 1credit honors thesis to be completed in the fall semester of senior year. Honors thesis credit may not substitute for any of the 12 engineering credits required for the bachelor of science. Candidates who choose an honors thesis will complete at least 13 credits in engineering and 33 from across the College. The two additional major preparations must each comprise two related, upper-level engineering electives. A précis of not more than 12 pages (including tables and figures) of each candidate's ENGR 090 project must be submitted by the end of the 10th week of the spring semester for mailing to the relevant honors examiner. The final ENGR 090 report will not be mailed to any examiner but may be brought to the oral examinations. Senior honors study by engineering majors is not required.

## Honors Minor

- Senior honors study is required for all engineering honors minors, except those who are also engineering course majors. For those not majoring in engineering, the senior honors study is the culminating experience. Course majors will not take senior honors study because ENGR 090 serves as the culminating experience.
- Every engineering honors minor preparation must include two related upper-level engineering electives for which all prerequisites must be satisfied. If the student is not also an engineering course major, then senior honors study is also required. Credits from official attachments or special topics courses in engineering may substitute for not more than one of the two upper-level courses within an engineering minor preparation.
- Prerequisites to upper-level engineering electives may be waived by the department, depending on the student's documentation of equivalent work in another department at the time of application.
- Formats of examination will follow those appropriate for the engineering major.
Prospective engineering majors and minors receive more specific information about Course and Honors Programs from the department each December. Additional information is also available on the Engineering Department website.


## Application Process Notes for the Major or the Minor

A form to aid in planning a proposed program of study is available on the department website. This form must be completed and submitted as part of the sophomore paper. All engineering courses are to be listed on this form in the appropriate semesters. Check prerequisites carefully when completing the program planning form. Courses, prerequisites and their availability are listed in the College Catalog. Note that many courses are offered yearly, others in alternate years, and some only when demand and staffing permit. An updated prospective two-year schedule is also available on the website.

## Courses Readily Available to Students Not Majoring or Minoring in Engineering

Problems in Technology (003), and Art and Engineering of Structures (007), and How Do Computers Work? (008) are designed for students contemplating only an introduction to engineering. Mechanics (006) is primarily for prospective majors, but other interested students, particularly those preparing for careers
in architecture or biomechanics, are encouraged to enroll. Environmental Protection (004A), Operations Research (057), Solar Energy Systems (035), Water Quality and Pollution Control (063), Swarthmore and the Biosphere (004B), Environmental Systems (066), and Environmental Policy and Politics (004C) appeal to many students majoring in other departments, particularly those pursuing an environmental studies minor. Students interested in computers, including computer science majors or minors, may wish to consider Fundamentals of Digital Systems (015), Principles of Computer Architecture (025), Computer Graphics (026), Computer Vision (027), and Mobile Robotics (028). Students majoring in the physical sciences or mathematics may enroll routinely in advanced engineering courses. Department faculty members also support minors in computer science and environmental studies and a special major with the Linguistics Program.
Note that Engineering Methodology, HighPerformance Composites, Exploring Acoustics, Problems in Technology, Art and Science of Structures, Introduction to Environmental Protection, Swarthmore and the Biosphere, and Environmental Policy and Politics are not admissible as technical electives within an engineering major or minor but may be taken as free electives subject to the 20 -course rule.

## Off-Campus Study

## Poland Study Abroad Program

A program of study is available, normally in the spring of the junior year, at the Technical University of Krakow, Poland, for students interested in an engineering study abroad experience in a non-English-speaking country. Students take courses taught in English consisting of two engineering electives and a survey course Environmental Science and Policy in Central and Eastern Europe plus an intensive orientation course on Polish language and culture provided by the Jagiellonian University. Coordinator: Professor McGarity.

## Courses

## ENGR 003. Problems in Technology

For students not majoring in science or engineering, this course will concentrate on the automobile and its impact on society. Class time will cover the principles of operation of vehicles and student lead discussions on related technical, political, social, and economic issues. Possible laboratory topics include evaluating alternative power systems (e.g., solar, hydrogen, and electric); investigating alternative fuels; and understanding existing automotive components. Enrollment is limited.

Natural sciences and engineering practicum. Writing course.
1 credit.
Fall 2011. Macken.

## 004: Environmental Courses for Nonmajors

Courses numbered ENGR 004A-004Z serve all students interested in environmental science, technology, and policy. Indicated courses may be used to satisfy the writing course and natural sciences and engineering practicum requirements. Some may also meet requirements for minors in environmental studies or public policy and special majors in environmental science or environmental policy and technology. Similar courses are available through the College's off-campus study programs in Poland and Ghana, West Africa. These courses may not be used to satisfy requirements for the major or minor in engineering.

## ENGR 004A. Environmental Protection

This course covers fundamentals of analysis for environmental problems in the areas of water pollution, air pollution, solid and hazardous wastes, water and energy supply, and resource depletion, with an emphasis on technological solutions. Topics include scientific concepts necessary to understand local and global pollution problems, pollution control and renewable energy technologies, public policy developments related to regulation of pollutants, and methods of computer-based systems analysis for developing economically effective environmental protection policies. Eligible for ENVS credit.
1 credit.
Spring 2012. McGarity

## ENGR 004B. Swarthmore and the Biosphere

An interdisciplinary seminar-style investigation of the role of Swarthmore College and its community within the biosphere, including an intensive field-based analysis of one major aspect of Swarthmore's interaction with its environment such as food procurement, waste disposal, or energy use. Student project groups explore the selected topic from various perspectives, and the class proposes and attempts to implement solutions. Faculty from various departments provide background lectures, lead discussions of approaches outlined in the literature, and coordinate project groups. This course is cross-listed in the instructors' departments and does not count toward distribution requirements.
1 credit.
Not offered 2011-2012.

ENGR 005. Engineering Methodology
A course for those interested in engineering, presenting techniques and tools that engineers use to define, analyze, solve, and report on technical problems, and an introduction to department facilities. Designed for students who are potential majors as well as those interested only in an introduction to engineering. Although ENGR 005 is not required of prospective engineering majors, it is strongly recommended. This course is not to be used to fulfill the requirements for the engineering major or minor.
0.5 credit.

Fall 2011. Everbach.

## ENGR 006. Mechanics

This course covers fundamental areas of statics and dynamics. Elementary concepts of deformable bodies are explored, including stress-strain relations, flexure, torsion, and internal pressure. Laboratory work includes a MATLAB workshop, experiments on deformable bodies, and a truss-bridge team design competition.
Prerequisite: PHYS 003 or the equivalent. 1 credit.
Spring 2012. Siddiqui, Everbach.

## ENGR 007. Art and Engineering of Structures

This introduction to the basic principles of structural analysis and design includes an emphasis on the historical development of modern structural engineering. It is suitable for students planning to study architecture or architectural history, or who have an interest in structures. This course includes a laboratory and is designed for students not majoring in engineering.
1 credit.
Not offered 2011-2012.

## ENGR 008. How Do Computers Work?

This course combines technical basics of digital systems and computer organization with a less technical overview of a range of topics related to computers. Class time will include a combination of lectures, student presentations and discussions, and hands-on design. Some of the topics covered include clusters and networks such as the Internet, file sharing programs such as iTunes and YouTube, and the history and future of computers. For students not majoring in engineering, no prerequisites. 1 credit.
Spring 2012. Moreshet.

## ENGR 011. Electrical Circuit Analysis

The analysis of electrical circuits is introduced, including resistors, capacitors, inductors, opamps , and diodes. The student will learn to
develop equations describing electrical networks. Techniques are taught to solve differential equations resulting from linear circuits. Solutions will be formulated both in the time domain and in the frequency domain. There is a brief introduction to digital circuits and a laboratory.
Prerequisites: MATH 025/026 or its equivalent, or permission of the instructor. PHYS 004 is recommended.
Natural sciences and engineering practicum. 1 credit.
Fall 2011. Molter, Staff.

## ENGR 012. Linear Physical Systems Analysis

Engineering phenomena that may be represented by linear, lumped-parameter models are studied. This course builds on the mathematical techniques learned in ENGR 011 and applies them to a broad range of linear systems, including those in the mechanical, thermal, fluid, and electromechanical domains. Techniques used include Laplace Transforms, Fourier analysis, and Eigenvalue/Eigenvector methods. Both transfer function and state-space representations of systems are studied. The course includes a brief introduction to discrete time systems and includes a laboratory.
Prerequisite: ENGR 011 or the equivalent or permission of the instructor.
Natural sciences and engineering practicum. 1 credit.
Spring 2012. Cheever, Zucker.

## ENGR 014. Experimentation for Engineering Design

Students are introduced to measurement systems, instruments, probability, statistical analysis, measurement errors, and their use in experimental design, planning, execution, data reduction, and analysis. Techniques of hypothesis testing, confidence intervals, and single and multivariable linear and nonlinear regression are covered. This course includes a laboratory.
Prerequisite: ENGR 011.
Natural sciences and engineering practicum.
Writing course.
1 credit.
Spring 2012. Macken, McGarity.

## ENGR 015. Fundamentals of Digital Systems

The course will introduce students to digital system theory and design techniques, including Boolean algebra, binary arithmetic, digital representation of data, gates, and truth tables. Digital systems include both combinational and sequential logic-consisting of flip-flops, finite state machines, memory, and timing issues.

Students will gain experience with several levels of digital systems, from simple logic circuits to a hardware description language and interface programming in C. This course includes a laboratory.
Prerequisites: At least 1 credit in engineering or computer science or permission of the instructor.
Natural sciences and engineering practicum. 1 credit.
Fall 2011. Moreshet, Zucker.

## ENGR 022. Operating Systems

(See CPSC 045)
Prerequisite: CPSC 035 required. One of ENGR 025 or CPSC 033 is recommended.
Lab work required.
Natural sciences and engineering practicum.
1 credit.
Fall 2011. Newhall.

## ENGR 023. Principles of Compiler Design and Construction (See CPSC 075)

Prerequisite: CPSC 035 required. One of ENGR 025 or CPSC 033 is recommended.
Lab work required.
Natural sciences and engineering practicum. 1 credit.
Not offered 2011-2012.

## ENGR 024. VLSI Design

This course is an introduction to the design, analysis, and modeling of digital integrated circuits, with an emphasis on hands-on chip design using CAD tools. The course will focus on CMOS technology and will cover both full custom and synthesis VLSI design. A laboratory is included.
Prerequisite: ENGR 015 or permission of the instructor.
Natural sciences and engineering practicum.
1 credit.
Fall 2011. Moreshet.

## ENGR 025. Principles of Computer

 Architecture(Cross-listed as CPSC 052)
This course covers the physical and logical design of a computer. Topics include current microprocessors, CPU design, RISC and CISC, pipelining, superscalar processing, caching, virtual memory, assembly and machine language, and multiprocessors. Labs cover performance analysis via simulation and microprocessor design using CAD tools. Prerequisites: One of ENGR 015, CPSC 035, CPSC 033.

Natural sciences and engineering practicum. 1 credit.
Spring 2012. Moreshet.

## ENGR 026. Computer Graphics

## (See CPSC 040)

Prerequisite: ENGR 015 or CPSC 035. MATH
027 or 28(S) is strongly recommended.
Natural sciences and engineering practicum. 1 credit.
Not offered 2011-2012.

## ENGR 027. Computer Vision

(Cross-listed as CPSC 072)
Computer vision studies how computers can analyze and perceive the world using input from imaging devices. Topics include line and region extraction, stereo vision, motion analysis, color and reflection models, and object representation and recognition. The course will focus on object recognition and detection, introducing the tools of computer vision in support of building an automatic object recognition and classification system. Labs will involve implementing both off-line and realtime object recognition and classification systems.
Prerequisites: ENGR 015 or CPSC 035 . MATH 027 or $28(\mathrm{~S})$ is strongly recommended.
Natural sciences and engineering practicum. 1 credit.
Spring 2012. Zucker.

## ENGR 028. Mobile Robotics

(Cross-listed as CPSC 082)
This course addresses the problems of controlling and motivating robots to act intelligently in dynamic, unpredictable environments. Major topics will include mechanical design, robot perception, kinematics and inverse kinematics, navigation and control, optimization and learning, and robot simulation techniques. To demonstrate these concepts, we will be looking at mobile robots, robot arms and positioning devices, and virtual agents. Labs will focus on programming robots to execute tasks and to explore and interact with their environment.
Prerequisites: ENGR 015 or CPSC 035. MATH 027 or $28(\mathrm{~S})$ is strongly recommended.
Natural sciences and engineering practicum. 1 credit.
Fall 2011. Zucker.
ENGR 035. Solar Energy Systems
Fundamental physical concepts and system design techniques of solar energy systems are covered. Topics include solar geometry, components of solar radiation, analysis of thermal and photovoltaic solar collectors,
energy storage, computer simulation of system performance, computer-aided design optimization, and economic feasibility assessment. This course includes a laboratory. Offered in the fall semester of alternate years.
Prerequisites: PHYS 004, MATH 015, or the equivalent or the permission of the instructor. Natural sciences and engineering practicum. 1 credit.
Fall 2011. McGarity.

## ENGR 041. Thermofluid Mechanics

This course introduces macroscopic thermodynamics: first and second laws, properties of pure substances, and applications using system and control volume formulation. Also introduced is fluid mechanics: development of conservation theorems, hydrostatics, and the dynamics of onedimensional fluid motion with and without friction. A laboratory is included.
Prerequisites: ENGR 006 and ENGR 011 or the equivalent.
Natural sciences and engineering practicum. 1 credit.
Fall 2011. Macken, Everbach.

## ENGR 057. Operations Research

(Cross-listed as ECON 032)
This course introduces students to mathematical modeling and optimization to solve complex, multivariable problems such as those relating to efficient business and government operations, environmental pollution control, urban planning, and water, energy, and food resources. Introduction to the AMPL computer modeling language is included. A case study project is required for students taking the course as a Natural sciences and engineering practicum
(ENGR 057). The project is optional for students taking the course as ECON 032.
Prerequisite: familiarity with matrix methods, especially solution of simultaneous linear equations, i.e., elementary linear algebra; but a full course in linear algebra is not required.
Natural sciences and engineering practicum. 1 credit.
Fall 2011. McGarity.

## ENGR 058. Control Theory and Design

This introduction to the control of engineering systems includes analysis and design of linear control systems using root locus, frequency response, and state space techniques. It also provides an introduction to digital control techniques, including analysis of $\mathrm{A} / \mathrm{D}$ and $\mathrm{D} / \mathrm{A}$ converters, digital controllers, and numerical control algorithms. A laboratory is included. Prerequisite: ENGR 012 or permission of the instructor.

Natural sciences and engineering practicum. 1 credit.
Spring 2012. Staff.

## ENGR 059. Mechanics of Solids

Internal stresses and changes of form that occur when forces act on solid bodies or when internal temperature varies are covered as well as state of stress and strain, strength theories, stability, deflections, photoelasticity, and elastic and plastic theories. A laboratory is included. Prerequisite: ENGR 006 or the equivalent. Natural sciences and engineering practicum. 1 credit.
Fall 2011. Siddiqui.

## ENGR 060. Structural Theory and Design I

This course covers fundamental principles of structural mechanics, statically determinate analysis of frames and trusses, approximate analysis of indeterminate structures, virtual work principles, and elements of design of steel and concrete structural members. A laboratory is included. Offered in the fall semester of alternate years.
Grade of B or better in ENGR 006, ENGR 059 as a corequisite, or permission of the instructor. Natural sciences and engineering practicum. 1 credit.
Fall 2011. Siddiqui.

## ENGR 061. Geotechnical Engineering: Theory and Design

Soil and rock mechanics are explored, including soil and rock formation, soil mineralogy, soil types, compaction, soil hydraulics, consolidation, stresses in soil masses, slope stability, and bearing capacity as well as their application to engineering design problems. A laboratory is included. Offered in the fall semester of alternate years.
Grade of B or better in ENGR 006, ENGR 059 as a corequisite, or permission of the instructor. Natural sciences and engineering practicum. 1 credit.
Not offered 2011-2012.

## ENGR 062. Structural Theory and Design II

This advanced structural analysis course covers classical and matrix methods of analysis, digital computer applications, and the design of steel and concrete structures. A laboratory is included. Normally offered in the spring semester of alternate years.
Prerequisite: ENGR 060.
Natural sciences and engineering practicum.
1 credit.
Spring 2012. Siddiqui.

## ENGR 063. Water Quality and Pollution Control

Students will study elements of water quality management and treatment of wastewaters through laboratory and field measurements of water quality indicators, analysis of wastewater treatment processes, sewage treatment plant design, computer modeling of the effects of waste discharge, stormwater, and nonpoint pollution on natural waters, and environmental impact assessment. Offered in the fall semester of alternate years.
Prerequisites: CHEM 010, MATH 025 or 026, or the equivalent or consent of the instructor. Natural sciences and engineering practicum. 1 credit.
Not offered 2011-2012.

## ENGR 066. Environmental Systems

Students will explore mathematical modeling and systems analysis of problems in the fields of water resources, water quality, air pollution, urban planning, and public health. Techniques of optimization including linear and integer programming are used as frameworks for modeling such problems. Dynamic systems simulation methods and a laboratory are included. Offered in the spring semester of alternate years.
Recommended: ENGR 057 or the equivalent, or the consent of instructor.
Natural sciences and engineering practicum. 1 credit.
Not offered 2011-2012.

## ENGR 071. Digital Signal Processing

Students will be introduced to difference equations and discrete-time transform theory, the Z-transform and Fourier representation of sequences, and fast Fourier transform algorithms. Discrete-time transfer functions and filter design techniques are also introduced. This course introduces the architecture and programming of digital signal processors. A laboratory is included.
Prerequisite: ENGR 012 or permission of the instructor.
Natural sciences and engineering practicum.
1 credit.
Spring 2012. Cheever.

## ENGR 072. Electronic Circuit

 ApplicationsThis course is of interest to a broad range of students in the sciences. The student will learn the fundamentals of electronic circuit design starting with a brief survey of semiconductor devices including diodes and bipolar and field effect transistors. The course continues with opamp applications, including instrumentation and filter design. The use of digital logic is also
explored. Throughout the course, practical considerations of circuit design and construction are covered. This course includes a laboratory.
Prerequisite: ENGR 012 or permission of the instructor.
Natural sciences and engineering practicum. 1 credit.
Fall 2011. Staff.
ENGR 073. Physical Electronics
Topics include the physical properties of semiconductor materials and semiconductor devices; the physics of electron/hole dynamics; band and transport theory; and electrical, mechanical, and optical properties of semiconductor crystals. Devices examined include diodes, transistors, FETs, LEDs, lasers, and pin photo-detectors. Modeling and fabrication processes are covered. A laboratory is included. Offered in the spring semester of alternate years.
Prerequisite: ENGR 011 or PHYS 008 or permission of the instructor.
Natural sciences and engineering practicum. 1 credit.
Spring 2012. Molter.

## ENGR 075, 076. Electromagnetic Theory I and II

The static and dynamic treatment of engineering applications of Maxwell's equations will be explored. Topics include macroscopic field treatment of interactions with dielectric, conducting, and magnetic materials; analysis of forces and energy storage as the basis of circuit theory; electromagnetic waves in free space and guidance within media; plane waves and modal propagation; and polarization, reflection, refraction, diffraction, and interference. Offered in the fall semester of alternate years.
ENGR 076 will include advanced topics in optics and microwaves, such as laser operation, resonators, Gaussian beams, interferometry, anisotropy, nonlinear optics, modulation and detection. Laboratories for both courses will be oriented toward optical applications using lasers, fiber and integrated optical devices, modulators, nonlinear materials, and solid-state detectors.

## ENGR 075.

Prerequisite: ENGR 012, PHYS 008, or permission of the instructor.
Natural sciences and engineering practicum. 1 credit.
Not offered 2011-2012.

## ENGR 076.

Prerequisite: ENGR 075 or a physics equivalent.
Natural sciences and engineering practicum. 1 credit.
Not offered 2011-2012.

## ENGR 078. Communication Systems

Theory and design principles of analog and digital communication systems are explored. Topics include frequency domain analysis of signals; signal transmission and filtering; random signals and noise; AM, PM, and FM signals; sampling and pulse modulation; digital signal transmission; PCM; coding; and information theory. Applications to practical systems such as television and data communications are covered. A laboratory is included. Offered in the spring semester of alternate years.
Prerequisite: ENGR 012 or permission of the instructor.
Natural sciences and engineering practicum. 1 credit.
Not offered 2011-2012.

## ENGR 081. Thermal Energy Conversion

This course covers the development and application of the principles of thermal energy analysis to energy conversion systems, including cycles and solar energy systems. The concepts of availability, ideal and real mixtures, and chemical and nuclear reactions are explored. A laboratory is included. Offered in the spring semester of alternate years.
Prerequisite: ENGR 041.
Natural sciences and engineering practicum. 1 credit.
Spring 2012. Macken.

## ENGR 083. Fluid Mechanics

Fluid mechanics is treated as a special case of continuum mechanics in the analysis of fluid flow systems. Conservation of mass, momentum, and energy are covered along with applications to the study of inviscid and viscous, incompressible, and compressible fluids. A laboratory is included. Offered in the spring semester of alternate years.
Prerequisite: ENGR 041.
Natural sciences and engineering practicum. 1 credit.
Not offered 2011-2012.

## ENGR 084. Heat Transfer

Students are introduced to the physical phenomena involved in heat transfer. Analytical techniques are presented together with empirical results to develop tools for solving problems in heat transfer by conduction, forced
and free convection, and radiation. Numerical techniques are discussed for the solution of conduction problems. A laboratory is included. Offered in the fall semester of alternate years. Prerequisite: ENGR 041.
Natural sciences and engineering practicum. 1 credit.
Not offered 2011-2012.

## ENGR 086. Dynamics of Mechanical Systems

Rigid-body kinematics and kinematics in plane and three-dimension using energy and momentum methods of analysis; linkages; vibrations; transform and state-variable dynamics modeling with Matlab. A laboratory is included.
Prerequisites: ENGR 006, ENGR 011, ENGR 012 , MATH $33 / 34 / 35$, MATH $43 / 44$, or permission of the instructor.
Natural sciences and engineering practicum. 1 credit.
Spring 2012. Everbach.

## ENGR 090. Engineering Design

Students work on a design project that is the culminating exercise for all senior engineering majors. Students investigate a problem of their choice in an area of interest to them under the guidance of a faculty member. A comprehensive written report and an oral presentation are required. This class is available only to engineering majors.
Writing course.
1 credit.
Spring 2012. Staff.

## ENGR 091. Special Topics

Subject matter dependent on a group need or individual interest. Normally restricted to seniors.
1 credit.
Offered when demand and staffing permit.

## ENGR 093. Directed Reading or Project

Qualified students may do special work with theoretical, experimental, or design emphasis in an area not covered by regular courses with the permission of the department and a willing faculty supervisor.
1 credit.
Offered only with department approval and faculty supervision.

## ENGR 096. Honors Thesis

In addition to ENGR 090, an honors major may undertake an honors thesis in the fall semester of the senior year with approval of the department and a faculty adviser. A prospectus of the thesis problem must be submitted and approved not later than the end of junior year.

1 credit.
Offered only with department approval and faculty supervision.

## ENGR 199. Senior Honors Study

Senior honors study is available only for engineering minors and must include at least 0.5 credit as an attachment to one of the courses in the engineering preparation. This course may be taken only in the spring of the senior year.
0.5 or 1 credit.

Offered when demand and staffing permit.

## Preparation for Honors Examinations

The department will arrange honors examinations in the following areas to be prepared for by the combinations of courses indicated. Other preparations are possible by mutual agreement.

## Communications and Electromagnetic Fields

Communication Systems
Electromagnetic Theory
Communications and Signal Processing
Communication Systems
Digital Signal Processing

## Computer Architecture

Fundamentals of Digital Systems
Principles of Computer Architecture
Electromagnetic Theory
Electromagnetic Theory I
Electromagnetic Theory II

## Electronics

Electronic Circuit Applications
Physical Electronics
Environmental Systems
Operations Research
Environmental Systems
Heat Transfer and Fluid Mechanics
Heat Transfer
Fluid Mechanics
Integrated Electronics
Electronic Circuit Applications
VLSI Design
Materials Engineering
Mechanics of Solids
Engineering Materials
Mobile Robotics and Machine Vision
Computer Vision
Mobile Robotics

## Engineering

Signals and Systems
Control Theory and Design
Digital Signal Processing
Solar Thermal Systems
Solar Energy Systems
Thermal Energy Conversion or Heat Transfer
Structural Analysis and Design
Structural Theory and Design I and II

## Structures and Soil

Structural Theory and Design I
Geotechnical Engineering: Theory and Design
Thermal Energy Conversion and Heat
Transfer
Thermal Energy Conversion
Heat Transfer
Visual Information Systems
Computer Graphics
Computer Vision
Water Quality and Fluid Mechanics
Water Quality and Pollution Control
Fluid Mechanics
Water Quality and Supply Systems
Water Quality and Pollution Control
Environmental Systems

NATHALIE ANDERSON, Professor<br>ELIZABETH BOLTON, Professor<br>NORA JOHNSON, Professor and Chair<br>PETER J. SCHMIDT, Professor ${ }^{3}$<br>PHILIP M. WEINSTEIN, Professor<br>PATRICIA WHITE, Professor of Film and Media Studies<br>CRAIG WILLIAMSON, Professor<br>ANTHONY FOY, Associate Professor<br>JILL GLADSTEIN, Associate Professor and Director of Writing Associates Program<br>KENDALL JOHNSON, Associate Professor ${ }^{3}$<br>BAKIRATHI MANI, Associate Professor ${ }^{1}$<br>RACHEL BUURMA, Assistant Professor ${ }^{3}$<br>ERIC SONG, Assistant Professor<br>MELINDA FINBERG, Visiting Associate Professor (part time) ${ }^{6}$<br>KEAT MURRAY, Visiting Associate Professor (part time)<br>BARBARA RIEBLING, Visiting Associate Professor (part time)<br>GABRIEL CUTRUFELLO, Visiting Instructor GREGORY FROST, Visiting Instructor (part time)<br>DALE MEZZACAPPA, Visiting Instructor (part time) ${ }^{5}$ RACHEL PASTAN, Visiting Instructor (part time) ${ }^{5}$ CAROLYN ANDERSON, Administrative Coordinator JOANNE HOWARD, Administrative Assistant (part time)

${ }^{1}$ Absent on leave, fall 2011.
${ }^{3}$ Absent on leave, 2011-2012.
${ }^{5}$ Fall 2011.
${ }^{6}$ Spring 2012.

This department offers courses in English literature, American literature, Native American literature, African and Caribbean literatures, Asian and asian american literatures, gay and lesbian literatures, drama, film, some foreign literatures in translation, creative writing, critical theory, and journalism. The departmental curriculum includes the intensive study of works of major writers, major periods of literary history, and the development of literary types; it also provides experience in several critical approaches to literature and dramatic art and explores certain theoretical considerations implicit in literary study, such as the problematics of canon formation and the impact of gender on the creation and reception of literary works.
Students who plan to do graduate work, to follow a course of professional training, or to seek teacher certification in English, should see a member of the department for early help in planning their programs, as should students who plan to include work in English literature in a special or cross-disciplinary major, or in a program with a concentration.

## Requirements and Recommendations

## First-Year seminars and Core Courses

The English Literature Department offers two kinds of first-year seminars. There are first-year seminars in composition and first-year seminars
in literature. ENGL 001F is a first-year seminar in composition (academic writing.) These count as Humanities W courses but do not count towards a major or minor in English literature. All first-year seminars (both in composition and in literature) are limited to 12 students. Firstyear seminars in English literature are numbered ENGL 008A-Z and ENGL 009A-Z. These literature seminars are designed to emphasize in-depth study of literary texts from a variety of perspectives, with careful attention to writing and maximum opportunity for class discussion. All first-year seminars in English count as humanities W courses. Students may take only one first-year seminar in literature from the English Department, but they are welcome to take a first-year seminar in composition and a first-year seminar in English literature.
We also offer core courses (CC), which are especially recommended for first- and secondyear students, though they are open to all. CCs pay special attention to one or more of the following: close reading, historical context, secondary (i.e., theoretical or critical) readings, or genre. They are distinguished by their pedagogical emphasis rather than by course topic per se. They are also distinguished from our other upper-division offerings by the fact that there are no prerequisites for these courses other than a W course from any department on campus, or a suitable course in literature from Modern Languages and Literatures or Classics.

Students are welcome to take more than one CC.

Students considering a major in English are strongly urged to take a first-year seminar in literature and one or two additional English courses during the sophomore year. Students need at least two literature courses from English to apply for the major. A core course or another mid-level English literature course is especially recommended. English 070A-070K courses will not suffice as the second course when applying for a major. ENGL 070F Journalism Workshop does not count toward a major or minor in English literature. Majors and prospective majors should consult a member of the English Department for information about courses in other departments complementary to their work in English; work in foreign languages is especially recommended.

## Course Major

The work of a major in course consists of a minimum of nine units of credit in the department including

- English 099 (taken fall of the senior year, no exceptions)
- at least three units in literature written before 1830 (such courses are marked with a *)
- and at least three in literature written after 1830
Courses marked with a ${ }^{* * *}$ may be counted as pre-1830 or post-1830 but not both. First-Year Seminars (ENGL 008 and 009A through Z), creative writing, journalism classes and AP credits do not count as part of the pre- or post1830 requirement. Creative writing credits and/or a validated AP credit of 4 or 5 in Literature (not "Language") count towards the credits needed for a major in English Literature; however, English 70F (Journalism) may not.


## Course Minor

The work of a minor in course consists of a minimum of five units of literature credit in the department including

- at least one unit in literature written before 1830 (such courses are marked with a *),
- and at least one in literature written after 1830.

Courses marked with a ${ }^{* * *}$ may be counted as pre-1830 or post-1830 but not both. First-Year Seminars in literature (ENGL 008 and 009 A through Z), creative writing, journalism classes, and an AP credit in Literature do not count as part of the pre- or post-1830 requirement. Creative writing credits and/or a validated AP credit of 4 or 5 in Literature (not "Language") count towards the credits needed for a minor in English Literature; however, ENGL 070F (Journalism) may not.

## Honors Major

Majors in English who seek a degree with honors will, in the spring of their sophomore year, propose for external examination a program consisting of four fields: three in English and one in a minor.
The three preparations in the major (constituting six units of credit) will be constituted as follows:

- all three preparations will normally be done through seminars (if approved by the department, one preparation may be a thesis or creative writing portfolio);
- the program must include at least one Group I and one Group II seminar.
Students may also take Romanticism courses for a two-course honors preparation.
Honors majors, as part of their overall work in the department, must meet the general major requirement of 9 credits in English literature, including three units of credit in literature written before 1830 and three units of credit in literature written after 1830. First-year seminars, creative writing, and journalism classes do not count as pre- or post-1830 classes. The Honors Program requirements are described in detail in the handout, Department of English Literature-Part II: Honors Program.
Students interested in pursuing honors within a faculty-approved interdisciplinary major, program, or concentration that draws on advanced English courses or seminars should see the chair for early help in planning their programs.


## Honors Minor

Minors must do a single, two-credit preparation in the department, normally by means of a seminar (or under special circumstances, a creative writing portfolio); the thesis option is only available to majors.
Minors are required to do a total of at least five units of work in English (including their honors preparation), with at least one pre- and one post-1830 credit. First-year seminars, creative writing, and journalism classes do not count as pre- or post-1830 classes. For further details, see the handout, Department of English Literature-Part II: Honors Program.

## Double Majors

Students may, with the department's permission, pursue a double major either as part of the Course or Honors Program. Double majors must fulfill all the major requirements in both departments.
For a double major in honors, one of the majors is used as the honors major and the other is
often used as the honors minor. See the department chair for further details.

## Special Major

Designed by the student in consultation with faculty advisers. If English is the central department, students must fulfill most of the regular requirements and have a minimum of 5 English Department credits as part of the special major. At least one of the 5 credits must be a pre-1830 course and one a post-1830 course.
Students must consult with the various departments or programs involved in the special major and have all approve the plan of study.
Only one integrative comprehensive exercise is required.
Students may now also do a special honors major with four related preparations in different departments.

## Major with a Creative Writing Emphasis

Students who want to major in English literature with an emphasis in creative writing-whether course or honors majorsmust complete three units of creative writing in addition to the usual departmental requirements of pre- and post-1830 units. The creative writing credits will normally consist of either

- three workshops (ENGL 070A, B, C, D, E, or G)
OR
- two workshops (ENGL 070A, B, C, D, E, or G) and ENGL 070K, Directed Creative Writing Projects
Students may count towards the program no more than one workshop offered by departments other than English literature. Admission into the program will depend upon the quality of the student's written work and the availability of faculty to supervise the work. Students who are interested in the program are urged to talk both with the department chair and with one of the department faculty who regularly teach the workshops.
Note: Creative writing and journalism classes do not count as pre- or post- 1830 classes. ENGL $070 \mathrm{~A}, 070 \mathrm{~B}, 070 \mathrm{C}, 070 \mathrm{~K}$, and 070 M are CR/NC courses (not graded.)
For a more detailed description of the English Literature Creative Writing program and its history, see the English Department website or handouts available at LPAC 202.


## Thesis / Culminating Exercise

## Course Majors

This colloquium, open only to senior English literature course majors and required for them
to take, offers a structured and supportive environment for students writing their senior essays. The course will feature a mix of literature, criticism, theory, and methodology, plus guest visits by other members of the English Literature Department and possibly others, with the opportunity for students to discuss central issues in the field of literary and cultural history in preparation for their research and writing.

## Honors Majors

Honors majors will prepare a senior honors essay and take an Honors exam for each of their three English honors preparations.
Students who wish either to write a thesis or pursue a creative writing project under faculty supervision as part of the Honors Program must submit proposals to the department; the number of these ventures the department can sponsor each year is limited. Students who propose creative writing projects will normally be expected to have completed at least one writing workshop as part of, or as a prelude to, the project; the field presented for examination will thus normally consist of a 1 -credit workshop plus a 1 -credit directed creative writing project. For further information, including deadlines for directed creative writing proposals, see rubric under ENGL 070K.

## Application Process Notes for the Major or the Minor

Applications for the major in English literature are considered in the spring of the sophomore year. Each student will, under the guidance of a faculty adviser, present a reasoned plan of study for the last two years. This plan will be submitted to the department and will be the basis of the departmental discussion of the student's application for a major. The plan will include a list of proposed courses and seminars that will satisfy the requirements for either the Course or Honors Program and a rationale for the program of study.
Such applications are normally considered at a meeting of all department members. Each student is discussed individually. The department has never established a minimum grade point average, nor are certain courses weighted in this discussion more heavily than others. A record of less than satisfactory work in English would certainly give us pause, however, unless it were attributable to circumstances other than academic ability. Students who want to include the English major as part of a double major must have a record of strong work in both majors as well as in other courses.
Students are eligible for seminars in the department regardless of their choice of honors or course majors. Admission to seminars will be
based on a student's prior academic work, her/his ability to interact well in a small class situation, and the shape of the larger course of study articulated in the sophomore paper. For oversubscribed seminars, priority will normally be given to honors majors and minors.
The minimum requirement for consideration for the major, minor, or admission to any seminar is the completion of at least two courses in English, not counting creating writing workshops. Applications for the major will be deferred until two literature courses are completed.

## Advanced Placement/International Baccalaureate Credit

A maximum of 2 credits may be awarded for AP or IB work.

## AP Credit

Students will receive credit for AP scores of 4 or 5 in English Lit/Comp which will count both toward graduation and toward the major requirements. AP credit is given for scores of 4 or 5 in English Lang/Comp but count only toward graduation and not toward the major requirements. If students take both exams and receive scores of 4 or 5 they will receive one credit for each exam.

## IB Credit

AP Literature credit is given for a score of 6 or 7 on the Higher Level English examination in the International Baccalaureate program. This credit will count both toward graduation and toward the major requirements.

## Transfer Credit

Students wishing to study away from Swarthmore should consult with the department chair far enough in advance of such study to effect proper planning of a major or minor. In determining which courses of study will meet department criteria for requirements or credit toward a major or minor, the department will rely both on its experience in evaluating the work of students returning from these programs and on careful examination of course descriptions, syllabi, and schedules. Students may undertake preparations for papers in the Honors Program while studying away from Swarthmore, but should consult carefully in advance with the appropriate department faculty.
Course credits for literature in English should be approved before you leave, but no course credits are finally awarded until you consult with the department upon your return to Swarthmore.

To find out who the course credits consultant is for English, contact the department chair. Please see the English Department website (www.swarthmore.edu/englishliterature) for more information on transferring credits.

## Off-Campus Study

Students wishing to study abroad should consult with the departmental chair far enough in advance of such study to effect proper planning of a major or minor.
In determining which courses of study abroad will meet department criteria for requirements or to receive credit toward a major or minor, the department will rely both on its experience in evaluating the work of students returning from these programs and on careful examination of course descriptions, syllabi, and schedules.
Students may sometimes undertake preparations for papers in the Honors Program while studying abroad, but should consult carefully in advance with the appropriate department faculty. For further details concerning department policies for study abroad, consult the department statement filed with the OffCampus Study Office. For further information on transferring credits toward the major or minor, see the relevant link on the English Department website.

## Teacher Certification

We offer English certification through a program approved by the State of Pennsylvania. For further information about the relevant set of requirements, please contact the Educational Studies Department chair, the English department chair, and the Educational Studies Department website.
Students being certified in English must complete all the requirements for an English Literature major. In addition, for certification in English, a student's program must include

- one course in American literature;
- one in Theater, Film, or Creative Writing;
- and ENGL/LING 014, or another suitable Linguistics course approved by the Educational Studies Department.


## Life After Swarthmore

Students graduating with a major in English literature often go on to pursue graduate or professional studies or take up a wide variety of positions in the working world where strong reading, writing, and interpretive skills are at a premium - in the public or private sector, in government or in non-government organizations. Many study law, medicine, or journalism. We number among our graduates poets and novelists, social workers and
scholars, news writers, broadcast journalists and editors, grant-writers, doctors, and directors.

## Curriculum

The English Department courses are grouped together by historical period, genre, or course level as follows:
001-005 A, B, C, etc.: Academic writing courses and seminars that do not count toward the major
008 and 009 A, B, C, etc.: First-Year Seminars (counted as W courses)
010-096: Advanced courses including core courses
010, 011: Survey Courses in British Literature 014-019: Medieval
020-029: Renaissance and 17th Century
030-039: Restoration, 18th Century, and Romantic
040-049: Victorian to Modern
050-069: American (including African
American, Asian American, and Native American)
$070 \mathrm{~A}, \mathrm{~B}, \mathrm{C}$, etc.: Creative Writing and Journalism Workshops
$071 \mathrm{~A}, \mathrm{~B}, \mathrm{C}$, etc.: Genre Studies
072-079: Comparative Literature/Literature in Translation
080-096: Critical Theory, Film, and Media Studies
097-099: Independent Study and Culminating Exercises
Over 100: Honors Seminars, Theses, etc. (open to juniors and seniors with approval of the department chair only)

## 001-005: Academic Writing Courses

These courses are writing-intensive courses that count toward graduation credit but not toward the English major. They may not be substituted for a prerequisite course in English.

## ENGL 001C. Writing Pedagogy

(Cross-listed as EDUC 001C)
This seminar serves as the gateway into the Writing Associates Fellowship Program. Students are introduced to the theory and pedagogy of composition studies and the concept of reflective practice. The seminar asks students to connect theory with practical experience when assessing how best to engage with different student writers and different forms of academic prose. Students will interact with the complexity of their new positions as peer mentors while learning how to be a professional within this role. Topics covered include: the ethics of peer mentoring, active
listening, development of written arguments, learning styles, and conferencing. This course is open only to those selected as WAs. It is a credit/no credit course.
Meets distribution requirements but does not count toward the major.
Writing course.
1 credit.
Fall 2011 and fall 2012. Gladstein.

## ENGL 001D. Writing Tutorial

Students enrolled in English 001F or 001G, in consultation with the professor of these courses, may enroll in the tutorial. Students will set up an individual program to work with the professor and/or a Writing Associate on writing for the course or other courses. Students take the tutorial in conjunction with English 001F or English 001G, or they may take it in a subsequent semester.
0.5 credit.

Spring 2012. Cutrufello.

## ENGL 001F. First-Year Seminar: Transitions to College Writing

This class, limited to 12 , introduces students to the different genres of writing required at the College. Through assignments and class readings students learn what they might need to transition from writing in high school to writing at Swarthmore. The content for this course overlaps with ENGL 001A; therefore, students may take either ENGL 001A or ENGL 001F.
Meets distribution requirements but does not count toward the major. Students may take ENGL 001F and an English Literature first-year seminar (ENGL $008 \mathrm{~A}-\mathrm{Z}$ and 009A-Z).
Writing course.
1 credit.
Fall 2011. Cutrufello.

## ENGL 001G. Writing with Genres

Writing with Genres looks behind the scenes of typical genres assigned at Swarthmore College to help students uncover how a disciplinary community's assumptions and practices shape what is and what isn't acceptable for writers. To explore these writing expectations, this class is built around one sustained question that will guide reading and writing throughout the semester: how have advanced members of disciplinary communities-professors, professionals, seniors - come to know what they know about writing? To answer this question, this course aims to teach students how an understanding of genre (as an organizing principle of disciplinary ways of inventing, writing, and thinking) can not only improve academic writing, but can also make evident the tacit knowledge and skills required by a range of academic genres.

This course is open to all students and offers an opportunity to develop skills as college writers. Through frequent practice, class discussion, and in-class activities, students will become familiar with all aspects of the writing process and will develop their ability to write academically. Students will also participate in conferences with the instructor and course Writing Associates. Meets distribution requirements but does not count toward the major.
Writing course.
1 credit.
Spring 2012. Staff.

## ENGL 002A. Argument and Rhetoric Across the Disciplines

This course examines the questions of rhetorical analysis in different academic genres. Through the reading of academic journal articles, popular press pieces, and texts on rhetoric and argument, students will both deconstruct and construct academic arguments as they are presented in different disciplines. The course will explore such topics as ethos, pathos, and logos; intended audience and how to use evidence to persuade that audience; what constitutes evidence and how evidence is utilized; the use of numbers to support or respond to an argument.
Meets distribution requirements but does not count toward the major.
Writing course.
1 credit.
Fall 2011. Gladstein.

## ENGL 003A. Independent Study and Directed Reading in Writing Studies

 Students who plan an independent study or a directed reading must consult with the appropriate instructor and submit a prospectus for such work before the beginning of the semester during which the study is actually done. The course is available only if a professor is free to supervise the project.0.5 or 1 credit.

Staff.

## ENGL 005. Journalism Workshop

This course is an introduction to the basics of news gathering, news writing, and news values. Students will come away from it with a clear sense of how news is covered: how to collect facts, find sources, conduct interviews, cover beats, make choices about daily coverage and conceive and execute longer projects. Guest speakers, including top area journalists, will discuss their careers and advise students on stories. Readings will include the best examples of contemporary journalism. It counts as a general humanities credit and as a writing course, but does not count as a credit toward a
major or minor in English literature.
Application to this course does not require the submission of a manuscript.
Writing course.
1 credit.
Fall 2011. Mezzacappa.

## 008 and 009: First-Year Seminars In English Literature

These courses are limited to 12 first-year students only. No student may take more than one. All count as Writing courses.

## ENGL 009B. First-Year Seminar: Old Worlds, New Worlds

This course investigates the long written history of European travel to (and conquests of) "new" worlds, Eastern and Western. Texts include the fantastical but influential Travels of Sir John Mandeville, More's fictional Utopia, Columbus's accounts of his explorations, Shakespeare's The Tempest, and Milton's Paradise Lost. Geopolitical and literary histories intersect: forms of writing govern the imagination of exploration, and vice versa. The course concludes with Robinson Crusoe and Equiano's abolitionist autobiography.
Writing course.
1 credit.
Fall 2011. Song.

## ENGL 009C. First-Year Seminar: Natural History and Imagination

For over 200 years, writers have observed, described and puzzled over Nature writ large and small. How does the human imagination continually rediscover itself in natural history? In this course, students will read and analyze classic texts in the nature writing tradition while working to develop the skills of a naturalist themselves as they keep a field journal set in the College's Crum woods. Readings range from British and American Romantics (the Wordsworths, Clare, Keats, Emerson and Thoreau) to contemporary writers such as Michael Pollan and Barry Lopez.
Writing course.
1 credit.
Spring 2012. Bolton.

## ENGL 009D. First-Year Seminar: Nation and Migration

Drawing on novels, short stories, film, and poetry produced by immigrant writers from South Asia, Africa, and the Caribbean, this course explores the ways in which identity and community is shaped in the modern world. How does the migrant/diasporic writer rewrite the English language to reflect questions of race and power, nationhood and citizenship, and histories of the past and present? Authors
include Salman Rushdie, Nadine Gordimer, Hanif Kureishi, and Michael Ondaatje. Writing course.
1 credit.
Fall 2012 and spring 2013. Mani.

## ENGL 009F. First-Year Seminar: Rough Justice: Writing Revenge

The desire for revenge is one of the darkest and most powerful of human emotions. From geopolitical conflicts to intimate relationships, it warps and wrecks countless lives. Yet it is fundamentally bound up with a very positive, indeed quintessentially civilized, instinct-our thirst for justice. In this class we will be reading and writing about revenge from a variety of perspectives: classic and contemporary, personal and political. We will respond in writing to such authors as Aeschylus, Euripides, and Shakespeare, and we will also examine the theme of revenge in select films from Titus to Batman, The Dark Knight. Finally, we will look critically at Louise DeSalvo's Conceived with Malice, exploring its intriguing notion that literary creations are often themselves sublime acts of revenge.
Writing course.
1 credit.
Spring 2013. Riebling

## ENGL 009G. First-Year Seminar: Comedy

This course covers a range of comic dramas and comic performances. It will introduce key theories about comedy as a genre and comic performance as a cultural practice. We will also work intensively on expository writing and revision. Likely texts include films, plays by Plautus, Shakespeare, Behn, Wilde, and Churchill; and materials on minstrelsy, genre theory, gender, and performance studies.
Writing course.
1 credit.
Spring 2012 and spring 2013. N. Johnson.

## ENGL 009H. First-Year Seminar: Portraits of the Artist

We will study a variety of works portraying artists in different cultures and contexts and media.
Writing course.
1 credit.
Fall 2012. Schmidt.

## ENGL 009M. First-Year Seminar: Jane Austen, Cultural Critic

Mingling stylistic precision with an uncanny eye for social foibles, Austen's novels offer a useful entry point into the study of literature and the ways literature reflects and refracts social conditions. We'll read Austen's major
novels along with the 18 th-century fiction, politics, and philosophy to which she was responding; we'll also consider recent critical views on Austen and the ways films of the 1990s through the present engaged Austen's style and social critique. At the same time, students will engage the genre of the academic essay by writing and revising several kinds of literary essays: close readings; analysis of a novel's use of source material or a film's use of an Austen novel; and a research paper addressing one or more of the novels in a broader historical or stylistic context.
Writing course.
1 credit.
Fall 2011 and fall 2012. Bolton.
ENGL 009P. First-Year Seminar: Women and Popular Culture: Fiction, Film, and Television
This course looks at Hollywood "chick flicks" and "women's films" and television soap operas, their sources in 19th- and 20th-century popular fiction and melodrama, and the cultural practices surrounding their promotion and reception. How do race, class, and sexual orientation intersect with gendered genre conventions, discourses of authorship and critical evaluation, and the paradoxes of popular cultural pleasures? Texts may include Uncle Tom's Cabin, Gone With the Wind, Rebecca, The Joy Luck Club, Bridget Jones's Diary. Weekly screenings.
Writing course.
1 credit.
Spring 2013. White.

## ENGL 009Q. First-Year Seminar: Subverting Verses

Once history, biography, fiction, philosophy, and even science could be written in verse without seeming peculiar or affected, but today the line between poetry and prose is sharply drawn. Or is it? This course will examine unconventional forms and uses of poetry-from Seneca's Oedipus to Rita Dove's Darker Face of the Earth, from Geoffrey Chaucer's Tales to Vikram Seth's Golden Gate, from Bob Perelman's verse essays to Carolyn Forché's prose poems-to explore our assumptions about the nature of genre.
Writing course.
1 credit.
Fall 2011 and fall 2012. Anderson.

## ENGL 009S. First-Year Seminar: Black Liberty, Black Literature

How have African American writers told stories of freedom, and how have they tried to tell them freely? How has the question of freedom shaped the development of, and debates over,
an African American literary tradition? Drawing upon fiction, poetry, personal narratives, and critical essays, we will examine freedom as an ongoing problem of form, content, and context in black literature from antebellum slavery to the present.
Eligible for BLST credit.
Writing course.
1 credit.
Fall 2011 and spring 2012. Foy.

## ENGL 009T. First-Year Seminar: The Poetics of Power

This course explores ideas about the problems power raises in texts ranging from ancient Greece to the modern era and from the context of those who are traditionally empowered and those who learn power "from the bottom up." Through voices of those who feel power's effects and inequities most acutely, we will consider such questions as: What is power? Where does it originate? How does it differ from "authority," "right," and "sovereignty"? What are its effects on race, gender, and class? On love and sex? As we tackle such questions, we will be seeking both perennial and carefully historicized answers to the problems power raises, looking for "universals" while differentiating between our contemporary experiences and lives far removed from our own in circumstance, distance, and time. Among others, writers include Sophocles, Shakespeare, Frederick Douglass, and Virginia Woolf.
Writing course.
1 credit.
Fall 2011. Riebling.

## ENGL 009V. First-Year Seminar: What's So Funny?: Cultures of American Humor from Franklin to Fey

Humor is indispensable. Judging from the way we gravitate to people with "a good sense of humor," flock to comedy clubs, and seek funny flicks, we really like humor, and we miss it when we don't have it. But why? What does humor do for us? What does our sense of humor say about us? Our time? Our culture? This writing seminar will address these and other questions to make better sense of humor in theoretical, social, historical, and political contexts. The course surveys various types of humor in various textual forms-fiction, nonfiction, film, TV, stand up, columns, political cartoons, etc.-to ascertain what humor is and what functions it serves. Featured writers may include Ben Franklin, Fanny Fern, Mark Twain, George Schulyer, James Thurber, Flannery O'Connor, Neil Simon, Bill Cosby, Sherman Alexie, David Sedaris, and Tina Fey. Writing course.

1 credit.
Fall 2011. Murray.

## ENGL 009Z. First-Year Seminar:

## Literature Against History?

Do we need history in order to read literature, or does it simply get in our way? In this class, we will study the conflict between text and context in literary interpretation. Our syllabus will include texts like Jane Austen's Mansfield Park, Virginia Woolf's To the Lighthouse, Shakespeare's sonnets, John Donne's poetry, Erich Auerbach's Mimesis, Roland Barthes's Mythologies, Cleanth Brook's The WellWrought Urn, Frederic Jameson's The Political Unconscious, and Eve Sedgwick's Touching Feeling.
Writing course.
1 credit.
Fall 2012. Buurma.

## 010-096: Advanced Courses

These courses are open to freshmen and sophomores who have successfully completed the necessary prerequisites and to juniors and seniors without prerequisite.

## Core Courses

Prerequisite for core courses: A Writing course from any department on campus. For fuller descriptions, see the following:
ENGL 010. Core Course: Survey I: Beowulf to Milton*
ENGL 019. Core Course: Chaucer and Shakespeare*
ENGL 035. Core Course: The Rise of the Novel***
ENGL 044. Core Course: The 20th-Century Novel
ENGL 052A. Core Course: U.S. Fiction, 19001950
ENGL 052B. Core Course: U.S. Fiction, 1945
to the Present
ENGL 053. Core Course: Modern American Poetry
ENGL 054. Core Course: Faulkner, Morrison, and the Representation of Race
ENGL 061. Core Course: Fictions of Black America
ENGL 066. Core Course: American Literature Survey I*
ENGL 071D. Core Course: The Short Story in the United States
ENGL 080. Core Course: Critical and Cultural Theory

## 014-019: Medieval

## ENGL 014. Old English/History of the Language*

(Cross-listed as LING 014)
A study of the origins and development of English-sound, syntax, and meaning-with an initial emphasis on learning Old English. Topics may include writing and speech, a history of morphology, the changing phonology from Old to Middle English, Shakespeare's puns and wordplay, a history of sounds and spellings, modern coinages, and creoles. We range from Beowulf to Cummings, from Chaucer to Chomsky.
This course may be taken without the usual prerequisite course in English; however, it may not serve in the place of a prerequisite for other advanced courses.
Counts as humanities distribution credit under this listing.
1 credit.
Spring 2012. Williamson.
020-029: Renaissance and 17th Century
ENGL 020. Shakespeare*
This course is a general survey of Shakespeare's work that focuses especially on the interrelation of social and political issues within their historical contexts. Beginning with texts that display primarily "domestic" concerns, we will explore early modern gender roles, problems with love and marriage, and conflicts between parents and children. Next, we will read texts that display primarily "dynastic" concerns such as conflicts over succession, tyranny, rebellion, and regicide. Finally, we will attempt to collapse the distinction between domestic and dynastic by analyzing plays where these social and political issues are deeply enmeshed. Among the works we will study are: selected sonnets, Romeo and Juliet, A Midsummer Night's Dream, Othello, Julius Caesar, Richard II, Hamlet, and
Macbeth.
1 credit.
Fall 2011. Song.

## ENGL 023B. Sign Languages and their Social Contexts <br> (See LING 023)

1 credit.
Fall 2011. Sutton-Spence.
ENGL 027. Tudor-Stuart Drama*
A survey of plays and masques written by Christopher Marlowe, Ben Jonson, Thomas Middleton, Thomas Dekker, John Webster, Elizabeth Cary, John Ford, and others. The course will consider historical, sociopolitical, and literary contexts; just as important, we will
look at how the plays have been and continue to be performed.
1 credit.
Spring 2012. N. Johnson.

## ENGL 028. Milton*

Study of Milton's poetry and prose with particular emphasis on Paradise Lost.
1 credit.
Spring 2012. Song.

## ENGL 029B. Sign Language and Folklore

(See LING 029)
1 credit.
Spring 2012. Sutton-Spence.

## 030-039: Restoration, 18th Century, and Romantic

ENGL 033. The Romantic Sublime*
"The essential claim of the sublime is that man[sic] can, in speech and feeling, transcend the human" (Weiskel). What does this transcendence look like? How is it achieved? What resources does it offer us, and at what cost? Authors include Burke, Blake, the Wordsworths, Coleridge, Byron, the Shelleys, and Keats.
1 credit.
Fall 2011 and spring 2013. Bolton.

## ENGL 035. Core Course: The Rise of the Novel***

In this course we will examine the development of the novel, from its origins in a multiplicity of diverse literary genres to its Victorian incarnation as a "realist" and middle-class form through the appropriation of the novel as high art by Modernist writers and its subsequent return to multi-genre roots later in the 20th century. We will trace changes in the novel's formal features as they relate to its treatment of themes such as publicity and privacy, the role of gender and sexuality in social life, the significance of monetary exchange, and the proper relation between the author and his or her text. First surveying the main critical narratives of the novel's "rise" or development, we will move on to see how the material form of the novel might offer us a counter-narrative to more conventional interpretations of the genre's origins.
1 credit.
Fall 2012. Buurma.

## ENGL 038. Regency Skepticism, 1812-

 1832*Skepticism and critique, rather than prophecy and transformation, are the common threads linking the "second-generation Romantics": writers like Jane Austen, Byron, the Shelleys,

Keats, among others. Indeed, Regency writers, pursuing formal and psychological integrity within a period of complex social changes, transform a certain wry cynicism into both an art form and a tool of inquiry. We'll start by considering the varieties of theatricality (and its counterpart, sincerity) operating in works like Austen's Mansfield Park, Byron's Manfred, Hazlitt's reviews, and popular plays like Lover's Vows. Next, we'll explore the different visions of power at work in such diverse texts as Austen's Emma, Percy Shelley's "Mont Blanc" and Prometheus Unbound, Mary Shelley's Frankenstein, and Hemans' Records of Women. Finally, we'll track Byron's shifting, skeptical narrator through Don Juan's burlesque adventures and end-still questioning but more affirmatively-with Shelley's "Ode to the West Wind" and Keats's great odes. 1 credit.
Spring 2012. Bolton.

## 040-049: Victorian to Modern

## ENGL 040. Core Course: Victorian

 Literature and the Culture of the Review This course offers an introduction to Victorian literature and culture through a focus on the review, a genre the Victorians both raised to an art form and used as a weapon in fighting the pettiest of personal battles. Often vilified as vampires who sucked their living out of other writers' works, reviewers nonetheless occupied a central and defining role in Victorian literary culture. First locating ourselves by taking a quick look at our current 21st-century ideas about book, music, and film reviewing, we will move on to examine some of the most important-and most reviewed-works of Victorian literature, by authors such as Bronte, Eliot, Tennyson, Darwin, Mill, Barrett Browning, Pater, and Wilde.1 credit.
Spring 2013. Buurma.

## ENGL 045. Core Course: Modern British Poetry <br> Steven Spender called them "recognizers,"

 creating a complex, fractured art out of circumstances they experienced as extraordinary, unprecedented. This course examines the responses of British male and female poets-and some American expatriates-to the wars, shifting beliefs, complicated gender roles, and other dislocations of early 20th-century life.1 credit.
Spring 2013. Anderson.

## ENGL 046. Tolkien and Pullman and

 Their Literary Roots***A study of the fantastic trilogies-Tolkien's Lord of the Rings and Pullman's His Dark Materials-in the context of their early English sources. For Tolkien, this will include Beowulf, Old English riddles and elegies, and Middle English, Sir Orfeo, and Sir Gawain and the Green Knight (all in Tolkien's translations). For Pullman, this will include Biblical stories of the Creation and Fall, Milton's Paradise Lost, and selected Blake poems. Some film versions will be included.
1 credit.
Spring 2012. Williamson.

## ENGL 048. Contemporary Women's Poetry

"Merely the private lives of one-half of humanity." Thus Carolyn Kizer defines the 20th-century revolution through which women poets give voice to the previously unspeakable and explore the political implications of the supposedly personal. This course considers a variety of poetic styles and stances employed by women writing in English today-feminist or womanist, intellectual or experiential, lesbian or straight, and mindful of ethnic heritage or embracing the new through artistic experimentation.
1 credit.
Spring 2012. Anderson.
ENGL 049. Contemporary Irish Poetry Ireland's complicated historical divisions have provided fertile ground for extraordinary poetry, both in the Republic and in the North. This course will consider poetry by Heaney, Boland, Carson, McGuckian, Muldoon, and ni Dhomnaill (among others) within the sociopolitical contexts of contemporary Ireland. 1 credit.
Spring 2013. Anderson.

## 050-069: American (Including African American, Asian American, and Native American)

## ENGL 052A. Core Course: U.S. Fiction,

 1900-1950This course will focus on well-known and newly recognized novelists important for this period, probably including Wharton, Hemingway, Fitzgerald, Cather, Hurston, Loos, and West. There will be attention to innovations in the novel as a literary form and to the ways in which writers engage with their historical context. The reading load will be heavy, averaging a novel a week.
1 credit.
Fall 2012. Schmidt.

## ENGL 052B. Core Course: U.S. Fiction, 1945 to the Present

Major authors and emerging figures, with an emphasis on the novel, key works from each decade of the postwar era, and relations between the U.S. and global events as represented in fiction. The reading load will be heavy, averaging a novel a week.
1 credit.
Spring 2013. Schmidt.

## ENGL 053. Core Course: Modern American Poetry

A study of selected U.S. poets beginning with Whitman and Dickinson but with the primary focus on major and minor poets of the 20th century.
1 credit.
Spring 2013. Schmidt.

## ENGL 057A. American Literature Through A Traveler's Eyes

The multicultural history of the Americas brims with rich narratives in which travelers attempt to comprehend unfamiliar people, places, and cultures. Do travelers see the new in its terms or through their own culture's tropes and interests? Do contact zones create new perspectives? Who are the real strangers in strange lands? These questions will initiate our survey of writings by conquerors and captives, indigenes and immigrants, seekers and satirists, slaves and surveyors, planters and POWs, reformers and rebels, exiles and entrepreneurs. Course readings are concentrated in pre-1830 writings and then extend into the 19th and 20th centuries. Some featured writers include Columbus, Cabeza de Vaca, Jean de Lery, Thomas Harriot, Mary Rowlandson, Sarah Knight, Olaudah Equiano, John Woolman, Alexis de Toqueville, Lewis and Clark, Mary Jemison, Henry Thoreau, Mark Twain, Zitkala Sa, Amy Tan, William Least-Heat Moon.
1 credit.
Spring 2012. Murray.

## ENGL 061. Core Course: Fictions of Black America

A survey of significant novels and short fiction produced by black writers in the past century. We will examine the textual practices, cultural discourses, and historical developments that have informed the evolution of a black literary tradition, paying close attention to the dynamic interaction between artist, culture, and community.
Eligible for BLST credit.
1 credit.
Fall 2011. Foy.

## ENGL 065. Asian American Literature

How does Asian American literature function as the site of key debates about ethnic and national identity? This course explores Asian American cultural production over the past 50 years, beginning with Flower Drum Song (1961), the first Hollywood film starring an all-Asian American cast, and ending with the Pulitzer Prize-winning author Jhumpa Lahiri's short stories. We will also read a number of major Asian American novelists and literary scholars in order to explore topics such as Asian American racial formation, gendered narratives of immigration, and the changing face (and space) of Asian America.
1 credit.
Spring 2012 and spring 2013. Mani.

## 070: Creative Writing and Journalism Workshops

Regular creative writing workshops are limited to 12 and require the submission of writing samples in order for students to apply for them. (Exception: ENGL 070F Journalism Workshop does not require submission of a manuscript.) Workshops marked with a \# combine a balance of substantial literary analysis of models along with creative writing exercises geared to the models; these workshops are limited to 15 and, do not require the submission of manuscripts. Students may normally take only one workshop at a time. ENGL 070A and 070B may normally be taken only once. Creative writing and journalism classes do not count as pre-or post-1830 classes. ENGL 070F does not count toward a major or minor in English literature.

## ENGL 070A. Poetry Workshop

A class, limited to 12, in which students write and talk about poetry. We will emphasize the discovery and development of each individual's distinctive poetic voice, imagistic motifs, and thematic concerns, within the context of contemporary poetics. Students should submit three to five pages of poetry for admission, due during the week after fall break. The workshop will meet once a week for 3 hours. Attendance at readings by publishing writers (outside of regular class hours) will provide additional perspectives. Admission and credit are granted at the discretion of the instructor.
Graded credit/no credit.
No prerequisite
1 credit.
Spring semester each year.
Spring 2012. Anderson.
Spring 2013. Bolton.
ENGL 070B. Fiction Writers' Workshop
The fiction writers' workshop combines lectures, discussion, and exercises in a toolbox approach to writing short stories and novels.

We cover topics such as voice, narrative structure, points of view, and tension. Over the semester, students will write weekly in-class and out-of-class exercises as well as two complete stories for group critique, one of which they will revise as a final project. Readings will average two stories or novel excerpts per week. Class is limited to 12 students, accepted on the basis of a writing sample (maximum of 15 double-spaced pages) due during the week after fall break. Attendance at readings by publishing authors (outside of class hours) will provide additional perspectives.
Graded credit/no credit.
No prerequisite.
1 credit.
Spring semester each year.
Spring 2012. Frost.
ENGL 070C. Advanced Poetry Workshop
Intensive volumes of poetry often represent their authors' conscious statements, made through selection, organization, and graphic presentation. This course-in which students design and complete volumes of their own work-is normally intended as an advanced workshop for students who have taken the Poetry Workshop (ENGL 070A), or-with the instructor's permission-students who have taken ENGL 070D, 070E, or 070G. Limited to 12. Attendance at readings by well-known writers (outside of regular class hours) will provide additional perspectives. Admission and credit are granted at the discretion of the instructor.
Graded credit/no credit.
1 credit.
Fall 2012. Anderson.

## ENGL 070E. Lyric Encounters\#

Matthew Arnold called it "a criticism of life" and Dylan Thomas "a naked vision." Emily Dickinson defined it as a blow: "If I feel physically as if the top of my head were taken off, I know that it is poetry." Students will examine varieties of the lyric and then shape their own criticisms, visions, cerebral explosions in response. Limited to 15. Attendance at readings by well-known writers (outside of regular class hours) will provide additional perspectives.
1 credit.
Fall 2011. Anderson.

## ENGL 070G. Writing Nature: Digital Storytelling\#

This course uses the Crum woods as a laboratory setting for the production of multimedia poems and brief memoirs. Digital stories combine spoken words with images,
sound, and sometimes video to create powerful short movies. We'll spend time grappling with some of the stories inherent in the Crum woods ecosystem as well as the multifaceted story of our relationship to the woods. In addition to producing one or two brief memoirs, we'll work with a series of poetic forms, including some combination of prose poems, question poems, the Persian ghazal, sonnets and linked haiku. The class will conclude with a public screening of work produced.
1 credit.
Fall 2012. Bolton.

## ENGL 070K. Directed Creative-Writing

 ProjectsStudents-whether course or honors majorswho plan a directed writing project in fiction or poetry must consult with the department chair and with a member of the department's writing faculty who might supervise the project and must submit a prospectus to the department by way of application for such work before the beginning of the semester during which the project is actually done. The number of these ventures the department can sponsor each year is limited. Deadlines for the written applications for the Directed Creative Writing Projects are the Mondays immediately following the fall and spring breaks. Normally limited to juniors and seniors who have taken an earlier workshop in the department.
For creative writing projects in the Honors Program, the 2-credit field will normally be defined as a 1 -credit workshop (ENGL 070A, 070B, or 070C) paired with a 1-credit Directed Creative-Writing Project (ENGL 070K). The approximate range of pages to be sent forward to the examiners will be 20 to 30 pages of poetry or 30 to 50 pages of fiction. There will be no written examination for the creative writing project; the student's portfolio will be sent directly to the examiner, who will then give the student an oral examination during honors week. For purposes of the transcript, the creative writing project will be assigned a grade corresponding to the degree of honors awarded it by the external examiner. Students are advised that such independent writing projects must normally be substantially completed by the end of the fall semester of the senior year as the spring semester is usually the time when the senior honors study essay must be written.
Graded credit/no credit.
1 credit.
Staff.

## ENGL 070M. Advanced Fiction

 WorkshopLike the Fiction Workshop, the Advanced Fiction Workshop will focus on short stories: writing them, reading them, thinking about
them, responding to them. We will read a range of story collections as well as writing our own stories, using our discussions of how writers like James Joyce, Flannery O'Connor, John Cheever, Deborah Eisenberg, and Denis Johnson have approached the form to inform and enlarge our own ideas of what is possible. While the Fiction Workshop devotes considerable time to structured writing exercises both in and outside of class time, the Advanced Workshop gives writers more independence in structuring their stories and more time for group analysis of their work. The class provides an open-minded, rigorous, constructive environment for writing and revising; it gives students the tools to conceive, revise, and realize vivid and complete works of the narrative imagination. Attendance at readings by publishing authors (outside of class hours) will provide additional perspectives.
Prerequisites: ENGL 070B, D, G or by permission of the instructor.
Graded credit/no credit.
1 credit.
Fall 2011. Pastan

## 071: Genre Studies

## ENGL 071C. The Short Story

As we read widely in the 19th- and 20thcentury short story, we'll focus on technical developments as well as certain recurring preoccupations of the genre: fragmentation and reconstruction, the staging of an encounter between the ordinary and the extraordinary, and the refutation of time and mortality.
1 credit.
Fall 2011. Bolton.

## ENGL 071E. American Theater: Staging the American Experience

In this course we will examine how writers use the conventions of the stage to express their visions of the American experience. These conventions demand that authors open their work to the collaborative input of directors, actors, designers and audiences, thus publicly opening their work to a myriad of interpretations. Using a dramaturgical approach, we will examine how American playwrights of the twentieth and twenty-first centuries, including such writers as Susan Glaspell, Arthur Miller, Sam Shepard, Tony Kushner, August Wilson, and Sarah Ruhl, exploit the stage conflation of public and intimate experience to examine the many facets of what it means to be "American." We will also research and discuss the performance history of plays and attend at least one performance.
1 credit.
Spring 2012. Finberg.

## ENGL 071G. Sacred and Profane Desires

 in the Renaissance Lyric*Lyric poetry articulates, in condensed form, the intensity of inner lives. In Renaissance lyric, much of this intensity stems from a complicated interplay between religious and erotic impulses. Far from being simple opposites, sacred and profane desires mirror or blend into each other in ways that engage theological, philosophical, and (perhaps most surprisingly) political controversies. This course will examine these dynamics in the writings of Spenser, Donne, Herbert, Philips, and Behn, among others.
1 credit.
Spring 2012. Song.

## 072-079: Comparative Literature/Literature in Translation <br> ENGL 073. Modernism: Theory and Fiction

Drawing on a range of theorists and novelists, this course will explore some of the most compelling energies and problems that drive Western modernism (from the 1840s through the 1940s). Focus will be on modernism's concern with shock rather than resolution, with the uncanny rather than the familiar. More broadly, the course will attend to modernism as a body of thought and expression committed less to knowledge than to "unknowing." Theoretical readings begin with Kierkegaard's Fear and Trembling, to be followed by Nietzsche's Genealogy of Morals and some of Freud's major essays. Fiction readings begin with Dostoevsky's Notes From Underground as a prelude to more sustained inquiry into Kafka (stories, The Trial), Proust (selections from In Search of Time Lost), and Woolf (Mrs. Dalloway). The course will conclude by attending to Benjamin's essays and Beckett's Molloy and Krapp's Last Tape.
1 credit.
Spring 2012. Weinstein.

## ENGL 076. Core Course: The World, the Text, and the Critic

In his collection of essays, The World, The Text, and the Critic (1983), the literary critic Edward Said argues, "The point is that texts have ways of existing that even in their most rarefied form are always enmeshed in circumstance, time, place, and society-in short, they are in the world, and hence worldly." This core course explores the "worldliness" of literary texts that are shaped by colonial and postcolonial histories. We will explore the relationship between reader and writer; between the writer and the text; and between ourselves as critics and the worldviews we bring to bear on so-called "non-western" literatures. The class will survey a range of late 20th-century novels and essays in English, and
will introduce students to a variety of critical approaches in contemporary global literatures. Authors include Zadie Smith, White Teeth; Arundhati Roy, The God of Small Things; and V.S. Naipaul, The Enigma of Arrival. 1 credit.
Fall 2012. Mani.

## 080-096: Critical Theory, Film, and Media Studies

Please see the film and media studies section for additional course listings.

## ENGL 082. Transnational Feminist Theory

(Cross-listed as GSST 020)
This class introduces perspectives from domestic United States and global contexts in order to ask: How do the contributions of women of color in the United States and of feminist movements in the "Third World" radically reshape the form and content of feminist and queer politics? Through critical inquiry into major texts in transnational feminist and queer studies, the course dynamically reconceptualizes the relationship between women and nation; between gender, sexuality and globalization; and between feminist/queer theory and practice.
1 credit.
Spring 2013. Mani.

## ENGL 087. American Narrative Cinema

Considers film as narrative form, audiovisual medium, industrial product, and social practice, emphasizing the emergence and dominance of classical Hollywood as a national cinema, with some attention to independent narrative traditions such as "race movies." Genres such as the western, the melodrama, and film noir express aspirations and anxieties about race, gender, class and ethnicity in the United States. Auteurist, formalist, Marxist, feminist, and psychoanalytic methods will be explored. 1 credit.
Fall 2012. White.

## ENGL 090. Queer Media

## (Cross-listed as FMST 046)

How are sexual identities mediated by popular culture? How do lesbian and gay film and video makers "queer" sexual norms and standard media forms? Challenging classic Hollywood's heterosexual presumption and mass media appropriations of lesbian and gay culture, we will examine lesbian and gay aesthetic strategies and modes of address in contexts such as the American and European avantgardes, AIDS activism, and diasporan film and video movements.
1 credit.
Fall 2011. White.

## 097-099: Independent Study and Culminating Exercises

## ENGL 097. Independent Study and Directed Reading

Students who plan an independent study or a directed reading must consult with the appropriate instructor and submit a prospectus to the department by way of application for such work before the beginning of the semester during which the study is actually done. Deadlines for the receipt of written applications are the second Monday in November and the first Monday in April. Normally limited to juniors and seniors and available only if a professor is free to supervise the project.
0.5 or 1 credit.

Staff.

## ENGL 098, 098A. Senior Thesis

Course majors in the department may pursue a thesis of their own choosing under the supervision of a member of the department. The thesis may be for 1 ( $40-50$ pages) or 2 ( $80-100$ pages) credits. A brief prospectus for the project must be submitted for approval by the department in April of the junior year. Before submitting this prospectus, course majors should consult with the department chair and with the department member who might supervise the project. This work must be separate from that of the senior culminating essay, required of every course major for graduation. Available only if a professor is free to supervise the project.
1 or 2 credits.
Staff.

## ENGL 099. Senior Course Majors Colloquium***

This colloquium, open only to senior English literature course majors and required for them to take, offers a structured and supportive environment for students writing their senior essays. The course will feature a mix of literature, criticism, theory, and methodology, plus guest visits by other members of the English Literature Department and possibly others, with the opportunity for students to discuss central issues in the field of literary and cultural history in preparation for their research and writing. We will use as critical touchstones short essays by Campbell, Freud, Kristeva, and Bhabha as we explore the topics of alienation, otherness, the uncanny, projection, and the foreigner within. Several short papers and other assignments may be featured in the early part of the course. Nearing the end of the semester, students will research and write a longer essay (10-20 pages) on a topic of their own choice approved by the department, with the chance to present drafts of their work in progress to the colloquium for revision advice. Students are
expected to complete their senior essays by the end of the term in which English 099 is offered. Note: This colloquium may count as either a pre- or a post-1830 credit, depending on the final essay topic. ENGL 099 will be offered for seniors every fall.
1 credit.
Fall 2011. Williamson.

## ENGL 099W. Senior Course Majors

 Colloquium***Only senior English majors who need one more W (writing) credit should enroll in this section of the course. The work will be the same as ENGL 099, but the writing requirements will include more revision work.
Prior approval from the professor is needed before enrolling in ENGL 099W.
1 credit.
Fall 2011. Williamson.

## Seminars

Honors seminars are open to juniors and seniors only and require approval of the department chair. Priority is given to honors majors and minors.

## ENGL 101. Shakespeare*

Study of Shakespeare as a dramatist. The emphasis is on the major plays, with a more rapid reading of much of the remainder of the canon. Students are advised to read widely among the plays before entering the seminar (pre-1830). Students who have taken ENGL 020 may take this seminar for 2 credits. 2 credits.
Fall 2011, fall 2012, and spring 2013. N. Johnson.

## ENGL 102. Chaucer and Medieval Literature*

A study of selected texts of medieval English literature with an emphasis on Chaucer. Texts will include Beowulf, and other Old English poems, Sir Gawain and the Green Knight, Pearl, selections from Chaucer's Canterbury Tales and Troilus and Criseyde, Margery Kempe's autobiography, selected mystery plays and Everyman, and Arthurian materials. Most of the Chaucer selections will be read in Middle English; other texts will be read in translation.
The seminar will also include some comparative texts-sources, analogues, and modern retellings of particular stories-such as John Gardner's novel, Grendel, and versions of Troilus and Criseyde by Boccaccio and Shakespeare.
2 credits.
Fall 2011. Williamson.

## ENGL 110. Romanticism*

We'll read the women poets of the period (Smith, Robinson, Baillie, Wordsworth, Hemans, and L.E.L.) alongside their more famous male contemporaries (Blake, Wordsworth, Coleridge, Byron, Shelley, and Keats) in order to explore issues of concern to both: formal innovation, colonial expansion, (counter) revolutionary politics (pre-1830). Eligible for GSST credit. 2 credits.
Spring 2013. Bolton.

## ENGL 111. Victorian Literature and Culture

This research-intensive seminar focuses on the Victorian novel as both a genre and a material object in its print cultural context, setting this approach within the broader world of Victorian literature and culture in order to examine the ways in which the novel was both product and producer of its historical moment. Readings will include novels by authors like George Eliot, Anthony Trollope, Elizabeth Gaskell, Wilkie Collins, George Meredith, Thomas Hardy, Bram Stoker, and Margaret Oliphant as well as readings in novel theory and cultural and literary criticism.
2 credits.
Spring 2013. Buurma.

## ENGL 112. Contemporary Women's Poetry Seminar

Women's poetry of the 20th century: "Tell it slant," Emily Dickinson advises, and women poets-whether or not they have read her work-have typically taken her subversive advice to heart. How women "slant" their truth, and how their poetic methods differ-if at allfrom those of their male counterparts will form the center of this inquiry into modernist and postmodernist feminist aesthetics (post-1830). 2 credits.
Fall 2012. Anderson.

## ENGL 115. Modern Comparative Literature

The semester will focus on Modernism: theory and fiction. Drawing on a range of authors writing between the 1840s and the 1940s, this seminar will attend to the conceptual underpinnings of European modernism and will seek to come to terms with several of its most salient texts. Primary readings will be drawn from among the following writers: Kierkegaard, Marx, Dostoevsky, Nietzsche, Freud, Rilke, Kafka, Proust, Joyce, Woolf, Benjamin, and Beckett. Secondary readings will include essays by Adorno, Lukacs, Bakhtin, Canetti, De Certeau, and others. Students should have read Joyce's Portrait of the Artist as a Young Man prior to taking this seminar (post-1830).

Students who have taken ENGL 073 should confer with the professor before enrolling in ENGL 115; they will receive 1 credit for this seminar.
2 credits.
Spring 2012 and spring 2013. Weinstein.

## ENGL 116. American Literature

Advanced work in U.S. literary history, with special focus on the 20th century. Prior work in U.S. literature and/or history is recommended (post-1830).
2 credits.
Fall 2012. Schmidt.

## ENGL 117. Theories and Literatures of Globalization

This seminar examines the literary and cultural dimensions of globalization. Defining globalization as a social, economic and political phenomenon, the seminar foregrounds the productive intersection between literature and contemporary cultural theory. Pairing novels and short stories by major national and diasporic writers (including Salman Rushdie, J.M. Coetzee, and Orhan Pamuk) with ethnographic and historical texts (by theorists such as Homi Bhabha, Arjun Appadurai, Gayatri Spivak), we will examine the relationship between colonialism and postcolonialism; modernity and globalization; racial formation and the nation-state. By developing a critical engagement with theories of identity and difference, we will explore the ways in which global literatures engender, often in complex and difficult ways, new politics of nationalism, race, and sexuality (post-1830).
2 credits.
Spring 2012. Mani.

## ENGL 118. Modern Poetry

A study of the poetry and critical prose of Yeats, Eliot, Stevens, and H.D., in an effort to define their differences within the practice of "modernism" and to assess their significance for contemporary poetic practice (post-1830). 2 credits.
Fall 2011. Anderson.

## ENGL 119. Black Cultural Studies

For readers, writers, and critics of black literature, what difference has race made, and how has it intersected with other modes of identity, such as class and gender? How have writers represented, and theorists theorized, the tensions between sound and vision, between roots and routes, between culture and capital? Focusing on black fiction, poetry, and autobiography published since World War II, we will examine approaches to this literature that are historical, political, and theoretical,
drawing upon key thinkers in black cultural studies.
Eligible for BLST credit.
2 credits.
Spring 2012. Foy.

## ENGL 120. Critical and Cultural Theory

"Culture is one of the two or three most complicated words in the English language," concedes Raymond Williams in Keywords. The influence of linguistics on philosophy and anthropology will lead us to the subject of culture-and the subject in culture. Marx, Freud, Saussure, Benjamin, Levi-Strauss, Fanon, Irigaray, Foucault, Sedgwick, and de Lauretis (post-1830).
2 credits.
Fall 2012. White.

## ENGL 180. Thesis

A major in the Honors Program may, with department permission, elect to write a thesis as a substitute for one seminar. The student must select a topic and submit a plan for department approval no later than the end of the junior year. Normally, the student writes the thesis of 80 to 100 pages, under the direction of a member of the department. The 2 -credit thesis project may take place over 1 or 2 semesters.
2 credits.
Staff.
ENGL 183. Independent Study
Students may prepare for an honors examination in a field or major figure comparable in literary significance to those offered in the regular seminars. Independent study projects must be approved by the department and supervised by a department member. Deadlines for the receipt of written applications are the second Monday in November and the first Monday in April. 2 credits.
Staff.

Coordinator: PETER COLLINGS (Physics and Astronomy)*<br>Committee: Elizabeth Bolton (English Literature)<br>Timothy Burke (History)<br>Erich Carr Everbach (Engineering)<br>Alison Holliday (Chemistry)<br>Eric Jensen (Physics and Astronomy)<br>José-Luis Machado (Biology)<br>Arthur McGarity (Engineering)*<br>Rachel Merz (Biology)<br>Carol Nackenoff (Political Science) ${ }^{3}$<br>Hans Oberdiek (Philosophy)<br>Colin Purrington (Biology) ${ }^{3}$<br>Christine Schuetze (Sociology and Anthropology) ${ }^{*}$<br>Richard Valelly (Political Science)<br>Mark Wallace (Religion) ${ }^{1}$

${ }^{1}$ Absent on leave, fall 2011.
${ }^{3}$ Absent on leave, 2011-2012.
*Member, 2011-2012 Tri-College Environmental Studies Steering Committee.

Profound anthropogenic changes are occurring in the land, water, and air around us, and education needs to respond to these changes. Swarthmore's heritage of social concern compels us to educate students so that they are well informed about vital, current issues and capable of full political participation. The College has a responsibility to provide means for the study of environmental problems and to encourage students to develop their own perspectives on these problems. The interdisciplinary Environmental Studies Program is one way the College meets these responsibilities.
Environmental studies offers numerous opportunities for rigorous interdisciplinary work, addressing the scientific, engineering, social, political, economic, literary, and philosophical dimensions of environmental topics. The minor helps guide students to the many academic fields that afford a perspective on environmental problems and enables them to explore questions most compelling to them from the vantage point of various disciplines. Beginning with the 2011-2012 academic year, the Swarthmore College Environmental Studies Program is expanding to cooperate with Bryn Mawr and Haverford colleges to offer a tricollege environmental studies interdisciplinary minor, involving departments and faculty from the natural sciences, the social sciences, and the humanities. The tri-college environmental studies program aims to bring students and faculty together to explore the interactions among earth systems, human societies, and local and global environments.

## The Academic Program

An interdisciplinary course minor in environmental studies is available to all students, consisting of an integrated program of five courses plus a capstone seminar, taken in addition to a regular major.
The expectation is that minors will take the foundations course, Case Studies in Environmental Studies, early in their program and before the senior year. Apart from the foundations course and the capstone seminar, there are three categories of courses: environmental science/technology, environmental social science/humanities, and cognate/interdisciplinary. Lists of courses belonging to each of these categories appear in the course catalog and the program's website. Environmental Studies minors are generally expected to take two courses in environmental science/technology (one of which must be a lab science) and two courses in environmental social science/humanities. In consultation with the program coordinator, however, up to two courses toward the minor may be chosen from the list designated cognate and interdisciplinary courses or courses taken at other institutions (domestic and foreign). Students should regularly check the program's website for additions and changes to course lists; the website will also have links to qualified and available environmental science, social science, arts and humanities courses at Bryn Mawr and Haverford colleges.
Any student may request credit in environmental studies for interdisciplinary environmental courses taken at other institutions (domestic and foreign). Application forms for credit evaluations are available on the
program's website. Swarthmore College sponsors environmental study abroad programs in Cape Town, South Africa (see
www.swarthmore.edu/x20601.xml) and Central
Europe (Krakow, Poland and Brno, Czech
Republic-see
www.swarthmore.edu/x11780.xml).
At least three of the five courses selected for the environmental studies minor must be outside the major and, if it exists, a second minor, so that when the capstone seminar is added, the College policy requiring at least four courses outside the major or any other minor will be satisfied.
Swarthmore environmental studies students may also apply for the honors minor, which has similar requirements plus an external examination on an approved topic that links together two of the courses and a senior honors study paper that explores the connections between the two courses (see honors section below).
Swarthmore students must submit their plan of study to the coordinator, usually when they apply for a major, and should inform the coordinator about any changes in their academic programs. Students may petition the Faculty Committee on Environmental Studies to have courses taken at other institutions fulfill some of these requirements. One of the courses may be independent work or a field study (in the United States or abroad) supervised by a member of the committee (ENVS 090).

## Overview of Curriculum

## Interdisciplinary Foundational Course

Beginning with the class of 2015, completion of the interdisciplinary foundations course, Case Studies in Environmental Issues (ENVS 001), will normally be required of all minors and should be taken prior to the senior year. Members of the class of 2014 are strongly encouraged to take the foundations course. This course will be co-taught by one faculty member from a science or engineering field and by one faculty member from the social sciences or humanities. Focusing on one or two case studies, the course will emphasize basic concepts in environmental studies and explore how environmental challenges are best approached by drawing upon the contributions of more than one academic discipline.

## Environmental Courses in Specific Disciplines (normally 4)

The minor in environmental studies generally requires at least two courses from specific disciplines in environmental science/technology, one of which must be a lab science, and two courses from specific disciplines in environmental social
science/humanities. These courses are offered by the departments that support the program, and they focus on environmental topics using the methods and perspectives of a specific discipline.

## Cognate and Interdisciplinary Courses (maximum of 2)

In consultation with the coordinator, up to two courses toward the environmental studies minor may come from the list of cognate courses. These courses cover topics and methods that relate significantly to the environment. Interdisciplinary environmental studies courses, including courses taken abroad at other institutions and study abroad programs, may also be included in this category. Such courses are occasionally offered by the Environmental Studies Program, including independent work or a field study (in the United States or abroad) supervised by a member of the committee (ENVS 090).

## Capstone Seminar

In addition to the five courses, each student pursuing a minor will participate in the capstone seminar in environmental studies, offered as ENVS 091 at Swarthmore during the spring semester of the senior year. The capstone seminar will involve advanced work on one or more issues or problems in environmental studies. Leadership of the capstone seminar rotates among the members of the Faculty Committee on Environmental Studies. For the next three years, the Bryn Mawr and Haverford Environmental Studies Senior Seminar (ENVS 397) will also count in fulfillment of the capstone requirement, but before students consider enrolling in the capstone seminar at another campus, they must consult with the Swarthmore Environmental Studies coordinator and recognize that the senior seminars all require major time commitments apart from scheduled seminar meeting times.

## Honors Minor

An honors minor in environmental studies includes an integrated program of five courses plus a capstone seminar. The course requirements are similar to those of the regular Environmental Studies minor (see above). These six courses are taken in addition to a regular major, and at least four of these courses must be outside the major.
The honors preparation will consist of a combination of two-courses that are related in some way that is suitable for a single honors examination. Both of the courses must be outside the major. The two courses may be selected from a single discipline or from two different, but environmentally related, disciplines. It is also possible for one of the courses to be interdisciplinary. Other two-credit
options such as a course with an attachment will not be encouraged, and a two-credit thesis will not be allowed. Student performance in the two designated courses must be at a high enough level to merit honors, as judged by the faculty teaching the courses. Also, approval of the student's honors application should be obtained from these same faculty since they will be expected to specify prospective honors examiners.
The senior honors study will consist of a small paper that explores the connections between the two courses used for the preparation. This paper will be included with background materials submitted to the honors examiner.

## Off-Campus Study

## Brno-Krakow Sustainability Studies Programs in the Czech Republic and Poland

Swarthmore operates closely related environmental foreign studies programs in Central Europe hosted by Masaryk University in Brno, Czech Republic and by the Jagiellonian University and Politechnika Krakowska in Krakow, Poland. Students usually take three environmentally related courses, taught in English, as well as a required language and culture course that includes intensive language instruction in either Czech or Polish. The Brno program, based in Masaryk University's Department of Environmental Studies, focuses primarily on environmental social sciences and humanities. An internship at one of two environmental NGO's, supervised by faculty for academic credit, is available at either Hnuti Duha (Czech branch of Friends of the Earth) or the Veronica Sustainability Center. The Krakow program, based in Politechnika Krakowska's Department of Environmental Engineering, focuses primarily on environmental science and technology. For more information, see our website: www.swarthmore.edu/x11780.xml

## Cape Town South Africa Program on Globalization and the Natural Environment

Swarthmore is a member of a consortium with Macalester and Pomona Colleges that sponsors a junior year environmental study-abroad program in collaboration with the University of Cape Town, South Africa. Students from the three consortium schools, as well as those schools under consortium agreements with the three schools, may apply. For more information, see the website: www.swarthmore.edu/x20601.xml Students should regularly check the program's website www.swarthmore.edu/envs.xml for additions and changes to the course lists shown below.

## Courses

Students should regularly check the program's website www.swarthmore.edu/envs.xml for additions and changes to the course lists shown below.

## Environmental Science/Technology Courses

The environmental science/technology category includes courses that emphasize techniques and methodologies of the sciences and engineering and whose subject is central to environmental studies. Therefore, all students will be familiar with a body of scientific knowledge and scientific approaches to environmental problems.
BIOL 036. Ecology
BIOL 039. Marine Biology
BIOL115E. Plant Molecular GeneticsBiotechnology
BIOL 137. Biodiversity and Ecosystem Function
CHEM 001. Chemistry in Context: Applying Chemistry to Society
CHEM 103. Topics in Environmental Chemistry
ENGR 004A. Environmental Protection
ENGR 063. Water Quality and Pollution
Control
ENGR 066. Environmental Systems
GEOL B103. Earth Systems and the
Environment (Bryn Mawr College)
PHYS 024. The Earth's Climate and Global Warming
SOAN 023C. Anthropological Perspectives on Conservation

## Environmental Social

## Sciences/Humanities Courses

The environmental social science/humanities category includes courses that are central to environmental studies and focus on values, their social contexts, and their implementation in policies. Thus, all students will have studied the social context in which environmental problems are created and can be solved.
ECON 076. Environmental Economics
ENGL 009C. Natural History and Imagination First-Year Seminar
ENGL 070G. Writing Nature
HIST 089. Environmental History of Africa
PHIL 035. Environmental Ethics
POLS 043. Environmental Policy and Politics
RELG 022. Religion and Ecology
SOAN 023C. Anthropological Perspectives on Conservation

## Cognate and Interdisciplinary Courses

The following are Swarthmore courses that are either (1) relevant to environmental studies but not central enough to justify their inclusion in the preceding groups or (2) focus primarily on the environment and are interdisciplinary in nature:
BIOL 004. Biology of Food
BIOL 016. Microbiology
BIOL 017. Microbial Pathogenesis and Immune
Response
BIOL 020. Animal Physiology
BIOL 025. Plant Biology
BIOL 026. Invertebrate Biology
BIOL 034. Evolution
BIOL 116. Microbial Processes and
Biotechnology
BIOL 130. Behavioral Ecology
CHEM 043. Analytical Chemistry
ENGR 003. Problems in Technology
ENGR 004B. Swarthmore and the Biosphere
ENGR 035. Solar Energy Systems
ENGR 057. Operations Research
ENVS 002. Human Nature, Technology, and
the Environment
ENVS 090. Directed Reading in Environmental
Studies
ENVS 092. Research Project
LING 120. Anthropological Linguistics:
Endangered Languages
LITR 022G. Food Revolutions: History,
Politics, Culture
MATH 056. Modeling
PHYS 002E. First-Year Seminar: Energy
PHYS 020. Principles of The Earth Sciences
POLS 048. The Politics of Population
For Senior Minors or Special Majors
ENVS 091. Capstone Seminar:
Perceptions of Global Warming
1 credit.
Spring 2012. Burke.
\(\left.$$
\begin{array}{ll}\text { Coordinator: } & \begin{array}{l}\text { PATRICIA WHITE, Professor } \\
\text { Carolyn Anderson, Administrative Coordinator } \\
\text { Joanne Howard, Administrative Assistant }\end{array} \\
\text { Core Faculty: } & \begin{array}{l}\text { ERICA CHO, Visiting Assistant Professor (Bryn Mawr) } \\
\text { LOUIS MASSIAH, Lang Professor for Issues of Social Change }\end{array} \\
& \begin{array}{l}\text { BOB REHAK, Assistant Professor }\end{array}
$$ <br>

SUNKA SIMON, Associate Professor\end{array}\right]\)| Timothy Burke (History) |
| :--- |
| William Gardner (Modern Languages and Literatures, Japanese) ${ }^{1}$ |
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|  |
|  |
| Tomoko Sakomura (Art History) |
| Carina Yervasi (Modern Languages and Literatures, French) |

${ }^{1}$ Absent on leave, fall 2011.

Moving image media have been one of the most distinctive innovations and experiences of the past century. In today's media-dependent culture, developing a critical understanding and a historical knowledge of media forms is vital. Film and media studies provides an interdisciplinary understanding of the history, theory, language, and social and cultural aspects of film, television and new media; introduces research and analytical methods; and encourages cross-cultural comparison of media forms, histories, audiences, and institutions.

## The Academic Program

The Film and Media Studies Program offers a range of courses in critical studies and production, cross-lists courses with English literature and modern languages and literatures, and draws on significant offerings from other departments. Students may add a minor in film and media studies to any major, and students in the Honors Program may designate a minor in film and media studies. The program plans to formalize its major in the near future; in the meantime, students may apply for a special major in film and media studies.

## Special Major

Students wishing to major should apply for a special major in film and media studies. Such applications must be approved by the Film and Media Studies Committee.

## Requirements

Special majors must take a minimum of 10 credits. Requirements: FMST 001 (Intro); FMST 090 (Capstone); 1 production course (FMST 002: Digital Film Fundamentals or an approved course taken at another institution or in theater or studio art); either FMST 020: Critical Theories of Film and Media or FMST 025: Television and New Media (or both) and at least 1 course on national or transnational cinema. Remaining courses and seminars
should be selected to achieve breadth, depth, and balance in the discipline, with no more than four credits in production counted toward the major. Courses may include those approved from other departments and film and media offerings at Bryn Mawr, Haverford, or Univ. of Penn. Relevant courses from other departments that do not appear on the list of approved courses, or courses taken at other institutions, must be approved by the film and media studies committee, with a maximum of three such courses applicable to the major.

## Acceptance Criteria

To be accepted as a special major, students must have satisfactorily completed FMST 001 and at least one additional approved course.

## Course Minor

Students may add a minor in Film and Media Studies to any major.

## Requirements

All students must take a minimum of 5 credits, which may be selected from the courses and seminars listed or from those taken abroad, at Bryn Mawr, Haverford, or University of Pennsylvania, when the work is approved by the committee. The 5 credits should include FMST 001: Introduction to Film and Media Studies and FMST 090: Capstone Seminar, normally taken in the senior year. No more than two study-abroad credits can be counted toward the minor.

## Acceptance Criteria

To be admitted to the minor, students must have satisfactorily completed one film and media studies course.

## Honors Major

Students wishing to design a special honors major must consult with the program chair.

## Honors Minor

## Requirements

Students in the Honors Program may minor in film and media studies by meeting the requirements for the minor and by preparing for and taking one external exam.

## The Honors Exam for Minors and Preparations

The preparation usually consists of either an FMST seminar or FMST 090 plus a 1-credit honors attachment; however a preparation may incorporate a 1- or 2-credit thesis or project or other course combination or seminar work with the approval of the film and media studies coordinator. Senior honors study (SHS) consists of a revised essay submitted for a course or seminar in the preparation. No SHS is required for a thesis or creative project.

## Acceptance Criteria

Students wishing to complete an honors minor must have received a grade of $\mathrm{B}+$ or better in all film and media studies courses.

## Thesis / Culminating Exercise

FMST 090: Capstone is considered the culminating exercise for majors and minors and it accommodates individual projects. There is no required thesis. Occasionally senior majors may be permitted to write a one-credit thesis or to make a thesis video in addition to their work in the capstone; applications must be submitted and approved in the semester before the project is to be undertaken.

## Advanced Placement/International Baccalaureate Credit

Consult with chair to determine eligibility of AP or IB work.

## Transfer Credit

Students may apply up to three approved transfer credits to their FMST major.

## Off-Campus Study

Many students receive film and media studies credit for courses in critical studies or production taken abroad or on other campuses. Please consult with your adviser as you plan your study abroad for recommended programs. Up to three approved credits may be applied to the FMST major; two may be applied to the FMST minor.

## Courses

## FMST 001. Introduction to Film and Media Studies

Provides groundwork for further study in the discipline and is recommended before taking additional FMST courses. Introduces students to concepts, theories, and histories of film and other moving-image media, treating cinema as a dominant representational system that shapes other media forms. Topics include the formal analysis of image and sound, aesthetics, historiography, genres, authorship, issues of gender, race, ethnicity, and nation, economics, technology, and reception and audience studies. Emphasis is on developing writing, analytical, and research skills. Required weekly evening screenings of works from diverse periods, countries, and traditions.
1 credit.
Fall semester. Simon.

## FMST 002. Digital Film Fundamentals

This course introduces students to the expressive possibilities and rigors of the film medium while offering a sound technical foundation in digital production and postproduction. We will explore documentary, experimental, and narrative approaches and also consider the opportunities and limitationsconceptual, practical and aesthetic-of exhibiting work through different venues and platforms. Emphasis will be on using the formal and conceptual palette introduced in the course to develop one's own artistic vision.
Coursework includes short assignments, discussions, screenings, and a final project. Limited to 12 students.
Prerequisite: FMST 001.
1 credit.
Spring 2012. Cho.

## FMST 005. First-Year Seminar: Special Effects and Film Spectacle

A first-year seminar focusing on the history, industry, and theory of special and visual effects, this course introduces students to the basics of studying and writing about film and other media through an exploration of "movie magic." Related topics include the relationship of film style and technology; formal and narrative principles of "showstoppers" such as musical numbers, fight scenes, and car chases; and questions of realism and illusion in the cinematic apparatus. Required weekly screenings.
Writing course.
1 credit.
Not offered 2011-2012. Rehak.

## FMST 011. Advanced Production Workshop

As movie lovers in a media-saturated world, we are all highly film literate, yet it is surprisingly difficult to make a narrative film that keeps the audience engaged. So what does a director's skill consist of? How do you stage the action, work with actors, use the camera as narrator, and manipulate cinematic time and space so that viewers can follow the story and get emotionally involved? This course is an immersive experience in the art of narrative film, combined with advanced technical instruction in cinematography, sound, and editing. Coursework includes directing exercises, in-class critiques, viewing film clips, and the production of a digital short film. Limited to 12 students.
Prerequisites: FMST 001 and FMST 002 or equivalent production background, with instructor's approval.
1 credit.
Fall 2011. Cho.

## FMST 020. Critical Theories of Film and Media

Film critic André Bazin's famous question, "What is cinema?," has gained new relevance since the advent of digital media. This course introduces classical film theory (realism, montage, theories of modernity and perception), contemporary film theory (theories of film language, the apparatus, and spectatorship), and approaches that cut across media (authorship, genre, stardom, semiotics, narratology, feminism, production and reception studies, cognitivism). Through readings and weekly screenings, we explore the significance of film and other media in shaping our identity and cultural experience. Required weekly evening screenings.
Eligible for INTP credit.
1 credit.
Spring 2012. White.

## FMST 021. American Narrative Cinema

Considers film as narrative form, audiovisual medium, industrial product, and social practice, emphasizing the emergence and dominance of classical Hollywood as a national cinema, with some attention to independent narrative traditions ("race movies," New Queer Cinema). Analyzes how genres such as the western, the melodrama, and film noir express aspirations and anxieties about race, gender, class and ethnicity in the United States. Surveys narrative film history from the 1910s to the 2010s with an emphasis on the Hollywood studio era. Required weekly evening screenings.
1 credit.
Fall 2012. White.

## FMST 022. Silent Cinema

This course explores the first decades of film history in the context of global modernity and artistic modernism. In form and content, cinema functioned as both a vector and a reflection of the transformative subjective and social experiences of modernity, including urbanization, immigration, consumerism, and women's participation in the labor force. We will pay special attention to cinema's internationalism before the introduction of synchronized sound, looking at film culture and national film stars in Asia, North Africa, and Latin America as well as the U.S. and Europe. Field trips and guests will address key topics of silent film historiography including archives and preservation and film music. Required weekly evening screenings.
1 credit.
Spring 2013. White.

## FMST 025. Television and New Media

This course introduces students to the major trends in critical thought regarding electronic media, including the rise of broadcast television, recent developments in narrowcast or niche programming and distribution, and the relationship among media industries, advertisers, and audiences. Special attention will be given to probing and historicizing the concept of "new" media, examining our ongoing cultural adaptation to emerging screen technologies and their attendant narrative and audiovisual forms. Coursework includes blogging, podcasting, and web-based research. Required weekly evening screenings. 1 credit.
Spring 2012. Rehak.

## FMST 031. The Documentary of Utility: Documentary Filmmaking Approaches in Africa and the African Diaspora

(Cross-listed as BLST 031)
When culture develops in direct relation to political movements-which is often the case for documentary film in Africa, the African diaspora, and the developing world-the idea of "utility" can be as important a criterion as "form" and "content." This course will provide an historical examination of the "documentary of utility," analyzing films by John Akomfrah (Ghana/U.K.), Linda Bryant (U.S.), Angèle Diabang Brener (Senegal), Raquel Gerber (Brazil), Raoul Peck (Haiti), Jean Rouch (France), and Jean-Mari Teno (Cameroon), among others. Along with exploring issues of aesthetics and structure, we will try to understand the larger context in which these works emerged.
1 credit.
Fall 2011. Massiah.

FMST 032. Documentary Filmmaking Practicum
(Cross-listed as BLST 032)
Lang Professor and filmmaker Louis Massiah will instruct students in research-based documentary production. Students will work collaboratively to produce short video essays. Students will be asked to begin topic readings over winter break, and principle production may be scheduled during the spring recess. The prerequisite is coursework in political science, history of Third World nations, or extensive reading on the subjects of colonization and/or post-colonialism. Although desirable, no prior filmmaking experience is required. Interested students should arrange a meeting with the professor prior to registration.
1 credit.
Spring 2012. Massiah.

## FMST 041. Fan Culture

This course explores the history, philosophy, and impact of fandom in film, television, and new media. Drawing on methodologies including reception ethnography, feminism, performance, cultural studies, and convergence theory, we will consider topics such as cults of celebrity; the creation of fan fiction and videos; gendered and queer identities in fan culture; adaptive responses of media texts and industries; and online networking. Screenings include serial and episodic television, camp and "trash" cinema, and fan-generated content.
Eligible for GSST credit if all papers and projects are focused on GSST topics.
1 credit.
Spring 2013. Rehak.

## FMST 042. Animation and Cinema

This course examines the forms, technologies, and history of animation in American narrative cinema and television. Screenings include short- and feature-length animated films, narrative and experimental animation from the U.S. and other countries, and animation in television and digital media. Emphasis is on framing animation in relation to an array of cultural and economic forces and theoretical perspectives, including performance, gender, the body, media evolution, taste, symbolism and realism, and the avant-garde. Required weekly evening screenings.
1 credit.
Fall 2012. Rehak.

## FMST 043. Conspiracy

Investigate conspiracy and the paranoid imagination both within film and television narratives and as a mode of skepticism and mistrust toward media themselves. Focusing on a period from the Cold War to the present day, the course constructs an archeology of screen
and print media to explore the shifting meanings of conspiracy in response to technological, political, and social change. Topics include the structural affinities among conspiracy, narration, and seriality; recurring tropes such as biological contagion, corporate and patriarchal menace, and supernatural forces; and the role of digital media in both spreading and debunking conspiracies.
Required weekly screenings.
Eligible for INTP credit.
1 credit.
Fall 2011. Rehak.

## FMST 045. Feminist Film and Media

 Studies(Cross-listed as ENGL 091)
This course focuses on critical approaches to films and videos made by women in a range of historical periods, national production contexts, and styles: mainstream and independent, narrative, documentary, video art, and experimental. Readings will address questions of authorship and aesthetics, spectatorship and reception, image and gaze, race, sexual, and national identity, and current media politics.
Eligible for GSST or INTP credit.
1 credit.
Not offered 2011-2012. White.

## FMST 046. Queer Media

(Cross-listed as ENGL 090)
The history of avant-garde and experimental media has been intertwined with that of gender non-conformity and sexual dissidence, and even the most mainstream media forms have been queered by subcultural reception. How do lgbt filmmakers "queer" sexual norms and standard media forms? How are sexual identities mediated by popular culture? Challenging classic Hollywood's heterosexual presumption and mass media appropriations of lgbt culture, we will examine lgbt aesthetic strategies and modes of address in contexts such as the American and European avant-gardes, AIDS activism, and transnational and diasporan film through the lens of queer theory.
Eligible for GSST or INTP credit.
1 credit.
Fall 2011. White.

## FMST 050. What on Earth Is World Cinema?

Is there such a thing as world cinema? What is the relationship between "world cinema" and national cinemas? What is "national" about national cinemas? This course introduces students to theoretical debates about the categorization and global circulation of films, film style, authorship, and audiences through case studies drawn from Iranian, Indian, East

Asian (Korea, Taiwan), Latin American, European, and U.S. independent cinemas presented at required weekly evening screenings. Special attention to how film festivals, journalism, and cinephile culture confer value.
Required weekly evening screenings. 1 credit.
Fall 2011. White.

## FMST 051. European Cinema

(Cross-listed as LITR 051G)
The course introduces post-war directors (Bergman and Fellini), British and French New Waves, Eastern European Cinema (Tarkovsky, Wajda), Post-New Wave Italian auteurs, Spanish cinema after Franco (Erice, Saura, Almodovar), New German cinema (Fassbinder, Herzog, Wenders), British cinema after 1970 (Roeg, Leigh, Loach, Greenaway) and Danish Cinema: Dogme 95 and others. The course addresses key issues and concepts in European cinema such as realism, authorship, art cinema, and political modernism, with reference to significant films and filmmakers and in the context of historical, social, and cultural issues. 1 credit.
Fall 2012. Simon.

## FMST 057. Japanese Film and Animation

 (Cross-listed as JPNS 024)This course offers a historical and thematic introduction to Japanese cinema, one of the world's great film traditions. Our discussions will center on the historical context of Japanese film, including how films address issues of modernity, gender, and national identity. Through our readings, discussion, and writing, we will explore various approaches to film analysis, with the goal of developing a deeper understanding of formal and thematic issues. A separate unit will consider the postwar development of Japanese animation (anime) and its special characteristics. Screenings will include films by Ozu, Mizoguchi, Kurosawa, Imamura, Kitano, and Miyazaki.
1 credit.
Spring 2012. Gardner.

## FMST 059. Re-Envisioning Diasporas

This new co-taught course will address the historical, cultural, representational, and theoretical specificities of Diasporas through examining how French and Francophone, Spanish and Latin American, and German visual and literary productions deal with questions of race and ethnicity, gender and sexuality, nationality and globalization from a perpetual state of "elsewhere." How does this experience mark the conceptualization, aesthetics, and politics of the artistic process
and textuality? What role do language, body memories, and visualization/projection play in the works we will discuss? How do virtual and real-life diasporic communities interact with their imagination and reception? Students are encouraged to do work in their first and secondary languages.
Seminar-style class taught in English. No prerequisites.
1 credit.
Spring 2012. Martinez, Simon, and Yervasi.

## FMST 086. Theory and History of Videogames

Explores video and computer games through historical, cultural, and formal perspectives, mapping the medium's emergence and evolution from its roots in hacker culture of the 1960s and 1970s to the commercial boom and bust of the arcades, the rise of home console and personal computer systems, and the role of the internet in creating multiplayer environments. Other topics include game genres, avatars, player subcultures, and transmedia entertainment. Readings and lectures emphasize multiple methodologies including anthropology, psychology, ludology, narratology, ideology, gender, and performance. Although not a programming course, some opportunities for design and play may be involved.
1 credit.
Fall 2011. Rehak.

## FMST 090. Film and Media Studies <br> Capstone

This team-taught course begins by exploring a major paradigm or debate in the field and reviewing research methodology and production techniques. Students then undertake an individual or collaborative research or creative project (in some cases building upon work started in another class or independent study), meeting to workshop ideas and present works-in-progress. Research projects will incorporate multimedia presentation, and creative projects will be accompanied by written materials. The semester culminates in a panel/film festival. Required for senior majors and minors.
1 credit.
Spring 2012. Rehak, White.

## FMST 097. Independent Study

Students must apply for preregistration approval in writing.
0.5 to 1 credit.

## FMST 098. Thesis

For a limited number of students completing a special major. Requires committee approval.

## Film and Media Studies

Writing course.
1 credit.
FMST 099. Senior Creative Project
For a limited number of students completing a special major. Requires committee approval. 1 credit.

## FMST 102. Convergence

This honors seminar explores the cultures and content of the contemporary mediascape through formal, technological, and political lenses, reading emergent paradigms such as virality, paratextuality, and collective intelligence against equivalent historical moments of media evolution. Particular attention will be paid to the concepts of "the digital"; rhetorics of revolution and continuity; and the intersection of information, entertainment, and capitalism within a dominant episteme of new media. Course majors and other students with relevant background can apply for instructor's approval to take the seminar.
2 credits.
Fall 2012. Rehak.

## FMST 180. Honors Thesis

For students completing a special major in honors. Requires committee approval.
Writing course.
2 credits.

## Other Courses and Seminars Currently Approved for Credit

For descriptions of the following courses offered in other departments, please consult the appropriate section of the course catalog: ENGL 009P. Women and Popular Culture: Fiction, Film, and Television (Spring 2013, White.)
FREN 053. Littérature et cinéma: La pensée géographique (Fall 2011, Yervasi.) JPNS 026/LITR 026J. Masculinities in Japanese Film and Fiction (Fall 2011, Herlands.)
SOAN 002E. Anthropology of Mass Media (Spring 2013, Nadkarni.) SPAN 063. Cine contemporáneo español (Fall 2012, Guardiola.)

Coordinator: GWYNN KESSLER (Religion)<br>Anna Everetts (Administrative Assistant)<br>Committee: Diane Downer Anderson (Educational Studies)<br>Jean-Vincent Blanchard (Modern Languages and Literatures, French)<br>Amy L.R. Bug (Physics) ${ }^{3}$<br>Sibelan Forrester (Modern Languages and Literatures, Russian)<br>Farha N. Ghannam (Sociology and Anthropology)<br>Alexandra Gueydan (Modern Languages and Literatures, French) ${ }^{3}$<br>Janine Mileaf (Art History) ${ }^{3}$<br>Gwynn Kessler (Religion)<br>Tamsin Lorraine (Philosophy)<br>Bakirathi Mani (English Literature) ${ }^{1}$<br>Luciano Martínez (Modern Languages and Literatures, Spanish)<br>Sunka Simon (German Studies, Film and Media Studies)<br>Anna Ward (Gender and Sexuality Studies)<br>Patricia White (Film and Media Studies)

${ }^{1}$ Absent on leave, fall 2011.
${ }^{3}$ Absent on leave, 2011-2012.

The Gender and Sexuality Studies Program (GSST) foregrounds the study of social relations of power in a variety of cultural, historical and national contexts. The objective of gender and sexuality studies is to bring feminist and queer theory in conversation with new research methodologies in the humanities, social sciences, and natural sciences. The program emphasizes the interrelationship not only between gender and sexuality but also between race and class as well as local and global politics.
The GSST Program is distinguished by the courses it offers across the three academic divisions of the College-humanities, social sciences and natural sciences, and engineering. Students in any major, whether as course majors or in the Honors Program, may elect a minor in gender and sexuality studies by fulfilling the requirements below. Students may also design a special major in GSST in consultation with the program's coordinator. Students who intend to pursue gender and sexuality studies should submit their proposed programs to the coordinator when they submit their sophomore papers. All proposals to minor or major in gender and sexuality studies must be approved by the GSST Committee.
The Jean Brosius Walton '35 Fund and the Wendy S. Cheek Memorial Fund generously contribute toward activities sponsored by Gender and Sexuality Studies.

## The Academic Program Course Minor

1. Course minors must take 5 courses and/or seminar offerings which must be selected from
at least two different divisions. Seminars count as one course toward program requirements.
2. Only one course counted for GSST may overlap with the student's major or other minor.
3. GSST minors are required to complete GSST 001: Introduction to Gender and Sexuality Studies, and subsequently GSST 020: Theory and Methodology. During the senior year, minors are required to complete GSST 091: Seminar in GSST.
4. With the approval of the GSST Coordinator, students may include courses offered by the Gender and Sexuality Studies program at Bryn Mawr and Haverford Colleges, and by the Women's Studies program at UPenn in their program.
5. Only one relevant course taken abroad may count toward fulfillment of the minor.
6. With the approval of the GSST Coordinator, students may elect to write a 1-credit thesis (GSST 092) or pursue an independent study as a substitute for regular coursework. The thesis cannot be used to fulfill the requirements of the student's major or other minor. Students must have adequate disciplinary background in gender and sexuality studies to carry out independent study and/or write a thesis.

## Honors Minor

1. Students must have a " $B$ " average in GSST coursework at the College in order to be accepted into Honors.
2. Honors minors must complete 6 credits and complete the written and oral external examinations at the end of the senior year.
3. Honors minors must successfully complete the program requirements (GSST 001, 020, and 091).
4. Honors minors must consult with the GSST Coordinator in spring of their junior year regarding their Honors preparations.
5. The examination preparation for the Honors minor will consist of GSST 091: Seminar in GSST. In consultation with the seminar instructor, Honors minors will be required to assemble a Senior Honors Study Portfolio which may include materials such as independent essays, seminar papers, additional reading lists, research projects, etc.
6. Honors minors may apply one GSST-related study abroad credit toward their minor.
7. With the approval of the GSST Coordinator, minors may elect to write a one-credit thesis (GSST 092) or pursue an independent study as a substitute for regular coursework. The thesis cannot be used to fulfill the requirements of the student's major or other minor. Students must have adequate disciplinary background in GSST to carry out independent study and/or write a thesis.

## Special Major

Students have the option of designing an individualized special major (such as GSST and religion, GSST and sociology and anthropology, GSST and history, etc.). Students also have the option of pursuing the following curricular path:

1. Special majors must successfully complete the program requirements (GSST 001, 020, and 091).
2. Special majors must complete at least 10 credits and normally no more than 12 credits for a special major in GSST.
3. Only two credits may overlap with the student's major or other minor.
4. Special majors may apply up to two GSSTrelated study abroad credits to their program.
5. With approval of the GSST Coordinator, special majors may elect to write a one-credit thesis (GSST 092), or pursue an independent study as a substitute for regular coursework. The thesis cannot be used to fulfill the requirements of the student's major or other minor. Students must have adequate GSST disciplinary background to carry out independent study and/or write a thesis.

## Special Honors Major

1. Special majors must have a " B " average in GSST coursework at the College in order to be accepted into Honors.
2. Honors majors must successfully complete the program requirements (GSST 001, 020, and 091).
3. Honors majors must complete at least 10 credits and complete the written and oral external examinations at the end of their senior year.
4. Only two credits may overlap with the student's major or other minor.
5. Special Honors Majors may apply up to 2 GSST-related study abroad credits to their program.
6. Honors majors must consult with the GSST Coordinator in spring of their junior year regarding their Honors preparations and Senior Honors Study Portfolio.
7. One of the four Honors exam preparations must include GSST 091: Seminar in GSST. 8. With approval of the GSST Coordinator, special majors may elect to write a one-credit thesis (GSST 092), or pursue an independent study as a substitute for regular coursework. The thesis cannot be used to fulfill the requirements of the student's major or other minor. Students must have adequate GSST disciplinary background to carry out independent study and/or write a thesis.

## Application Process Notes for the Minor

Students interested in pursuing a minor in GSST are required to complete a GSST application form to be submitted along with a copy of their sophomore application to the Programs Office, Trotter 107. Special major, honors, and transfer credit applications are also available at: www.swarthmore.edu/x19528.xml

## Transfer Credit

To receive academic credit for women's studies or gender and sexuality studies courses taken at other colleges and universities in the U.S., students must first apply for credit through the appropriate Swarthmore department, and then apply to the Gender and Sexuality Studies Program to have the course included in their program. If the institution that offers the course has a Women's Studies, Gender and Sexuality Studies Program, or similar program the course
in question must be part of that program in order to be approved as a gender and sexuality studies course at Swarthmore.

## Off-Campus Study

The Gender and Sexuality Studies Program grants academic credit for course work relevant to the academic program taken while studying abroad. Minors may apply for no more than one credit of work done abroad to meet their GSST requirements. GSST special majors may apply up to two GSST-related study abroad credits to their program.
In order to receive credit, the GSST Coordinator must preapprove the course(s). When the student returns to campus, the GSST Coordinator will evaluate the work (syllabus, exams, papers, and class notes) and assign the appropriate amount of credit.

## Internship Support

The Summer Social Action Awards (S2A2) support students in the current sophomore and junior classes to spend ten weeks, full time ( 35 hours per week) performing advocacy and/or service through a host non-profit organization. Financial support includes a weekly stipend to offset modest living expenses, and the provision of the summer earnings requirement. In the summer of 2010, the total S2A2 support was $\$ 4,350.00$ per selected student.
The Richard Sager Internship, administered through the S2A2 program, supports one student interested in working with a non-profit organizational host whose mission focuses on LGBTQ issues. While the Sager Internship funds can only provide support for one student per summer, please note that applications are evaluated on their own merits. Therefore, more than one student who has been offered a fulltime placement with an LGBTQ organization may serve through a "general" S2A2 grant. Students applying as a result of their academic involvement in the GSST program may also be funded through a Nason grant.

## Courses

The program offers the following courses and seminars:

## GSST 001. Introduction to Gender and Sexuality Studies

This interdisciplinary core course is an introduction to key concepts, questions, and analytical tools developed by scholars of gender and sexuality studies. Through this course, you will become familiar with key contemporary debates in the field, as well as the historical formation of these debates. Substantial attention
will be paid to the development and application of queer theory within the history of the field. We will explore gender and sexuality in relation to topics such as media representation, embodiment, technology, and violence. In addition to written work, students will work together in groups to develop an in-class presentation.
Required course for all GSST minors and special majors.
1 credit.
Fall 2011. Ward.

## GSST 020. Theory and Methodology: Unruly Bodies

This course will explore theories of embodiment emerging within the field of gender and sexuality studies. We will examine how certain bodies are rendered "unruly"dysfunctional, disabled, diseased, incomplete, excessive, grotesque, et cetera. How do gender and sexuality scholars and activists challenge these renderings or deploy them with a difference? In addition to examining critical theories of embodiment, we will explore the work of filmmakers, performance artists, and street activists who put the "unruly" body on display as a means to challenge its construction. Prerequisite: GSST 001 or permission of instructor.
Required course for all GSST minors and special majors.
1 credit.
Spring 2012. Ward.

## GSST 020. Theory and Methodology: The Gender of Modernity (Cross-listed with GMST 052)

As the effects of industrialization and bourgeois emancipation spread through the Europe of the late 19th century, long held concepts of gender and sexuality were opened to reinterpretation and redefinition. From medical anthropology and race hygiene to literary and cinematic representations, notions of femininity, masculinity, hetero- and homosexuality underwent heightened mass-cultural exposure and socio-political scrutiny. In this course, we will examine the individual disciplinary methodologies of political, popular, and scientific discourses to understand how and why gender and urban modernity co-constituted each other in turn of the century Berlin, London, Paris, Prague and Vienna. Prerequisite: GSST 001 or permission of instructor. Required course for all GSST minors and special majors.
1 credit.
Spring 2013. Simon.

## GSST 091. Seminar in Gender and Sexuality Studies: Affect

This two-credit capstone seminar will examine the "affective turn" within the field-the explosion of literature examining how emotions, moods, and feelings relate to gender and sexuality. Exploring such affects as happiness, longing, disgust, shame, fear, anger, envy, and sadness, we will examine how contemporary affective theories within the field are challenging conceptualizations of history, memory, embodiment, and politics. The course will include readings by Eve Sedgwick, Judith Butler, Sara Ahmed, and Lauren Berlant, as well as classic readings within psychoanalysis, phenomenology, etc.
Required for GSST minors and special majors, and others by permission of the instructor. GSST 091 must be taken by GSST minors and special majors in the senior year and cannot be used to fulfill distribution requirements. Prerequisite: GSST 020 or permission of instructor. 2 credits.
Spring 2012. Ward.

## GSST 092. Thesis

1 credit.
Each semester. Staff.

## GSST 093. Directed Reading

 1 credit.Fall 2011 and spring 2012. Ward.

## GSST 192A and GSST 192B. Thesis

For students completing a special major in honors ( 1 credit must be taken each semester of the senior year).
2 credits. Staff.

The following departmental courses have been approved for credit towards the Gender and Sexuality Studies Program:

## Art History

ARTH 076. The Body in Contemporary Art

## Biology

BIOL 006. History and Critique of Biology
BIOL 024. Developmental Biology
BIOL 093. Directed Reading in Feminist
Critiques of Biology

## Dance

DANC 025A. Dance and Diaspora
DANC 028. Politics and Aesthetics of Classical Indian Dance
DANC 035. Women Choreographers and Composers
DANC 036. Dancing Identities
DANC 079. Dancing Desire in Bollywood

## Economics

ECON 073. Race, Ethnicity, and Gender in
Economics

## Education

EDUC 045. Literacies and Social Identities* EDUC 061. Gender and Education

## English Literature

ENGL 009M. Jane Austen, Cultural Critic
ENGL 009P. Women and Popular Culture:
Fiction, Film, and Television
ENGL 009Y. Interrogating Gender
ENGL 023. Renaissance Sexualities
ENGL 024. Witchcraft and Magic
ENGL 033. The Romantic Sublime
ENGL 036. The Age of Austen
ENGL 040B. The 19th-Century Novel
ENGL 048. Contemporary Women's Poetry
ENGL 071J. Cherchez la femme: The Mystery of Woman in the Mystery Genre
ENGL 071K. Lesbian Novels Since World War II

ENGL 077. South Asians in Asian America
ENGL 082. Transnational Feminist Theory
ENGL 091. Feminist Film and Media Studies
ENGL 110. Romanticism
ENGL 112. Contemporary Women's Poetry
Film and Media Studies
FMST 041. Fan Culture*
FMST 045. Feminist Film and Media Studies
FMST 046. Queer Media
FMST 081. German Cinema
French
FREN 037. Littératures Francophones
FREN 056. Ecritures au feminine
FREN 111. Le Désir Colonial
FREN 115. Paroles de Femmes

## German Studies

GMST 052. The Gender of Modernity
GMST 056. Populärliteratur
GMST 108. Wien und Berlin

## History

HIST 001C. Sex and Gender in Western
Traditions
HIST 001 K . Engendering Culture
HIST 001V. Witches, Witchcraft, and Witch Hunts
HIST 016. Sex, Sin, and Kin in Early Europe HIST 029. Sexuality and Society in Modern Europe
HIST 052. The History of Manhood in America, 1750-1920

HIST 053. Black Women in the Civil Rights Movement
HIST 054. Women, Society, and Politics HIST 055. Social Movements in the 20th Century
HIST 079. Women, Family, and the State in China
HIST 131. Gender and Sexuality in America

## Japanese

JPNS 023. Anime, Gender, and Culture JPNS 026. Masculinities in Japanese Film and Fiction

## Linguistics

LING 005. Linguistic Underpinnings of Racism and Bias

## Literatures

LITR 015R. East European Prose in Translation LITR 017R. Love and Sex in Russian Literature LITR 023J. Anime: Gender, and Culture
LITR 026. Masculinities in Japanese Film and Fiction
LITR 072SA. The Testimonial Literature of Latin American Women
LITR 075S. U.S. Latina/o Literature
LITR 076AF. Contemporary Arab Women
Writers
LITR 076S. Latino and Latin American
Sexualities

## Philosophy

PHIL 045. Futures of Feminism
PHIL 145. Feminist Theory Seminar

## Physics

PHYS 029. Seminar on Gender and (Physical)
Science

## Political Science

POLS 013. Feminist Political Theory
POLS 031. Difference, Dominance, and the Struggle for Equality
POLS 032. Gender, Politics, and Policy in America
POLS 046. Lesbians and Gays in American Politics

## Religion

RELG 007B. Women and Religion
RELG 025B. Black Women and Religion in the United States
RELG 032. Queering God: Feminist and Queer Theory
RELG 053. Gender, Sexuality, and the Body in Islam
RELG 114. Love and Religion
RELG 128. Sex, Gender and the Hebrew Bible

## Russian

RUSS 015. East European Prose in Translation
RUSS 017. Love and Sex in Russian Literature
RUSS 079. Russian Women Writers
RUSS 111. Tsvetaeva and Mayakovsky
RUSS 112. The Acmeists

## Sociology and Anthropology

SOAN 00 2D. Culture and Gender
SOAN 007C. Sociology Through African American Women's Writing SOAN 010J. War, Sport, and the Construction of Masculine Identity
SOAN 049B. Comparative Perspectives on the Body

## Spanish

SPAN 066. Escritoras españolas: Una voz propia
SPAN 070. Género y sexualidad en Latinoamérica
SPAN 104. La voz de la mujer a través de los siglos
*All papers and projects must focus on gender and sexuality studies.

STEPHEN P. BENSCH, Professor<br>TIMOTHY J. BURKE, Professor<br>STEPHEN F. DALE, Visiting Professor ${ }^{2}$<br>ALLISON DORSEY, Professor ${ }^{1}$<br>BRUCE DORSEY, Professor and Chair<br>PIETER M. JUDSON, Professor ${ }^{1}$<br>LILLIAN M. LI, Professor ${ }^{2}$<br>MARJORIE MURPHY, Professor<br>ROBERT E. WEINBERG, Professor<br>DIEGO ARMUS, Associate Professor ${ }^{3}$<br>SHANE MINKIN, Assistant Professor<br>DARIUS V. ECHEVERRÍA, Visiting Assistant Professor ${ }^{1}$<br>JEN MOORE, Administrative Assistant

${ }^{1}$ Absent on leave, fall 2011.
${ }^{2}$ Absent on leave, spring 2012.
${ }^{3}$ Absent on leave, 2011-2012.

Swarthmore's History Department gives students the intellectual and analytical skills to think critically about the past and the contemporary world.
It is part of a journey of self-discovery-and crucial to the kind of liberal arts education offered at Swarthmore, because it asks students to question critically the assumptions, values, and principles that guide them in their daily lives. History encourages us to have respect for other cultures and peoples.

## What is History?

The study of history is not limited to learning events, dates, and names. History is a method of analysis that focuses on the contexts in which people have lived, worked, and died. Historians seek to go beyond their descriptive abilities and to wrestle with the essential questions of "how" and "why" change occurs over time. They interpret the past and are in constant dialogue with what other historians have written about it. For example, although there may be agreement that Adolf Hitler became chancellor of Germany in 1933, historians have and will continue to debate the origins of Nazism, the rise of Hitler to power, and the causes of World War II and the Holocaust. Historical scholarship enables us to not only know what occurred in the past but also to understand the thoughts and actions of people living in other times and places, allowing us to uncover the continuities and disruptions of patterns that characterized life before our time.

## Overview of Curriculum

Swarthmore's history curriculum introduces students to historical methods and the fundamentals of historical thinking, research, and writing. Faculty members expose students to the contested nature of the discipline, cultivating the skills historians employ to understand and interpret the past. Students learn
to assess critically the evidence of the past through first-hand exposure to primary sources. They also develop the ability to evaluate the respective arguments of historians. In all courses and seminars, the department strives to involve students in the process of historical discovery and interpretation, emphasizing that all historians are engaged in the constant sifting of old and new evidence.
Each faculty member in the History Department has a regional focus as well as expertise in a particular kind of historical inquiry. Some study social, cultural, and political movements; others examine the impact of religion or explore the rise of capitalism. They all share a commitment to a global and comparative approach to the study of history and a common pedagogical concern for promoting a critical understanding of the past.
Students are encouraged to hone their skills as historians by using the rich collections of the Swarthmore College Peace Collection and Friends Historical Library, both located in McCabe Library. The Peace Collection is unparalleled as a depository of antiwar and disarmament materials, housing the papers of many leading social activists. The Friends Library possesses one of the richest collections of manuscripts and printed source material on Quaker history. The holdings of other institutions in the greater Philadelphia area, such as the Historical Society of Pennsylvania, the Hagley Museum and Library (Wilmington, Del.), the Library Company of Philadelphia, and the American Philosophical Society, are also accessible to the student-researcher. Students are also encouraged to broaden their cultural and intellectual horizons through study abroad.
Students are eligible to apply for grants that will enable them to spend a summer conducting research on a historical topic of their choosing. In the past, students have used these grants to
immerse themselves in materials found in libraries and archives around the United States, Europe, and Latin America, collecting materials that formed the basis of their senior research papers. Topics of recent senior theses include the record industry and Southern music; an African American community in rural Pennsylvania; pain and obstetric anesthesia in the United States; liberalism and the British empire; and religion and community in medieval Catalonia.
Courses and seminars offered by the History Department are integral to most interdisciplinary programs, such as black studies, gender and sexuality studies, interpretation theory, Islamic studies, Latin American studies, peace and conflict studies, and public policy, as well as to the majors in Asian studies and medieval studies. Students interested in these programs should consult the appropriate statements of requirements and course offerings. In addition, we encourage students who wish to obtain teacher certification to major in history.

## The Academic Program

## First-Year Seminars

First-year seminars (HIST 001A-001Z; 1 credit) explore specific historical issues or periods in depth in a seminar setting; they are open to first-year students only and are limited to 12 students. Students who are not admitted to first-year seminars in the fall will receive priority for seminars in the spring.

## Survey Courses

Survey courses provide broad chronological coverage of a particular field of history. Survey courses (002-010; 1 credit) are open to all students without prerequisites and are designed to offer a general education in the field as well as provide preparation for a range of upperlevel courses. Although these entry-level courses vary somewhat in approach, they normally focus on major issues of interpretation, the analysis of primary sources, and historical methodology.

## Upper-Division Courses

Upper-division courses (HIST 011-099; 1 credit) are specifically thematic and topical in nature and do not attempt to provide the broad coverage that surveys do. They are generally open to students who have fulfilled one of the following: (1) successfully completed one of the courses numbered 001-010; (2) received an Advanced Placement score of 4 or 5 (or a 6 or 7 IB score) in any area of history; (3) successfully completed one of the following Classics courses: $031,032,042,044,056$, or 066 ; or (4) received the permission of the instructor.

Exceptions are courses designated "not open to first-year students" or where specific prerequisites are stated.

## Double-Credit Seminars

Double-credit seminars are small classes in which students are expected to take substantial responsibility for the development of the discussion and learning. These seminars focus on the literature of a given field. Critical thinking about secondary sources and historiographical writing constitute their principle objectives. Seminars are limited to 10 students. Admission to these seminars is selective and based on the department's evaluation of the student's potential to do independent work and to contribute to seminar discussions. A minimum grade of $\mathrm{B}+$ in at least two history courses taken at Swarthmore and a record of active and informed participation in class discussions are required of all students entering seminars. In addition, recommendations from department faculty members who have taught the student are solicited.

## Language Attachment

Certain designated courses offer the option of a foreign language attachment, normally for 0.5 credit. Arrangements for this option should be made with the instructor at the time of registration.

## Course Major Requirements

All majors in history must take at least 9 credits in history that fulfill the following requirements:

1. They complete at least 6 of their 9 credits at Swarthmore. Beginning with the Class of 2014, only one credit from AP/IB will count toward the 9 credits required for the major.
2. They take at least one course or seminar at Swarthmore from each of the following categories: (a) before 1750 (including CLAS $031,032,042,044,056$, and 066) and (b) outside Europe and the United States, specifically Africa, Asia, Latin America, and the Near East. This distribution requirement encourages students to explore various fields of history and engage in comparative historical analysis. Students must use different courses or seminars to fulfill this requirement.

## Senior Research Seminar

Course majors must complete the Senior Research Seminar (HIST 091) in which students write a research paper based on primary sources. This course (which counts as one of the required nine credits) satisfies the College's requirement that all majors have a culminating exercise and is only offered during the fall semester. The department encourages students to consult faculty members about their
topics by the end of their junior year and select their topic prior to taking the Senior Research Seminar.

## Acceptance Criteria

Admission to the department as a course major normally requires a B average in at least two history courses taken at Swarthmore and a satisfactory standard of work in all courses. Courses in Greek and Roman history offered by the Classics Department count toward the two history courses prerequisite. The department reserves the right to withhold evaluation of applications submitted after the deadline. If after applying a student is deferred, the department will review their application at the end of each semester until the student is either accepted into the major or withdraws his or her application.

## Honors Major Requirements

Honors history majors must complete the same credit and distribution requirements as described above. Seminars are the normal mode of preparation for students studying history in the Honors Program. Honors majors will complete three double-credit seminars. Students may substitute Honors Thesis (HIST 180) for one of their seminars. Beginning with the class of 2014, honors majors will also be required to complete the Senior Research Seminar. Honors students may, if their Honors Program requires it, receive approval from the department chair to complete the Senior Research Seminar in the fall of their junior year.

## Seminars

Seminars are a collective, collaborative, and cooperative venture among students and faculty members designed to promote self-directed learning. Because the seminar depends on the active participation of all its members, the department expects students to live up to the standards of honors. These standards include attendance at every seminar session, submission of seminar papers according to the deadline set by the instructor, reading of seminar papers before coming to the seminar, completion of all reading assignments before the seminar, respect of the needs of other students who share the reserve readings, and eagerness to engage in a scholarly discussion of the issues raised by the readings and seminar papers. Students earn double-credit for seminars and should be prepared to work at least twice as hard as they do for single-credit courses. The department reminds students that the responsibility for earning honors rests squarely on the students' shoulders and will review on a regular basis their performance in the program. Failure to live up to the standards outlined previously may disqualify students from continuing in the Honors Program. Students in seminars take a 3-
hour written examination at the end of each seminar and receive a grade from the seminar instructor based on the quality of seminar papers and comments during seminar discussions, in addition to the written examination. Seminar instructors will not normally assign grades during the course of the seminar, but they will meet periodically with students on an individual basis during the course of the semester to discuss their progress.

## External Examiner Evaluations

Honors students will revise one paper per seminar for their portfolio submitted to external examiners. Revised papers will not be graded but will be included in the portfolio to provide examiners a context for the evaluation of the written examination taken in the spring of the senior year. The thesis and revised seminar papers are due by the end of classes in the spring semester of the students' senior year. Students before the Class of 2014 completing an honors major will also complete the honors exams as their culminating exercise.
Revised seminar papers are written in two stages. During the first stage, students confer with their seminar instructor about what paper to prepare for honors and what revisions to plan for these papers. Seminar instructors will offer advice on how to improve the papers with additional readings, structural changes and further development of arguments. The second stage occurs when the student revises the papers independently. Faculty members are not expected to read the revised papers at any stage of the revision process. Each revised paper must be from 2,500 to 4,000 words and include a brief bibliography. Students will submit them to the department office by the end of classes in the spring semester of the students' senior year. Students who fail to submit their revised papers by the deadline might adversely affect their honorific. Examiners will be notified about late papers.

## Study Groups

The department encourages students to form their own study groups to prepare for the external examinations. Although faculty members may, at their convenience, attend an occasional study session, students are generally expected to form and lead the study groups, in keeping with the department's belief that honors is a collaborative, self-learning exercise that relies on the commitment of students

## Acceptance Criteria

Admission to honors is selective and based on an evaluation of the student's potential to do independent work and to contribute to seminar discussions. A minimum grade of B+ in at least two history courses taken at Swarthmore and a record of active and informed participation in
class discussions are required of all students entering seminars. In addition, recommendations from department faculty members who have taught the student are solicited.
Sophomores hoping to take history seminars in their junior and senior years should give special thought to the seminars that they list in their sophomore papers. Seminar enrollments are normally limited to 10 . If you are placed in a seminar at the end of your sophomore year, you will be one of 10 students guaranteed a space and you are, in effect, taking the space of another student who might also like to be in the seminar. Consequently, you should not list any seminar in your sophomore paper without being quite certain that you intend to take it if you are admitted.
Honors students are expected to maintain a B + average to continue attending honors seminars and being an honors student. Honors majors who wish to withdraw from the Honors Program and still graduate on time with a course major in history must complete the Senior Research Seminar in the fall of their senior year. The department's culminating exercise is only offered in the fall semester, with no exceptions. Withdrawing from an honors major in history after the beginning of the senior year would jeopardize a student's ability to graduate on time.

## Honors and Course Minor Requirements

To graduate with a minor in history, a student must complete five history credits at Swarthmore College (AP, transfer credit and study abroad courses do not count). Two of the five credits must be from courses above the introductory level (course numbers 11 and higher; honors minors will meet this requirement with their honors seminar), and one credit may be in a history course offered by the Classics Department (CLAS 031, 032, 042, 044,056 , and 066 ). Honors minors will complete one double-credit seminar as part of their academic program.
Admission to honors is selective and based on an evaluation of the student's potential to do independent work and to contribute to seminar discussions. A minimum grade of $\mathrm{B}+$ in at least two history courses taken at Swarthmore and a record of active and informed participation in class discussions are required of all students entering seminars. In addition, recommendations from department faculty members who have taught the student are solicited.

## Senior Thesis

A student who wishes to write a thesis should state her or his intention by submitting a proposal no later than the beginning of the senior year. The department must approve the topic before the student can enroll in HIST 092 (Thesis). A course major thesis should be a work of about 10,000 to 15,000 words (50-75 pages), and a brief oral examination will be conducted upon completion of the thesis. Students wishing to write an honors thesis (HIST 180) should declare their intention to the department and secure an adviser by May 1 of their junior year.

## Special Major in History and Educational Studies

## Requirements

Students designing a special major in history and educational studies must take six courses in history, including one course in a field other than the United States or Europe. To graduate with a major in History and Educational Studies, a student must also complete our culminating exercise, HIST 091: Senior Research Seminar. With permission, students can complete a two-semester, two-credit thesis (but one credit of this thesis must be HIST 091). Special majors in history and educational studies will work with both an educational studies faculty member and the HIST 091 instructor to complete their one-credit senior research paper or two-credit thesis.

## Acceptance Criteria

Admission to the department as a special major follows similar requirements as course majors. Advisers in each department should be consulted when designing a plan.

## External Credit

## Advanced Placement/International Baccalaureate

The History Department will automatically grant one credit to students who have achieved a score of 4 or 5 in the U.S., European, or World History Advanced Placement examinations (or a score of 6 or 7 in the International Baccalaureate examinations) once they have completed any history course number HIST 001 to HIST 010 and earned a grade of C or higher. Students who want credit for a second Advanced Placement/International Baccalaureate examination (in a different area of history) must take a second history course at Swarthmore (any course number, including CLAS 031, 032, 042, 044, 056, or 066) and earn a grade of C or higher. The History
Department will grant up to two credits for

Advanced Placement/International Baccalaureate work. Beginning with the Class of 2014, only one credit from AP/IB will count toward the 9 credits required for the history major.
A score of 4 or 5 for Advanced Placement (or a score of 6 or 7 for International Baccalaureate) allows students to take some upper-division courses in the History Department.
Advanced Placement/International Baccalaureate credit may be counted toward the number of courses required for graduation and may be used to help fulfill the College's distribution requirements.

## Off-Campus Study

The History Department encourages students to pursue the study of history abroad and grants credit for such study as appropriate. We believe that history majors should master a foreign language as well as immerse themselves in a foreign culture and society. To receive Swarthmore credit for history courses taken during study abroad, a student must have departmental preapproval and have taken at least one history course at Swarthmore (normally before going abroad). Students who want to receive credit for a second course taken abroad must take a second history course at Swarthmore. Students must receive a grade of C or higher to receive history credit at Swarthmore.

## Transfer Credit

The History Department does not grant credit for any history courses taken at other U.S. colleges and universities except courses at Bryn Mawr, Haverford, and the University of Pennsylvania while a registered Swarthmore student.

## Teacher Certification

History majors can complete the requirements for teacher certification through a program approved by the state of Pennsylvania. For further information about the relevant set of requirements, please refer to the Educational Studies section of the Bulletin.

## Life After Swarthmore

## Graduate School

Students who intend to continue the study of history after graduation should bear in mind that a reading knowledge of one or two foreign languages is generally assumed for admission to graduate school.

## Career Opportunities

With strong analytical, writing, and research skills, history majors are prepared for a wide range of occupations and professions.
Swarthmore College history majors can be
found pursuing a broad range of career paths, ranging from government service to the world of medicine, from elementary and high schools to trade unions and public interest foundations, from journalism and publishing to consulting, and from the private to the public sector. Many find that studying history is excellent preparation for law school and business. And others have gone onto graduate school in history and now teach at universities and colleges in the United States and overseas.

## Courses

## HIST 001A. First-Year Seminar: The Barbarian North

The seminar will explore how Germanic and Celtic societies emerged and solidified their identities as they came into contact with Roman institutions and Latin Christendom.
Eligible for MDST credit.
Writing course.
1 credit.
Fall 2011. Bensch.

## HIST 001E. First-Year Seminar: The SelfImage of Latin America: Past, Present, and Future

Latin America as it was discussed and perceived by Latin American intellectuals and political actors vis-à-vis agendas for social, national, and regional change.
Eligible for LASC credit.
1 credit.
Not offered 2011-2012.

## HIST 001F. First-Year Seminar: "Foreigners" in the Middle East

This class studies the "Others" of the Middle East. We look at what categorized a community or person as "foreign" (nationality, ethnicity, gender, socio-economic status et al); when and how these categories changed; and how "foreign" communities and individuals influenced the changing political, economic and cultural landscapes of the Middle East.
Eligible for ISLM or PEAC credit.
Writing course.
1 credit.
Fall 2011. Minkin.

## HIST 001J. First-Year Seminar: A New History of the Cold War Era

This seminar focuses on Cold War debates and the hotly contested issues of McCarthyism; isolationism and containment; the Korean War; Eisenhower's leadership; the Central Intelligence Agency's role in Guatemala, Iran, Cuba, and Nicaragua; Bomb Shelters, the Space Program, Détente; and Reagan, Gorbchev and the Fall of the Berlin Wall.

Writing course.
1 credit.
Not offered 2011-2012.

## HIST 001K. First-Year Seminar: Engendering Culture

A seminar focused on the way in which American culture is infused with gender; how culture is constructed and reconstructed to replicate gender roles; the iconography of the industrial worker, gender in WPA art in public spaces, New York night life, John Wayne movies and the masculine West; and suffrage in consumer culture, militarism and pacificism, jobs, and gender.
Eligible for GSST or INTP credit.
Writing course.
1 credit.
Spring 2012. Murphy.

## HIST 001M. First-Year Seminar: History of Food in North America

This seminar introduces first year students to the history of competing food cultures, agricultural production, trade, marketing, and animal husbandry, which produced the diet of the United States in the centuries before the American Civil War.
1 credit.
Not offered 2011-2012.

## HIST 001Q. First-Year Seminar: Angels of Death: Russia Under Lenin and Stalin

This seminar focuses on the history of Russia from the Revolution of 1917 through the death of Stalin. Particular attention is paid to assessing the impact of Lenin and Stalin on developments in the Soviet Union and the interplay among socioeconomic, cultural and ideological currents. Course materials include documents, novels and short stories, monographs, and films.
1 credit.
Spring 2012. Weinberg.

## HIST 001R. First-Year Seminar: <br> Remembering History

Explores the relationship between the creation of personal and collective memory and the production of history.
Writing course.
1 credit.
Not offered 2011-2012.

## HIST 001S. First-Year Seminar: The American West

An introduction to the history of the American West, this course is designed to challenge the myths and legends associated with the role of the West in the history of the United States.

1 credit.
Not offered 2011-2012.

## HIST 001T. First-Year Seminar: Cross and Crescent: Muslim-Christian Relations in Historical Perspective

The course will selectively explore the interaction of Muslim and Christian communities from the emergence of Islam to contemporary Bosnia.
Eligible for ISLM or MDST credit.
Writing course.
1 credit.
Not offered 2011-2012.

## HIST 001X. First-Year Seminar: Crime and Punishment in America

From bucket shops to the Sopranos, this course will focus on America's fascination with crime and its problems with incarceration. Las Vegas, as a crime city, criminal justice and the new Jim Crow, banditry and rebellion are all topics for consideration.
Writing course.
1 credit.
Not offered 2011-2012.

## HIST 001Y. First-Year Seminar: The History of the Future

In this seminar, we will trace the history of the idea of "the future," concentrating on 19th- and 20th-century experience.
1 credit.
Not offered 2011-2012.

## HIST 002A. Medieval Europe

The course will explore the emergence of Europe from the slow decline of the Roman world and the intrusion of new Germanic and Celtic peoples (third to the 15th centuries). Eligible for MDST credit.
1 credit.
Fall 2011. Bensch.

## HIST 002B. Early Modern Europe

Using primary sources, art, recent scholarship, and film, this course explores the origins of the modern world in Europe and its colonies between the 15 th and 18th centuries.
1 credit.
Not offered 2011-2012.
HIST 003A. Modern Europe, 1789 to 1918: The Age of Revolution and Counterrevolution
A survey that covers the impact of the French revolution on European politics, society, and culture during the 19th and early 20th centuries. 1 credit.
Not offered 2011-2012.

HIST 003B. Modern Europe, 1890 to the Present: The Age of Democracy and Dictatorship
This course surveys major developments in Europe since 1890, including the rise of mass politics; World War I; ethnic cleansing and genocide; the failure of liberal politics; the rise of fascism and communism; the Great Depression; World War II; the Cold War and Stalinism in Eastern Europe; the welfare state, consumerism, and the politics of protest; decolonization; the collapse of communism, and the persistence of nationalism.
1 credit.
Weinberg. Spring 2012.

## HIST 004. Latin American History

This course surveys Latin American history from pre-Columbian times to the present.
Eligible for LASC credit.
1 credit.
Not offered 2011-2012.

## HIST 004B. History of Latinos in the United States

A survey of the history of Latinos in the United States from the early 19th century to the present.
Eligible for LASC credit.
1 credit.
Spring 2012. Echeverría.

## HIST 005A. The United States to 1877

In this thematic survey of American culture and society from the colonial era through the American Civil War and Reconstruction, student interpretation of primary-source documents will be emphasized.
Recommended for teacher certification. 1 credit.
Spring 2012. B. Dorsey.

## HIST 005B. The United States from 1877 to the Present

American society, culture, and politics from Reconstruction to the recent past.
Recommended for teacher certification. 1 credit.
Not offered 2011-2012.

## HIST 006A. The Formation of the Islamic Near East

This introduction to the history of the Near East from the seventh to the 15 th centuries will examine the life of Muhammad; the political dimensions of Islam; and the diversification of Islamic culture through the law, mysticism, philosophy, and the religious sciences.

Eligible for ISLM or MDST credit. 1 credit.
Fall 2011. Bensch.

## HIST 006B. The Modern Middle East

This course surveys the modern history of the Middle East. Topics covered include the late Ottoman Empire, European colonialism, the rise of nationalism and nation-states, Israel/Palestine, oil, political Islam and the role of the U.S. in the region.
Eligible for ISLM credit.
1 credit.
Spring 2012. Minkin.

## HIST 007A. African American History, 1619 to 1865

This survey of the social, political, and economic history of African Americans from the 1600s to the Civil War focuses on slavery and resistance, the development of racism, the slave family (with special emphasis on women), and the cultural contributions of people of African descent.
Eligible for BLST credit.
1 credit.
Not offered 2011-2012.

## HIST 007B. African American History, 1865 to Present

Students study the history of African Americans from Reconstruction through the present. Emancipation, industrialization, cultural identity, and political activism are studied through monographs, autobiography, and literature.
Eligible for BLST credit.
1 credit.
Not offered 2011-2012.

## HIST 008A. West Africa in the Era of the Slave Trade, 1500 to 1850

This survey course focuses on the origins and impact of the slave trade on West African societies and on processes of state formation and social change within the region during this era.
Eligible for BLST credit.
1 credit.
Not offered 2011-2012.
HIST 008B. Mfecane, Mines, and Mandela: Southern Africa from 1650 to the Present
This course surveys southern African history from the establishment of Dutch rule at the Cape of Good Hope to the present day, focusing on the 19th and 20th centuries.

Eligible for BLST credit.
1 credit.
Not offered 2011-2012.
HIST 008C. From Leopold to Kabila: Central Africa's Bad 20th Century A survey of central African history from the coming of Belgian colonial rule to recent conflicts in the Congo and Rwanda.
1 credit.
Fall 2011. Burke.
HIST 009A. Chinese Civilization
Chinese civilization and culture from prehistoric times until the early 19th century. Eligible for ASIA credit.
1 credit.
Not offered 2011-2012.

## HIST 009B. Modern China

The history of China from the early 19th century until the present. Eligible for ASIA credit. 1 credit.
Not offered 2011-2012.

## HIST 009C. The Silk Road: China,

 Central Asia, India, and IranCrossing deserts, mountains, and oceans, the Silk Road linked the ancient civilizations of China, India, Iran, and the Mediterranean, even reaching the Roman Empire. Camel caravans and monsoon-driven vessels carried silks, porcelain, cotton, spices, glass, carpets, and silver. Trade facilitated the transmission of Buddhism, Islam, Manichaeism, and Nestorian Christianity. The Silk Road-a term coined and romanticized by modern European explorerslinked Han Chinese, Indians, Turks, Mongols, and Persians in a pre-European global system extending from the pre-Christian era to the 15th century.
Eligible for ASIA credit.
1 credit.
Fall 2011. Dale and Li.

## HIST 012. Chivalric Society: Knights, Ladies, and Peasants

The emergence of a new knightly culture in the 11th and 12th centuries will be explored through the Peace of God, crusades, courtly love, lordship, and seigneurialism.
Eligible for MDST credit.
1 credit.
Spring 2012. Bensch.

## HIST 014. Friars, Heretics, and Female Mystics

An exploration of radical movements of Christian perfection, evangelical poverty,
heresy, and female mystics that emerged in Europe from the 11th to the 15th century.
Eligible for MDST credit.
1 credit.
Not offered 2011-2012.

## HIST 015. Founding Urban Europe: From Rome to Renaissance Florence

The course will explore the emergence of Western towns from the "post-nuclear" world of the early Middle Ages to the 15th century. Were medieval towns the seedbeds of capitalism?
Eligible for MDST credit.
1 credit.
Not offered 2011-2012.

## HIST 016. Sex, Sin, and Kin in Early Europe

This course will explore the transformation of attitudes regarding sexuality, kinship, structures, marriage, and inheritance from Late Antiquity to the early modern period. The course will explore two issues. Because Christianity maintained an ambivalent attitude towards the perpetuation of the world, how did it become so involved with sexuality and marriage? To what extent did it transform or modify the different traditions inherited from the Romans and early Germanic and Celtic peoples?
Eligible for GSST or MDST credit.
1 credit.
Not offered in 2011-2012.

## HIST 017. Cultural History of the Modern Middle East

This class explores the connections between historical narrative and cultural production in modern Middle East history.
Eligible for ISLM credit.
1 credit.
Not offered 2011-2012.

## HIST 018. Cities of the Middle East

This class investigates modern Middle East cities from a variety of angles, including public and private space, geography, built environment, trade and social service networks, indigenous and foreign migrations and more.
Eligible for ISLM credit.
1 credit.
Not offered 2011-2012.

## HIST 020. The History of Current Events in the Middle East

In this class, we use the happenings of today's Middle East to study the history of the region. We will begin with the focus of our news here in America and work in the classroom to
understand the historical context and implications of current events. Eligible for ISLM or PEAC credit. 1 credit.
Fall 2011. Minkin.
HIST 025. Colonialism and Nationalism in the Modern Middle East
This class uses an historiographical approach to study the nascent nationalisms of the Middle East in the late 19th and 20th centuries under colonial and postcolonial rule.
Eligible for ISLM or PEAC credit.
1 credit.
Not offered 2011-2012.

## HIST 026. History of Modern Egypt

This class explores Egypt from the 18th to 21st centuries, both using and disrupting a chronological history of this most populous Arab state. We will learn not only about the internal domestic realm of Egypt, but also about pan-Arab trends, Arab-Israeli conflict and the United States' role within the modern Middle East.
Eligible for ISLM credit.
1 credit.
Spring 2012. Minkin.

## HIST 027. European Societies in the First World War, 1913-1923

This research seminar examines the experience of Europeans in the trenches, under military occupation, and at home in the turbulent years during and immediately following the First World War.
Optional language attachments: German, French.
1 credit.
Not offered 2011-2012.
HIST 028. Nations and Nationalism in Eastern Europe, 1848 to 1998
Is ethnic nationhood compatible with democratic practice? This course traces the historical and often violent construction of nationalism and self-proclaimed nation-states out of multi-ethnic communities in Eastern Europe since the late 19th century. Optional language attachment: German.
Eligible for PEAC credit.
1 credit.
Spring 2012. Judson.

## HIST 029. Sexuality and Society in Modern Europe

The historical constructions of sex and sexual identities in Western societies since 1700.
Eligible for GSST or INTP credit.
Writing course.

1 credit.
Not offered 2011-2012.

## HIST 031. Revolutionary Iconoclasm:

Tearing Down the Old, Building the New
Students undertake a comparative study of efforts by revolutionaries since 1789 to transform their societies and cultures.
1 credit.
Not offered 2011-2012.

## HIST 032. A History of Jewish

## Nationalisms: History, Religion, and

 PoliticsThis course focuses on the political expression of Jewish identity since the emergence of Zionism in the late 19th century.
1 credit.
Not offered 2011-2012.

## HIST 034. Antisemitism Through the Ages

This course explores the religious, social, economic, political, and intellectual roots of history of antisemitism from late antiquity to the present.
1 credit.
Not offered 2011-2012.

## HIST 035. From Emancipation to Extermination: European Jewry's Encounter With Modernity

This course focuses on the fate of European Jewry from the beginning of emancipation in the late 18th century to the Holocaust.
Eligible for PEAC credit and toward the social science or humanities distribution requirements. 1 credit.
Not offered 2011-2012.

## HIST 036. Modern Germany

German politics, society, and culture in the 19th and 20th centuries.
Optional language attachment: German. 1 credit.
Not offered 2011-2012.

## HIST 037. History and Memory: Perspectives on the Holocaust

The genocide of European Jewry continues to generate compelling historical and interpretive questions. We will explore the roots of Nazism, the implementation of the Final Solution, the legacy of the Holocaust on European society, and the representation of the Holocaust through an interdisciplinary approach that relies on primary sources, historical scholarship, memoirs, poetry, painting, and film.
Eligible for PEAC credit.
1 credit.
Fall 2011. Weinberg.

HIST 038. Russia in the 20th Century
This course explores the trials and tribulations of the Russian people during the tumultuous 20th century. Topics include: the causes of the revolutions of 1917: the hopes and aspirations of Russian society during the initial years of communist rule; the rise of Stalin and the Stalinist system; and the Soviet Union after Stalin's death. Readings include primary documents, visual arts, literature, and films. 1 credit.
Fall 2011. Weinberg.
HIST 041. The American Colonies
A history of European colonies in North America from 1600 to 1760 .
1 credit.
Not offered 2011-2012.
HIST 042. The American Revolution
Revolutionary developments in British North America between 1760 and 1800.
1 credit.
Not offered 2011-2012.
HIST 044. American Popular Culture
The history of entertainment and cultural expression in the United States from early America to the contemporary era.
1 credit.
Not offered 2011-2012.
HIST 045. The United States Since 1945
This course is a survey of social, political and cultural history of the United States since 1945. Topics include: The Cold War, McCarthyism, Civil Rights, Rock n' Roll, TV, Baby Boomers, JFK, Gender, LBJ, the Vietnam War, Nixon and Watergate, The Oil Crisis, The rise of the New Right, Ronald Reagan, George Bush I \& II; Bill Clinton, 9/11, the Iraqi War. We will use the presidencies to help generalize the political climate, discuss the sensibility of each era and select some cultural and social events. The entire era is heavily documented with film of actual events, especially the atom bomb, McCarthyism, civil rights, the Vietnam War, Ronald Reagan, and the Gulf War.
1 credit.
Fall 2011. Murphy.

## HIST 046. The American Civil War

The social, cultural and political history of the American Civil War.
1 credit.
Not offered 2011-2012.

## HIST 047. The Politics of Education: Class and Race in Urban America, 1954 1996

This is a research workshop aimed at exploring the history of educational reform in urban

America. Elements of the course include: teachers unions, African-American perspectives on educational reform, the economics and politics of urban life, black mayors and school reform, race riots and neighborhood dynamics, class relations in school reform, and the debates over public and private education. This course is largely based on original research, historical documents, and archival material.
1 credit.
Not offered 2011-2012.

## HIST 048. Murder in a Mill Town: A Window on Social Change During the Early Republic

Topics in the social and cultural history of the United States between the American Revolution and the Civil War.
Writing course.
1 credit.
Not offered 2011-2012.

## HIST 049. Race and Foreign Affairs

Race has always played a major part of foreign affairs in the United States just as race relations have dominated in the domestic sphere. This course covers the history of United States foreign affairs with attention paid to the origins of racialism and the impact of expansionism on various ethnic and racial groups. Topics include the myths of Indian atrocities in the War of 1812, the Trail of Tears and the Presidency of Andrew Jackson; Manifest Destiny and expansionism, 1848; the war with Mexico, 1845-1848; the creation of California and Texas, 1850; the civil war; the little-known war with Korea, 1878; the war with Spain, 1898; intervention in Mexico, 1916; and Panama, 1898-1914; colonialism in the Philippines, 1898-1947; tourism in Cuba and the Caribbean; the significance of Central and Latin America in global commerce, with particular attention to NAFTA agreements; racialism and Japan in World War II; racial constructs and foreign affairs during the Cold War; the Civil Rights Movement and the international community; interventions in Korea and Vietnam as interpreted through the lens of cold world geopolitics. Ideology in foreign affairs serves as the general theme of the course.
Eligible for PEAC or PPOL credit.
1 credit.
Fall 2011. Murphy.

## HIST 050. The Making of the American Working Class

The meaning of work and the history of labor including: origins of the sweatshop, the introduction of industrial discipline, the managerial ethos, the political economy of racism among American workers, the rationalization of work culture, the role of the
community and workplace as contested terrain, organizing the unorganized, possibilities of radicalism in the early 20th century, industrial unionism during the Great Depression, white collar workers, race, gender and job competition during and after World War II, and labor and the state.
Eligible for PPOL credit.
1 credit.
Fall 2011. Murphy.

## HIST 051. Black Reconstruction

Like a phoenix, black freedom and national citizenship rights rose from the ashes of the Civil War. The story of post-Civil War Reconstruction, maligned and contorted by novelists and historians alike, is a dynamic tale of courage, determination, hard won success and "splendid failures." Readings in history and fiction, as well as film treatments of the era will help students gain new insights into "America's second Revolution."
1 credit.
Spring 2012. A. Dorsey.

## HIST 052. History of Manhood in America

Constructions of masculine identity in America between the 18th and 20th centuries.
Eligible for GSST credit.
1 credit.
Not offered 2011-2012.

## HIST 053. Black Women in the Civil Rights Movement

This study of black women in the modern civil rights movement (1945-1975) explores black women's experiences in the struggle for equal rights in mid-20th century.
Eligible for BLST or GSST credit.
1 credit.
Not offered 2011-2012.
HIST 054. Women, Society, and Politics
This course analyzes the history of American women from the colonial period to the present. Eligible for GSST or PPOL credit. 1 credit.
Not offered 2011-2012.

## HIST 055. Social Movements in the 20th Century

Students will examine large-scale grassroots movements for social change in the United States since the 1890s.
Eligible for GSST or PEAC credit.
1 credit.
Not offered 2011-2012.

## HIST 056. The Modern American West

 1850 to the PresentThis mid-level course explores the modern American West in units which will address the history of: Native Americans from the 1887 Dawes Act to 1973 Wounded Knee rebellion, the agricultural and environmental transformation of the west, the expansion of federal power and expenditure of federal resources in the west and lastly, the role of corporations in guiding the economy and the politics of the west. The course will also highlight the diversity of traditions in the West, including the experiences and contributions of Asian Americans, Mexican Americans, African Americans and immigrant populations.
Prerequisite: An introductory history course. 1 credit.
Not offered 2011-2012.

## HIST 058. Africa in America:

## Gullah/Geechee Life and Culture

Creators of a "pidgin" indigenous to the American south, crafters of sweet grass baskets, skilled fishermen and growers of Carolina Gold rice, the Gullah/Geechee peoples have lived on and worked the coastal areas from South Carolina to Florida since the 18th century. Their descendents, the 21st-century Gullah/Geechee, are struggling to retain the rights to live in harmony with the land now designated "wildlife sanctuaries." This course will trace the history of the Gullah/Geechee from West Africa to present day political struggles, culminating in a field school research trip to the newly designated Gullah/Geechee Cultural Heritage Corridor.
This course is not open to first-year students. 1 credit.
Not offered 2011-2012.

## HIST 059. The Black Freedom Struggle: From Civil Rights to Hip-Hop

This course is devoted to the study of the black efforts to achieve political, social and economic equality within the United States through protest. Students will investigate the links between protest efforts in the era of World War II, the nonviolent and radical phases of the modern civil rights movement and the development of a new culture of protest in the last quarter of the 20th century. In addition to studying historical texts, students will analyze various forms of protest media such as black radio productions, cartoons, paintings and plays of 1960s Black Arts Movement, and the poems, song lyrics, and graphic art of early hip-hop.
This course is not open to first-year students.
Eligible for BLST credit.
1 credit.
Not offered 2011-2012.

## HIST 062. History of Reading

This course examines the historical evolution of reading, literature, and books from their origins to the present day, but focuses on the postGutenberg era, after 1450.
1 credit.
Spring 2012. Burke.

## HIST 063. Voices of the Past: Between Oral History and Memory

An examination of the possibilities and limitations of oral history in the reconstruction of the past.
1 credit.
Not offered 2011-2012.
HIST 064. Migrants and Migrations: Europeans and Asians in Latin America and Latinos in the United States
The course will explore the interaction between global forces and local and individual circumstances in the migration experience.
Eligible for LASC credit.
1 credit.
Not offered 2011-2012.
HIST 066. Disease, Culture, and Society in the Modern World: Comparative Perspectives
An examination of the ways scholars discuss certain diseases in specific places and periods. Eligible for INTP, LASC, or PPOL credit. 1 credit.
Not offered 2011-2012.
HIST 067. Peripheral Modernities: Latin American Cities in the 20th Century
An exploration of the socio-cultural, economic, and political processes that have shaped the modern experience in Buenos Aires (Argentina) and Lima (Peru).
Eligible for LASC credit.
1 credit.
Not offered 2011-2012.
HIST 069. Image and Identity: U.S. Latinos/as in Film and Fiction
Using diverse genres, including essays, poetry, plays, historical works, and films, this course examines cultural identity, displacement, migration, mestizo/taino consciousness, transnationalism, race, class, citizenship, gender politics, and popular culture. It explores the diverse experiences of Mexican Americans, Puerto Ricans, ethnic Cubans, Dominican descent citizens, and Central/South Americans. Eligible for LASC credit.
1 credit.
Spring 2012. Echeverría.

## HIST 075. Modern Japan

This course considers the history of Japan from the early 19th century to the present, tracing its transformation from a feudal-samurai society to a modern nation-state in the 19th century, and then its turn from democracy to ultra-militarism and expansionism in the Pacific War and World War II, and finally from its rebuilding during the Occupation to its boom years as a economic superpower in the late 20th century. Topics include Tokugawa feudalism, the rise of the Meiji state, the growth of the Japanese empire and militarism, the Pacific War, and Japan's postwar politics, economy, and society. Eligible for ASIA credit.
1 credit.
Fall 2011. Li.
HIST 077. Orientalism East and West
The history of Western views of the Orientfrom Arabian Nights to Lawrence of Arabia, from Marco Polo to Madame Butterfly, from Silk Road explorers to Fu Manchu.
Eligible for ASIA credit.
1 credit.
Not offered 2011-2012.

## HIST 078. Beijing and Shanghai: Tale of Two Cities

The history of China's two major cities since the 19th century. The second half of the course is devoted to writing a research paper using English-language primary and secondary sources.
Eligible for ASIA credit.
1 credit.
Not offered 2011-2012.

## HIST 079. Women, Family, and the State in China

The history of women and families in Chinese society from the late imperial period to the present.
Eligible for ASIA or GSST credit.
1 credit.
Not offered 2011-2012.

## HIST 080. The Whole Enchilada: Debates in World History

Students will discuss various ongoing scholarly debates in the field of world history, as well as the evolution of world history as a genre of historical writing.
1 credit.
Not offered 2011-2012.

## HIST 081. The History of Food in the Modern Era

This mid-level course explores the transformation of the American diet from the end of the Civil War to the present day.

Students will study industrial developments including advances in technology relating to food preservation, the growth of corporations, increased governmental involvement in agricultural production and booming immigration that contributed to the abundance of American food choices.
1 credit.
Not offered 2011-2012.

## HIST 083. What Ifs and Might-HaveBeens: Counterfactual Histories

"What if" histories, attempts to study and describe possible histories which did not happen, such as "What if the South had won the American Civil War?", are a popular genre of writing about the past. The course will focus on debates about and within the writing of counterfactual histories. Students will be expected to research and write a substantial counterfactual study of their own over the course of the semester.
1 credit.
Not offered 2011-2012.

## HIST 086. The Image of Africa

This course focuses on the representation of Africa in mass media, official documents, and other materials from 1500 to the present day. Students will consider both how European colonizers depicted and imagined Africa and Africans and how African-Americans have imagined and encountered Africa.
Eligible for BLST, FMST, or INTP credit. 1 credit.
Not offered 2011-2012.

## HIST 087. Development and Modern Africa: Historical Perspectives

This course examines the idea and practice of "development" in the last century of African life through its intellectual, institutional, and economic history.
Prerequisite: A prior course in the social sciences.
Eligible for BLST credit.
1 credit.
Spring 2012. Burke.

## HIST 089. The Environmental History of Africa

This course examines African history from an ecological and environmental perspective.
Eligible for ENVS credit.
1 credit.
Not offered 2011-2012.
HIST 091. Senior Research Seminar Students write a 25 -page paper based on primary sources.
Required of all course majors.

Class of 2014: Required of all majors, including honors.
Writing course.
1 credit.
Fall 2011. B. Dorsey and Minkin.

## HIST 092. Thesis

A single-credit thesis, available to all majors in their senior year after completion of HIST 091, on a topic approved by the department. Students may not register for HIST 092 credit/no credit. 1 credit.
Fall 2011 and spring 2012. Staff.

## HIST 093. Directed Reading

Individual or group study in fields of special interest to the student not dealt with in the regular course offerings requires the consent of the department chair and of the instructor.
HIST 093 may be taken for 0.5 credit as HIST 093A.

## Seminars

## HIST 111.Muslims, Christians, and Jews

 in the Medieval MediterraneanThe course will examine the interchange and friction among Byzantium, Islam, and Latin Christendom cultures as the sea passed from Islamic to Christian control from the 7th to the 14th centuries.
Eligible for MDST credit.
2 credits.
Spring 2012. Bensch.

## HIST 122. Revolutionary Europe, 1750 to 1871

Selected topics in the social, economic, and political history of Europe from the French Revolution to the Paris Commune will be considered.
2 credits.
Not offered 2011-2012.

## HIST 125. Fascist Europe

This seminar studies European fascism in the context of societies torn by world war, class conflict, and economic depression. It focuses on fascist movements, regimes, and cultural politics in Italy and Germany, France, and Romania.
2 credits.
Spring 2012. Judson.

## HIST 128. Russia in the 19th and 20th

 CenturiesThis course focuses on the social, economic, political, and intellectual forces leading to the collapse of the autocracy and the rise of Stalin. Particular attention is devoted to the dilemmas
of change and reform, and the problematic relationship between state and society. Writing course.
2 credits.
Fall 2011. Weinberg.

## HIST 130. Early America in the Atlantic World

The "new world" of European and Indian encounter in the Americas, along with the African slave trade, British North American colonies, and the American Revolution. 2 credits.
Not offered 2011-2012.

## HIST 131. Gender and Sexuality in

 AmericaA social and cultural history of gender and sexuality in the United States from the early republic to the present.
Eligible for GSST credit.
2 credits.
Fall 2011. B. Dorsey.

## HIST 134. U.S. Political and Diplomatic

 History II: The Rise of Globalism Nation building, national identity, and political ideologies and movements; covers the period from the American Revolution through the rise of globalism.Eligible for PEAC credit.
2 credits.
Not offered 2011-2012.

## HIST 135. Labor and Urban History

A seminar that focuses on history from the bottom up, on working-class people as they build America and struggle to obtain political, social, and economic justice. Topics include urbanization and suburbanization, republicanism and democracy, racism and the wages of Whiteness, gender and work, class and community, popular culture, the politics of consumption, industrialism and the managerial revolution, and jobs and gender.
2 credits.
Spring 2012. Murphy.
HIST 137. Slavery, 1550 to 1865
This seminar focuses on slavery in the United States between 1550 and the end of the Civil War, emphasizing the link between black enslavement and the development of democracy, law, and economics. Topics addressed include the Atlantic slave trade, the development of the Southern colonies, black cultural traditions, and slave community. Eligible for BLST credit.
2 credits.
Not offered 2011-2012.

## HIST 138. Black Urban Communities, 1800 to 2000

This seminar is focused on the study of the black community in the United States from the end of the American Revolution to the end of the 20th century. This course investigates the link between racial identification and community formation, the strengths and weaknesses of the concept of community solidarity, and the role class and gender play in challenging group cohesiveness.
Eligible for BLST credit.
2 credits.
Not offered 2011-2012.

## HIST 140. The Colonial Encounter in Africa

Students focus on the social, economic, and cultural dimensions of the colonial era in modern Africa.
Eligible for BLST or PEAC credit.
2 credits.
Fall 2011. Burke.

## HIST 144. State and Society in China, 1750 to 2000

This seminar examines the Chinese state and society in three periods: the mid-Qing (17501850), late Qing and Republic (1850-1950), and the People's Republic of China (19502000). Topics include: the last emperors, the bureaucracy and examination system, law, women and family, local elites, cities and merchants, popular religion and rebellions, political reform and revolution.
Eligible for ASIA credit.
2 credits.
Not offered 2011-2012.

## HIST 148. Issues and Debates in Modern Latin America

Explores major problems and challenges Latin American nations have been confronting since the last third of the 19th century onward.
Eligible for LASC credit.
2 credits.
Not offered 2011-2012.
HIST 149. Reforms and Revolutions in Modern Latin America
A history of reform movements and revolution in Latin America during the 20th century.
Eligible for LASC credit.
2 credits.
Not offered 2011-2012.

## HIST 180. Honors Thesis

2 credits.
Fall 2011 and spring 2012. Staff.

Coordinator: RICHARD ELDRIDGE (Philosophy)<br>Anna Everetts (Administrative Assistant)<br>Committee: Jean-Vincent Blanchard (Modern Languages and Literatures, French)<br>Timothy Burke (History)<br>Rachel Buurma (English Literature) ${ }^{3}$<br>Michael Cothren (Art History)<br>Sibelan Forrester (Modern Languages and Literatures, Russian)<br>Cynthia Halpern (Political Science)<br>Tamsin Lorraine (Philosophy)<br>Braulio Muñoz (Sociology and Anthropology)<br>Patricia Reilly (Art History)<br>Mark Wallace (Religion) ${ }^{3}$<br>Patricia White (English Literature)<br>Philip Weinstein (English Literature) ${ }^{3}$

${ }^{3}$ Absent on leave, 2011-2012.

Since 1992, the Interpretation Theory Program has been providing students and faculty with an interdisciplinary forum for exploring the nature and politics of representation. Reaching widely across the disciplines, work done in the minor reflects a long-standing drive to understand the world through the constructs of its interpretive propositions. Students use their programs to develop a flexible, deeply historicized grasp of what is thought today as critical and cultural theory. They also sharpen their skills in critical reading and intellectual analysis.
Students who minor take a total of six courses that build on a combination of classic and current hermeneutic methods. Each year, graduating seniors enroll in a capstone seminar that proposes a structured investigation into an inherently interdisciplinary problem. Faculty team-teach the course as a way of drawing out multi-disciplinary concerns in both theory and practice.

## The Academic Program Course Minor

Students complete six credits toward the minor. Three general rules guide the selection:

1. All minors must complete a one-credit capstone seminar that is team-taught by two faculty members from different departments. Students complete this capstone in the spring of their senior year.
2. The three remaining courses are elective. At least four of the six interpretation theory credits must be outside the major.
3. A minimum " $B$ " average is required for all minors by their junior and senior years.
Other courses may be considered upon petition to the Interpretation Studies Committee. These may include relevant courses offered at Bryn Mawr College, Haverford College, and the University of Pennsylvania.

## Honors Minor

All students participating in the Honors Program are invited to define a minor in interpretation theory. Students must complete one preparation for external examination. This 2 -credit preparation can be the seminar and a reading attachment or a thesis, a combination of two courses in different departments, a 2 -credit thesis, or a combination of a thesis and a course. Any thesis must be multidisciplinary. The proposed preparation must be approved by the Interpretation Theory Committee. Honors minors must meet all other requirements of the interdisciplinary minor in course.

## Capstone Seminars

All minors are required to successfully complete the one-credit capstone seminar, team-taught by two faculty members from different departments, in the spring of their senior year.
Each year, graduating seniors enroll in a capstone seminar that proposes a structured investigation into an inherently interdisciplinary problematic. The capstone seminar embodies both the theoretical and interdisciplinary qualities that make interpretation theory distinctive and compelling.
Students majoring in a variety of disciplines come together with faculty members from two different areas to explore theories of knowledge and questions of interpretation and representation. For example, the past capstone seminars have brought together professors from French literature and biology, political science and religion, sociology/anthropology and English, philosophy and art, and other interdisciplinary combinations.
Capstone titles have included The Classical in Art and Literature, Reworking the Cultural Imaginary, Simultaneity and Monumentality, After Babel: Poetry, Language and Translation, Mind, Body, Machine; Interpretation and the

Visual Arts; Beyond Reason: Nietzsche, Levinas, and the Kabbalah; Mapping the Modern; and Visionaries of Spirit, Masters of Suspicion.

## Life After Swarthmore

Respondents to the 2006 Interpretation Theory Alumni Survey indicated that approximately $75 \%$ went on to graduate school and of those, approximately $25 \%$ pursued a Ph.D.
Occupations of interpretation theory graduates are diverse and include: physicians, professors, editors, grant writers, an assistant district attorney, and a civil rights investigator.

## Courses

Currently offered courses relevant to the program include the following:
INTP 090. Directed Reading
1 credit.
Each semester. Staff.
INTP 091. Capstone Seminar: Contested Truth(s): Questions of Modernity in German Philosophy and Literature (Cross-listed as PHIL 077 and LITR 077G) During the last decades of the 18th century, a powerful sense of rupture from the past, a distinctive consciousness of living in a modern culture, was both felt in daily life and articulated in texts of literature and philosophy. The version of that consciousness appearing in Germany was especially systematic and powerful, and it has exerted a lasting influence. The promise of freedom and, simultaneously, the abnegation of that promise in modern life are reflected and articulated in German texts of literature and philosophy from 1781 to the present, from Romantic poets to the intellectuals of the Frankfurt School. In this seminar, we will trace the emerging theoretical questions (and answers) arising from cultural and political life of the last 200 years, as formulated by such writers and thinkers as Kant, Hegel, Hölderlin, F. Schlegel, Schiller, Kleist, Marx, Heine, Nietzsche, Heidegger, Benjamin, Adorno, Horkheimer, Gadamer, Kafka, Celan, and Sebald.
1 credit.
Spring 2012. Eldridge, Werlen.

## INTP 092. Thesis

2 credits.
Each semester. Staff.

## Art History

ARTH 166. Avant-Gardes in History, Theory, and Practice (Mileaf)
ARTH 168. Dada and Surrealism (Mileaf)

## Biology

BIOL 006. History and Critique of Biology (Gilbert)

Classics
CLAS 036. Classical Mythology (Beck, Munson)

## English

ENGL 035. The Rise of the Novel (Buurma)
ENGL 073. Modernism: Theory and Fiction (Weinstein)
ENGL 080. Critical and Cultural Theory (White)
ENGL 081. Theory of the Novel (Buurma)
ENGL 082.Transnational Feminist Theory (Mani)
ENGL 091. Feminist Film and Media Studies (White)
ENGL 115. Modern Comparative Literature (Weinstein, counts toward INTP in the spring only)
ENGL 120. Critical and Cultural Theory (White)

## Film and Media Studies

FMST 046. Queer Media (White)
FMST 087. American Narrative Cinema (White)
FMST 091. Feminist Film and Media Studies (White)
FMST 092. Film Theory and Culture (White)

## French

FREN 044. Tyrants and Revolutionaries (Blanchard)
FREN 056. Ecritures au féminin (RiceMaximin)
FREN 116. La critique littéraire (Blanchard)

## History

HIST 001K. Engendering Culture (Murphy) HIST 029. Sexuality and Society in Modern Europe (Judson)
HIST 066. Disease, Culture, and Society in the Modern World (Armus)
HIST 086. The Image of Africa (Burke)
HIST 088. Social History of Consumption (Burke)

## Literatures

LITR 070R. Translation Workshop (Forrester)
LITR 071F. French Cultural and Critical Theory (Blanchard)
LITR 075S. U.S. Latina/o Literature (Martinez)
LITR 076S. Latino and Latin American
Sexualities (Martinez)
Philosophy
PHIL 016. Philosophy of Religion (Berger)

PHIL 017. Aesthetics (Eldridge)
PHIL 019. Philosophy of Literature (Eldridge)
PHIL 026. Language and Meaning (Eldridge)
PHIL 039. Existentialism (Lorraine)
PHIL 045. Futures of Feminism (Lorraine)
PHIL 048. German Romanticism (Eldridge)
PHIL 049. Marx, Nietzsche, and Freud (Lorraine)
PHIL 069. Phenomenology (Lorraine)
PHIL 079. Poststructuralism (Lorraine)
PHIL 106. Aesthetics and Theory of Criticism (Eldridge)
PHIL 114. 19th-Century Philosophy (Eldridge)
PHIL 116. Language and Meaning (Eldridge)
PHIL 139. Phenomenology, Existentialism, and Poststructuralism (Lorraine)

## Physics

PHYS 029. Seminar on Gender and (Physical)
Science (Bug)

## Political Science

POLS 011. Ancient Political Theory (Halpern)
POLS 012. Modern Political Theory (Berger)
POLS 013. Political Psychology and Moral Engagement (Berger)
POLS 100. Ancient Political Theory (Halpern)
POLS 101. Modern Political Theory (Halpern)

## Religion

RELG 003. The Bible: In the Beginning (Kessler)
RELG 004. New Testament and Early Christianity (Wallace)
RELG 005B. Introduction to Christianity (Wallace)
RELG 015. Religion and Literature: Blood and Spirit (Wallace)
RELG 015B. Philosophy of Religion (Wallace)
RELG 032. Queering God: Feminist and Queer Theology (Kessler)
RELG 112. Post-modern Religious Thought (Wallace)
RELG 128. Sex, Gender and the Bible (Kessler)

## Russian

RUSS 047. Russian Fairy Tales (Forrester)
RUSS 070. Translation Workshop (Forrester)
Sociology and Anthropology
SOAN 044B. Colloquium: Art and Society (Muñoz)
SOAN 044D. Colloquium: Critical Social Theory (Muñoz)
SOAN 044E. Colloquium: Modern Social Theory (Muñoz)

SOAN 049B. Comparative Perspectives on the Body (Ghannam)
SOAN 101. Critical Modern Social Theory (Muñoz)

## Spanish

SPAN 051. Textos híbridos: crónicas periodísticas y novellas de no-ficción (Martinez)
SPAN 068. Seducciones literarias/traiciones filmicas (Martinez)

Note: This list is revised annually; any courses attached to the program at the time taken will be counted. For the most up-to-date, semester-by-semester list of courses, please consult the program website at www.swarthmore.edu/intp. Other courses may be considered on petition to the Interpretation Theory Committee. These may include relevant courses offered at Bryn Mawr and Haverford colleges and the University of Pennsylvania.

Coordinator: TARIQ AL-JAMIL (Religion)<br>Anita Pace (Administrative Assistant)<br>Committee: Stephen Bensch (History)<br>Farha Ghannam (Sociology and Anthropology)<br>Alexandra Gueydan (Modern Languages and Literatures) ${ }^{3}$<br>Steven Hopkins (Religion)<br>Shane Minkin (History)

${ }^{3}$ Absent on leave, 2011-2012.

Swarthmore's Islamic Studies Program focuses on the diverse experiences and textual traditions of Muslims in global contexts. As one of the world's great religions and cultures, Islam has shaped human experience-both past and present-in every area of the world. The academic program explores the expressions of Islam as a religious tradition, the role of Muslims in shaping local cultures, Islamic civilization as a force of development in global history, and the significance of Islamic discourses in the contemporary world. The program offers an undergraduate minor, drawing from the academic disciplines of anthropology, economics, history, political science, religion, film and media studies, and gender and sexuality studies.
The Islamic Studies Program challenges students to consider a wide range of social, cultural, literary, and religious phenomena in both the Arabic and non-Arabic speaking parts of the world. These include aspects of life in countries with Muslim majorities such as Egypt, Syria, Indonesia, Pakistan, Afghanistan, Iran, and Turkey as well as those countries with vital minority communities such as France, Germany, and the United States. A sample of coursework includes The Qur'an and its Interpreters; Islamic Law and Society; Gender, Sexuality, and the Body in Islamic Discourses; Cultures of the Middle East; Culture, Power, Islam; History of the Modern Middle East; Cities of the Middle East; and Kathak Dance Performance.

## The Academic Program Course Minor

All students must take a minimum of 5 Islamic Studies Program credits. Students must follow the guidelines below regarding the required 5 courses.

## Requirements

1. The 5 required courses must cross at least 3 different academic departments.
2. Only 1 of the total 5 credits required by the Islamic studies minor may overlap with the student's major.
3. Students must successfully complete Arabic 004 (and its prerequisites) or the equivalent. This requirement is waived for native speakers of Arabic and for students who demonstrate sufficient competence by passing an equivalency exam. Alternate fulfillment of the language requirement may also be approved by the Islamic Studies Committee if a student demonstrates competence in another language that is relevant to the study of a Muslim society and is directly related to the student's academic program. Only Arabic courses beginning at the level of Arabic 004 or its equivalent will count toward the total 5 credits in Islamic studies required for the minor.
4. Students must complete a 1-credit thesis that will count toward the minimum of 5 credits required for the minor. The thesis must be supervised by a member of the Islamic Studies Program faculty. Students normally enroll for the thesis (ISLM 096) in the fall semester of the senior year.
To supplement classes offered at Swarthmore, students are encouraged to explore and take classes at other nearby colleges, especially Bryn Mawr, Haverford, and the University of Pennsylvania. Students are also strongly encouraged to spend a minimum of one semester abroad in a program approved by both Islamic studies and Swarthmore's Off-CampusStudy Office. In addition to furthering the student's knowledge of Islam and Muslim societies, studying abroad is a unique opportunity for personal and intellectual growth.

## Acceptance Criteria

Students interested in Islamic studies are invited to consult with members of the Islamic Studies Committee before developing a proposal for a minor. The proposal should outline and establish how a minor in Islamic studies relates to the student's overall program of undergraduate study and should provide a list of the courses to be taken. The minor is open to students of all divisions.
Students will be admitted to the minor after having completed at least two Islamic studies courses at Swarthmore in different departments with grades of B or better. Applications to the
program must be submitted by March 1st of the sophomore year, and all programs must be approved by the Islamic Studies Committee. Deferred students will be re-evaluated at the end of each semester until they are either accepted or they withdraw their application.

## Honors Minor

To complete an honors minor in Islamic studies, a student must have completed all the course requirements for the interdisciplinary minor listed above. Students are encouraged to take a 2-credit honors seminar in an Islamic studies topic in either their junior or senior year. Honors students are required to complete a 2credit thesis under program supervision that will count toward the minimum of 5 credits required for the interdisciplinary minor. The honors examination will address the themes explored in the 2 -credit thesis.

## Special Major

Students are invited to consider a special major in Islamic studies in consultation with members of the Islamic Studies Committee. The proposal should include the above requirements and should provide a list of the courses.

## Courses

## ISLM 096. Thesis

1 credit.
Staff.

## ISLM 180. Honors Thesis

2 credits.
Staff.
The following courses may be applied to an academic program in Islamic studies. See individual departments to determine specific offerings in 2011-2012.

## Art History

ARTH 043. Islam and the West: Architectural Cross-currents from the Middle Ages to the 21st century

## Dance

DANC 046. Dance Technique I: Kathak
DANC 049. Dance Technique II: Kathak

## History

HIST 001F. First-Year Seminar: "Foreigners" in the Middle East
HIST 001T. First-Year Seminar: Cross and Crescent: Muslim-Christian Relations in Historical Perspective
HIST 006A. Formation of the Islamic Near East HIST 006B. The Modern Middle East

HIST 017. Cultural History of the Modern Middle East
HIST 018. Cities of the Middle East
HIST 020. The History of Current Events in the Middle East
HIST 025. Colonialism and Nationalism in the Arab Middle East
HIST 026. History of Modern Egypt
HIST 111. Christians, Muslims, and Jews in the Medieval Mediterranean

Modern Languages and Literatures, Arabic
ARAB 004. Intermediate Modern Standard Arabic II
ARAB 005A. Arabic Conversation
ARAB 006A. Advanced Arabic Conversation
ARAB 007A. Arabic Communication
Workshop
ARAB 011. Advanced Arabic I
ARAB 012. Advanced Arabic II
ARAB 013A. Foreign Language Teaching and Pedagogy
ARAB 014. Advanced Arabic Through Reading
ARAB 018A. Culture Context of Arabic Music
ARAB 020. Arabic Literature in Cross-Cultural Context
ARAB 027. Writing Women in Modern Arabic Fiction
ARAB 040. Introduction to Arabic Literature
ARAB 045. Contemporary Thought in the Arabic World

## Modern Languages and Literatures, French

FREN 045B. Le monde francophone: France and the Maghreb: Postcolonial Writing in a Transnational Context

## Modern Languages and Literatures,

 Literatures in TranslationLITR 076AF. Female Authors from the Arab World

## Religion

RELG 008B. The Qur'an and Its Interpreters
RELG 011B. The Religion of Islam: The Islamic Humanities
RELG 013. The History, Religion, and Culture of India II: Muslim, Hindu, Sikh, and Dalit in North Africa
RELG 053. Gender, Sexuality, and the Body in Islamic Discourses
RELG 054. Power and Authority in Modern Islam
RELG 100. Holy War, Martyrdom, and Suicide in Christianity, Judaism, and Islam

RELG 119. Islamic Law and Society
RELG 127. Secrecy and Heresy
Sociology and Anthropology
SOAN 009C. Cultures of the Middle East
SOAN 123. Culture, Power, Islam

Coordinator: LUCIANO MARTINEZ (Modern Languages and Literatures, Spanish) Anna Everetts (Administrative Assistant)<br>Committee: $\quad$ Diego Armus (History) ${ }^{3}$<br>Aurora Camacho de Schmidt (Modern Languages and Literatures, Spanish) ${ }^{1}$<br>Jose Luis Machado (Biology)<br>Braulio Muñoz (Sociology and Anthropology)<br>Kenneth Sharpe (Political Science)

${ }^{1}$ Absent on leave, fall 2011.
${ }^{3}$ Absent on leave, 2011-2012.

Swarthmore's Latin American Studies Program explores the rich diversity and points of unity among and within Latin American countries and cultures. Participants in the program engage with a variety of disciplines to consider what defines "Latin America." Spoken language, literature, pre-colonial, colonial and modern history, native and immigrant experiences, politics, socioeconomic conditions, religion, social structures, architecture, cultural production, and political borders are all considered in this far-ranging and inclusive course of study.
Swarthmore empowers students to pursue an interdisciplinary approach to issues relating to the diversity of the Americas. As such, Latin American studies supports and guides students interested in developing academic and service initiatives to advance their understanding of Latin America and its peoples. Faculty members also encourage internships and community service that will further enrich students' understandings of the Latin American experience. On campus, often in conjunction with the Intercultural Center and student organizations, Latin American studies sponsors several public lectures and cultural activities each year as well as student projects related with the Latino community in the greater Philadelphia area.

## The Academic Program

## Course Minor

Latin American Studies minors must complete the following requirements:

- Language: LAS requires the successful completion of SPAN 004 or its equivalent. This requirement is waived for native speakers of Spanish or Portuguese and for students who demonstrate sufficient competence in either one of these languages. Note: LAS credit is not offered for language courses.
- Courses: Students must take a minimum of 5 credits in Latin American studies that may include courses and seminars (counting as one credit for LAS).

To give students a basic introduction to Latin America, students are expected to take one of the following courses:

HIST 004: Introduction to Latin American History,
SPAN 010: En busca de Latinoamérica, or HIST 001E: The Self Image of Latin America: Past, Present, Future.
Only one introductory course (HIST 004, SPAN 010, HIST 001E) may count toward fulfillment of the five-course requirement. The remaining four courses (one credit each) should originate in at least three departments regardless of the introductory course chosen.

## Honors Minor

For an honors minor in Latin American studies students must complete all requirements for the interdisciplinary minor. From within these offerings, they may select a seminar taken to fulfill the interdisciplinary minor's requirements for outside examination. The seminar chosen, however, may not be an offering within their major department. Seminars count as one credit toward the minor.

## Special Major

Students preferring more intensive work in Latin American studies are also welcome to design a special major by consulting with the program's coordinator during the sophomore year. Special majors consist of at least 10 credits and no more than 12 credits.

## Application to the Minor or Special Major

Students in any major may add a minor in Latin American studies or, with the support of faculty mentors students may design a special major in the field. Courses from anthropology, art history, history, modern languages and literatures, political science, religion, and sociology contribute to this lively interdisciplinary program. Diverse topics such as contemporary social movements; children's
literature; the past and present of cities; international migrations; politics, gender and sexualities; and disease and public health are considered in coursework relevant to the program. Other courses focus attention on the immigration experiences of Latin Americans in the U.S. as well as the making of Latino communities. Students may also take Spanishlanguage courses that include interpretations of the narrative visions of writers such as Jorge Luis Borges and Carlos Fuentes.

## Off-Campus Study

The experience of living and studying abroad in any Spanish-speaking country is strongly encouraged by the faculty of the Latin American Studies Program. By extending learning beyond the traditional classroom walls students have distinctive opportunities for enriching intellectual experiences and unique opportunities for personal growth.
Students are required to spend a minimum of one semester abroad in a program approved by both LAS and the Off-Campus Study Office. Swarthmore College hosts a study-abroad program in Buenos Aires, Argentina. Students are also welcome to choose from a selection of approved programs available in other locations throughout Latin America. Only in exceptional cases, with the support of a faculty member and the approval of the LAS committee, will a summer internship, or a community service project in Latin America fulfill this requirement.
The study-abroad requirement may be waived for students who have lived and studied in Latin America for a number of years, but they must apply for this waiver at the time of application for the minor. For LAS credit, study abroad courses must have a Latin American focus. Language courses are not eligible for LAS credit. Students can transfer two courses taken abroad in Spanish or Portuguese with the approval of the LAS coordinator. Course preapproval is strongly recommended.

## Life After Swarthmore

Swarthmore graduates who have taken part in the Latin American Studies Program find that their rich understanding of the cultures and people of Latin America and Latinos in the U.S. is attractive to employers. Graduates most frequently pursue careers in public service, law, government, education, humanities, social sciences, and the media.

## Courses

The following courses may be counted toward a minor or special major in Latin American studies:

## Art History

ARTH 024. Architectures of Mexico

## Film and Media Studies

FMST 031. Documentary Filmmaking Approaches in Africa and the African Diaspora
FMST 032. Documentary Filmmaking
Practicum

## History

HIST 001E. First-Year Seminar: The SelfImage of Latin America: Past, Present, and Future
HIST 004. Latin American History
HIST 051. Race and Poverty in the United States
HIST 063. Voices of the Past: Oral History and Memory
HIST 064. Migrants and Migrations: Europeans in Latin America and Latinos in the U.S. HIST 065. Past and Present in the Andean World
HIST 066. Disease, Culture, and Society in the Modern World: Comparative Perspectives
HIST 067. Peripheral Modernities: Latin American Cities in the 20th Century
HIST 148. Issues and Debates in Modern Latin America
HIST 149. Reforms and Revolutions in Modern Latin America

Latin American Studies
LASC 093. Directed Reading

## Linguistics

LING 021. Language, Race, and Identities in the USA

Literatures
LITR 015S. First-Year Seminar: Children in Latin American Literature
LITR 046. Latino/Latin American Sexuality LITR 070S. The Persistent Power of Central American Literature

LITR 071S. Latin American Society Through Its Novel
LITR 072S. The Testimonial Literature of Latin American Women
LITR 076S. Latino and Latin American
Sexualities
LITR 077S. The Gender of Latin American Modernity
LITR 078S. Seditious Bodies: Latina and Latin American Transgender Subjectivities
LITR 079S. The New Latin American Cinema

## Music

MUSI 031. Musics of Central and South America and the Caribbean
MUSI 033. Music of Cuba and Brazil

## Latin American Studies

## Political Science

POLS 057. Latin American Politics
POLS 109. Comparative Politics: Latin America

## Religion

RELG 109. Afro-Atlantic Religions
Sociology and Anthropology
SOAN 010Q. First-Year Seminar: The Mexico of Anthropology
SOAN 010R. Tales We (and They) Tell
SOAN 022H. The Americas: Cultural Politics and Social Movements
SOAN 024B. Latin American Society and Culture
SOAN 024C. Latin American Society Through Its Novel
SOAN 030M. The Power of Words: Language and Social Inequality in the Americas
SOAN 030N. Migration, Transnationalism, and Transborder Circulation
SOAN 124. The Americas: Cultural Politics and Social Movements

## Spanish

SPAN 010. En busca de Latinoamérica
SPAN 023. Introducción a la literatura latinoamericana
SPAN 050. Objetos del deseo en el Caribe hispano
SPAN 055. El cine mexicano y la identidad nacional
SPAN 070. Género y sexualidad en
Latinoamérica
SPAN 072. Seducciones literarias-traiciones fílmicas
SPAN 073. El cuento latinoamericano
SPAN 075. El relato policial latinoamericano
SPAN 076. La novela latinoamericana
SPAN 077. Desaparecidos: literatura, cine y dictadura
SPAN 081. Movimientos sociales y literatura en México
SPAN 082. Un siglo de canto: poesía latinoamericana contemporánea
SPAN 083. El tirano latinoamericano en la literatura
SPAN 084. Los niños en la literatura latinoamericana
SPAN 085. La edad del tiempo: Carlos Fuentes y su obra
SPAN 106. Visiones narrativas de Carlos Fuentes
SPAN 108. Jorge Luis Borges
SPAN 109. Elena Poniatowska la hija de México

SPAN 110. Política y póetica: los mundos de Pablo Neruda, Octavio Paz y Ernesto Cardenal

THEODORE B. FERNALD, Professor and Chair
DONNA JO NAPOLI, Professor
RACHEL SUTTON-SPENCE, Julian and Virginia Cornell Distinguished Visiting Professor K. DAVID HARRISON, Associate Professor ${ }^{3}$

DANIEL G. ALTSHULER, Visiting Assistant Professor (Tri-College)
NATHAN SANDERS, Visiting Assistant Professor
AARON J. DINKIN, Visiting Assistant Professor (part time) \& Phonetics Lab Coordinator
SHELLEY DEPAUL, Instructor
DOREEN KELLEY, Instructor
DOROTHY KUNZIG, Administrative Assistant
${ }^{3}$ Absent on leave, 2011-2012.

## What is Linguistics?

There are 7,000 languages in the world. Linguistics is the scientific study of languagewe develop techniques to explore patterns that all human languages have in common and investigate the ways in which each is unique. Our explorations yield insights not only about languages, but also about the nature of the human mind.
The relevance of linguistics to the fields of anthropology, cognitive science, language study, philosophy, psychology, and sociology has been recognized for a long time. Linguistics cross list courses from ten departments, reflecting the diversity of fields with strong relevance to our field. The interdisciplinary nature of the field, and our program, further encourages students to broaden their horizons and interact with a wide variety of students, scholars, and ideas.

## What we hope you will get from studying Linguistics

Because the very nature of modern linguistic inquiry is to build arguments for particular analyses, the study of linguistics gives the student finely honed argumentation skills, which stand in good stead in careers in law, business, and any other profession where such skills are crucial.

## Linguistics at Swarthmore, Bryn Mawr College, and Haverford College

The community of learning is enhanced and expanded by the Linguistics Department's strong ties to Bryn Mawr and Haverford colleges. Swarthmore linguistics professors teach courses on all three campuses (though the vast majority are at Swarthmore), and linguistics courses regularly include students from all three schools.

## The Academic Program

## Course Major: Linguistics

This major consists of eight credits in linguistics. Students may choose LING001

Introduction to Language and Linguistics as part of the major or not.
All linguistic course majors are required to write a senior thesis in the fall of their senior year in LING100 (Research Seminar) for one or two credits. This paper constitutes the comprehensive requirement.

## Special Course Major: Linguistics and Languages

This major consists of 12 credits. Six credits in linguistics and three credits in each of two languages. The languages can be modern or ancient.
All linguistics and languages special course majors are required to write a senior thesis in the fall of their senior year in LING100 (Research Seminar) for two credits.
For a language taught by the Modern Languages and Literatures Department, there must be one course numbered four or above, two courses numbered 11 or above or a seminar. For a language taught by the Classics Department there must be one intermediatelevel course numbered 11-14 and one seminar. Some work in each foreign language included in the major must be done in the student's junior or senior year.
If one or both of the foreign languages is modern, the student must study abroad for at least one semester in an area appropriate for one of the foreign languages.

## Major Requirements

All linguistics and linguistics and languages course majors must take one course or seminar from each of the following three lists:

- Sounds: LING 045, 052
- Forms: LING 050
- Meanings: LING 026, 040

All linguistics and linguistics and languages course majors are required to take the structure of a non-Indo-European language, typically LING 061,062 , or 064 . If you are a native speaker of a non-Indo-European language you may be excused from this requirement.

All linguistics and linguistics and languages course majors are required to write a senior thesis in the fall of their senior year in LING 100 (Research Seminar). This paper constitutes the comprehensive requirement. The course can be taken for one or two credits. All Linguistics and Linguistics and Languages honors majors are required to write a senior thesis in the fall of the senior year in LING195 for two credits.

## Course Minor

Four minors offered, each totaling 5 credits (courses below plus any other two credits in linguistics):

- Theory: LING 040, LING 045, LING 050
- Phonology/Morphology: LING 045, LING

043, and LING 052 or LING 025

- Syntax/Semantics: LING 040, LING 050, LING 043
- Individualized: Student may choose five courses in linguistics and provide justification why the courses form a coherent minor.


## Honors Major

All Linguistics honors majors must take one course or seminar from each of the following three lists:

- Sounds: LING 045, 052
- Forms: LING 050
- Meanings: LING 026, 040

All Linguistics honors majors are required to take the structure of a non-Indo-European language, typically LING 061,062 , or 064 . If you are a native speaker of a non-IndoEuropean language you may be excused from this requirement.

## Honors Major Portfolio requirements:

Thesis: Students are required to write a twocredit thesis in LING 195 (Senior Honors Thesis) in the fall of their senior year. The thesis may be on any topic in linguistics. It need not be related to course work. Work may be collaborative with one other student at the discretion of the faculty. The oral examination will consist of a discussion of up to one hour with the external reader.
Research Papers: Students are required to write two research papers. The student will prepare for these research papers by taking at least four credits of course work (two credits in each of the research paper areas). The areas will be selected from any combination of the following, possibly in combination with other course work:

- phonetics
- phonology
- morphology
- syntax
- semantics
- historical \& comparative
- sociolinguistics

Students will take LING 199 (Senior Honors Study) for one credit in the spring of their senior year. LING 199 is where honors majors discuss theoretical issues related to the preparation of their research papers. The two research papers will be on topics selected by the external readers and must be directly related to course work the student has taken.
Students will work independently on their research papers. The oral examination will consist of a thirty minute discussion with the external reader for each paper. The discussion will cover the papers and any other material pertinent to the two credits of course work offered in preparation for the paper.

## Honors Special Major Linguistics and Languages

All linguistics and linguistics and languages honors majors must take one course or seminar from each of the following three lists:

- Sounds: LING 045, 052
- Forms: LING 050
- Meanings: LING 026, 040

All linguistics and languages honors majors are required to take the structure of a non-IndoEuropean language, typically LING 061,062 , or 064 . If you are a native speaker of a non-Indo-European language you may be excused from this requirement.

## Honors Special Major Linguistic \& Languages portfolio requirements:

 Thesis: Students are required to write a twocredit thesis in LING 195 (Senior Honors Thesis) in the fall of their senior year. The thesis may be on any topic in linguistics. It need not be related to course work. Work may be collaborative with one other student at the discretion of the faculty. The oral examination will consist of a discussion of up to one hour with the external reader.Research Papers: Students are required to write two research papers in linguistics and one research paper in a language that is administered by the relevant language department. The student will prepare for the linguistics research papers by taking at least four credits of course work (two credits in each of the research paper areas). The areas will be selected from any combination of the following, possibly in combination with other course work:

- phonetics
- phonology
- morphology
- syntax
- semantics
- historical \& comparative
- sociolinguistics

The third research paper is administered by the relevant language department.
Students will take LING 199 (Senior Honors Study) for one credit in the spring of their senior year. LING 199 is where majors discuss theoretical issues related to the preparation of their research papers. The three research papers will be on topics selected by the external readers and must be directly related to course work the student has taken.
Students will work independently on their research papers. The oral examination will be a ninety-minute discussion with a panel of the four external examiners (the thesis reader, the readers for each linguistics research paper, and the language area examiner).

## Honors Minor

If a student is a course major in Linguistics as well as an honors minor in Linguistics, that student has the option of doing a thesis for the honors portfolio, instead of a research paper.

## Honors Minor Linguistics:

Four minors offered, each totaling 5 credits (courses below plus any other two credits in linguistics):

- Theory: LING 040, LING 045, LING 050
- Phonology/Morphology: LING 045, LING

043, and LING 052 or LING 025

- Syntax/Semantics: LING 040, LING 050, LING 043
- Individualized: Student may choose five courses in linguistics and provide justification why the courses form a coherent minor.


## Honors Minor portfolio requirements:

A single research paper will constitute the portfolio for honors. The areas will be selected from any combination of the following:

- phonetics
- phonology
- morphology
- syntax
- semantics
- historical \& comparative
- sociolinguistics

The program requires a one-half credit in LING 199 (Senior Honors Study) in the spring of the senior year. The oral examination will consist of a discussion of up to one hour with the external reader.

## Thesis / Culminating Exercise

Every senior linguistics major or linguistics and language major must write a thesis during the fall semester of their senior year.

## Application Process Notes for the Major or the Minor

Please follow the process described by the Dean's Office and the Registrar's Office about how to apply for a major.
Please contact our Department office and request a sophomore paper form. You can also download from our website:
www.swarthmore.edu/SocSci/Linguistics/xling1 4. html. Submit the completed form to the department office.

## Advanced Placement/International Baccalaureate Credit

Linguistics does not accept AP/IB credit.

## Transfer Credit

Linguistics does accept transfer credit. Please contact the department for more information.

## Off-Campus Study

If you special major in linguistics and languages and both of your foreign languages is modern, you must spend at least one semester abroad in an area appropriate for one of the foreign languages.
Students planning on a semester abroad must consult with their adviser and the Linguistics Department. Upon return from study abroad, students must present all written work to the department in order to have the course work considered for credit here, including class notes, syllabi, examinations, and papers.

## Sample Paths through Linguistics

There are many acceptable paths through the major. We urge you to talk with your adviser to find the one that is best suited to your interests, bearing the following considerations in mind. The end of the path is satisfaction of the requirements for the major. The most intricate of these is successful completion of the senior thesis. While students are permitted to complete one or more of the core requirements (courses in sounds, forms, and meanings) during their senior year, doing so will preclude writing a senior thesis in one of these areas. We strongly recommend completing these requirements by the end of the junior year. Because students frequently develop thesis topics during their courses in the Structure of a Non-IndoEuropean Language, we also recommend
satisfying this requirement by the end of the junior year. Syntax (LING 050) and Phonetics \& Phonology (LING 045) are prerequisites for (LING 006X), the faculty urge students to take these courses by the end of the fall semester of the junior year.

## Courses

## LING 001. Introduction to Language and Linguistics

Introduction to the study and analysis of human language, including sound systems, lexical systems, the formation of phrases and sentences, and meaning, both in modern and ancient languages and with respect to how languages change over time. Other topics that may be covered include first-language acquisition, sign languages, poetic metrics, the relation between language and the brain, and sociological effects on language.
Writing course.
1 credit.
Fall 2011. Sanders. Spring 2012. Staff.

## LING 002. First-Year Seminar: The Linguistic Innovation of Taboo Terms and Slang

Taboo terms vary across language communities with respect to topic. While religion, sex, disease and death, and bodily effluents are commonly found on the list, many other topics can appear, often depending upon nonlinguistic factors of the community (size, demographics, cultural beliefs). Taboo terms also vary with respect to the range of ways they can be used. While exclamations, name-calling, and maledictions are commonly found on the list, various other uses can appear, such as modifiers and predicates. Over time these less common uses tend to become semantically bleached, so that the historical taboo term is no longer even recognized as a taboo term, and can be used without any hint of vulgarity or rudeness. These less common uses sometimes fall together with slang in exhibiting linguistic behavior that is often unique within that language, both at the word level and the phrase and sentence level, behavior that is telling with respect to linguistic theory. Each student will choose a language other than English to investigate, for original research. Since both slang and taboo-terms are very new topic of research in linguistics, students have a real chance of analyzing structures that have been understudied or completely overlooked and, thus, producing work of interest to the field in general. 1 credit.
Fall 2011. Napoli.

## LING 004. First-Year Seminar: American Indian Languages

At least 300 languages were spoken in North America before the first contact occurred with Europeans. Most of the surviving languages are on the verge of extinction. Students will learn about language patterns and characteristics of language families, including grammatical classification systems, animacy effects on sentence structure, verbs that incorporate other words, and evidentials. Topics include how languages in contact affect each other, issues of sociolinguistic identity, language endangerment and revitalization efforts, and matters of secrecy and cultural theft.
1 credit.
Not offered 2011-2012.

## LING 006. First-Year Seminar: Language and Deafness

This course will look at many issues connected to language and people with hearing loss in the United States, with some comparisons to other countries. We will consider linguistic matters in the structure of American Sign Language (ASL) as well as societal matters affecting users of ASL, including literacy and civil rights. A onehour language drill outside of class is required.
All students are welcome to do a community service credit in LING 095.
1 credit.
Not offered 2011-2012.

## LING 007. Hebrew for Text Study I

(See RELG 057)
This course counts for distribution in humanities under the religion rubric and in social sciences under the linguistics rubric. 1 credit.
Fall 2011. Plotkin.
LING 008A. Russian Phonetics
(See RUSS 008A)
0.5 credit.

Not offered 2011-2012.
LING 010. Hebrew for Text Study II (See RELG 059)
1 credit.
Spring 2012. Plotkin.

[^5]
## LING 015. Lenape Language Study

Students will gain a working knowledge of the structure of the Lenape Language. The course covers conversation, grammar, and usage, as well as discussion of the conceptual elements inherent in this Algonquian language. Topics will include elements of Lenape culture, songs in the language, and discussion of the current status of Lenape as an endangered language.
1 credit.
Spring 2012. DePaul.

## LING 016. History of the Russian Language <br> (See RUSS 016)

This course counts for distribution in humanities under the Russian rubric and in social sciences under the linguistics rubric. 1 credit.
Not offered 2011-2012.

## LING 020. Computational Linguistics:

 Natural Language Processing (See CPSC 065)Prerequisites: CPSC 035 (or the equivalent). 1 credit.
Not offered 2011-2012.

## LING 023. Sign Languages and their Social Contexts

(Cross-listed as ENGL 023B)
This course considers the structure and use of sign languages. It will be of value to any students interested in sign languages or the structure and use of English or other modern languages. Understanding the structure of visual minority languages, their variation and attitudes to their use can help students in other disciplines objectively and critically to understand the structure of language and how it works in society.
1 credit.
Fall 2011. Sutton-Spence.

## LING 024. Discourse Analysis

(See SOAN 026B)
1 credit.
Not offered 2011-2012.

## LING 025. Language, Culture, and

 Society(Cross-listed as SOAN 040B)
This course is an introduction to sociolinguistics and the study of language variation and change, with a focus on variation in North American English. Topics to be examined include the following: How do social factors such as age, gender, ethnicity, and socioeconomic class influence the way people use language? How do individual speakers use language differently in different situations?

How do regional dialects differ from each other, and why? How does language change spread within a community and between communities? In learning the answers to these questions, students will carry out sociolinguistic field projects to collect and analyze data from reallife speech.
1 credit.
Fall 2011. Dinkin.
LING 026. Language and Meaning
(See PHIL 026)
This course counts for distribution in humanities under the philosophy rubric and in social sciences under the linguistics rubric.
1 credit.
Not offered 2011-2012.

## LING 027. Language Acquisition and Development

(See PSYC 027)
1 credit.
Spring 2012. Thothathiri.

## LING 029. Sign Language Literature and Folklore

(Cross-listed as ENGL 029B and LITR 029)
This course is an examination of the literature and folklore of signed languages, giving insight into deaf culture by exploring the cultural importance of signed languages in depth. It will be of value to those interested in Deaf Studies but also provide alternative perspectives for those with experience of these subjects in relation to English and other spoken languages, and to non-deaf communities. The course should be of great interest to students of disciplines such as English literature, anthropology, and linguistics and drama. 1 credit.
Spring 2012. Sutton-Spence.

## LING 033. Introduction to Classical Chinese

(See CHIN 033)
This course counts for distribution in humanities or social sciences under either rubric.
1 credit.
Fall 2011. Berkowitz.

## LING 034. Psychology of Language

 (See PSYC 034)1 credit.
Fall 2011. Grodner.

## LING 040. Semantics

(Cross-listed as PHIL 040)
In this course, we look at a variety of ways in which linguists, philosophers, and psychologists have approached meaning in language. We
address truth-functional semantics, lexical semantics, speech act theory, pragmatics, and discourse structure. What this adds up to is an examination of the meaning of words, phrases, and sentences in isolation and in context.
This course counts for distribution in humanities under the philosophy rubric and in social sciences under the linguistics rubric.
Writing course.
1 credit.
Fall 2011 and spring 2012. Fernald.
LING 043. Morphology and the Lexicon
This course looks at word formation and the meaningful ways in which different words in the lexicon are related to one another in the world's languages.
Prerequisite: LING 001 or 045 .
1 credit.
Fall 2011. Napoli.

## LING 045. Phonetics and Phonology

Phonetics explores the full range of sounds produced by humans for use in language and the gestural, acoustic, and auditory properties that characterize those sounds. Phonology investigates the abstract cognitive system humans use for representing, organizing, and combining the sounds of language as well as processes by which sounds can change into other sounds. This course covers a wide spectrum of data from languages around the world and focuses on developing analyses to account for the data. Argumentation skills are also developed to help determine the underlying cognitive mechanisms that are needed to support proposed analyses.
1 credit.
Fall 2011 and spring 2012. Sanders.

## LING 047. Japanese Language in Society <br> (see JPNS 045) <br> 1 credit. <br> Not offered 2011-2012.

## LING 050. Syntax

We study the principles that govern how words make phrases and sentences in natural language. Much time is spent on learning argumentation skills. The linguistic skills gained in this course are applicable to the study of any modern or ancient natural language. The argumentation skills gained in this course are applicable to law and business as well as academic fields.
Writing course.
1 credit.
Fall 2011. Napoli. Spring 2012. Altshuler.

## LING 052. Historical and Comparative Linguistics

This course is an introduction to the study of linguistic history in the following sense: (i) The languages we are speaking are constantly changing. Over longer periods of time, these small changes build up to significant changes. (ii) As groups of speakers whose ancestors once spoke the same language become separated, their languages diverge. This leads to a split into separate daughter languages, which often end up being mutually incomprehensible. The question is, how is it possible to figure out and reconstruct the changes and splits that occurred in the distant past in languages that are no longer spoken and were perhaps never recorded? The method applied by historical linguists to solve this problem, the main focus of this course, is called the 'comparative method.' We will draw on material from a wide range of languages, focusing mainly on sound change and morphological analogy.
Prerequisite: LING 001 or 045 or permission of the instructor.
1 credit.
Spring 2012. Sanders.

## LING 053. Language Minority Education in the U.S.: Issues and Approaches

 (See EDUC 053)1 credit.
Fall 2011. Allard.

## LING 054. Oral and Written Language

(Cross-listed as EDUC 054) (Studio course)
This course examines children's dialogue and its rendering in children's literature. Each student will pick an age group to study. There will be regular fiction-writing assignments as well as primary research assignments. This course is for linguists and writers of children's fiction and anyone else who is strongly interested in child development or reading skills. It is a course in which we learn through doing. All students are welcome to do a community-service credit in LING 096.
Prerequisite: LING 001, 043, or 045 and LING 040 or 050 . Can be met concurrently.
Writing course.
1 credit.
Spring 2012. Napoli.

## LING 055. Writing Systems and Decipherment

We will discuss the typology and history of the writing systems of the world. The modern decipherment of ancient writing systems such as Linear B and Egyptian hieroglyphic writing will be covered, as will some of the approaches and challenges in the modern electronic encoding of diverse writing systems.

Prerequisite: LING 001 or permission of the instructor.
1 credit.
Not offered 2011-2012.

## LING 061. Structure of Navajo

Navajo is an Athabaskan language spoken more commonly than any other Native American language in the United States. This course is an examination of the major phonological, morphological, syntactic, and semantic structures of Navajo. The morphology of this language is legendary. This course also considers the history of the language and its cultural context.
Prerequisites: LING 050 and 045 or 052 or permission of the instructor.
1 credit.
Spring 2012. Fernald.

## LING 062. Structure of American Sign Language

In this course, we look at the linguistic structures of ASL: phonetics, phonology, morphology, syntax, semantics, and history. We also discuss issues of culture, literacy, and politics pertinent to people with hearing loss.
All students are required to participate in a rudimentary introduction to ASL for an additional 0.5 credit. Sign up for LING 062A. Prerequisites: LING 050 and 045 or 052 or permission of the instructor.
All students are welcome to do a communityservice project in LING 095.
Writing course.
1 credit (plus 0.5 credit under LING 062A). Not offered 2011-2012.

## LING 064. Structure of Tuvan

Tuvan belongs to the Turkic branch of the Altaic language family and is spoken in Siberia and Mongolia by nomadic herders. It has classically agglutinating morphology and curious phenomena such as vowel harmony, converbs, and switch reference. It has rich sound symbolism, a tradition of oral (unwritten) epic tales, riddles, and world-famous song genres ("throat singing"). We will investigate the sounds, structures, oral traditions, and ethnography of Tuvan, using both printed and digital media.
Prerequisites: LING 050 and 045 or 052 or permission of the instructor.
1 credit.
Not offered 2011-2012.

## LING 070R. Translation Workshop

(See LITR 070R and RUSS 070)
This course counts for distribution in humanities under the literature rubric and in social sciences under the linguistics rubric.
1 credit.
Next offered 2012-2013.

## LING 075. Field Methods

This course affords a close encounter with a language, direct from the mouths of native speakers. Students develop inference techniques for eliciting, understanding, analyzing, and presenting complex linguistic data. They also gain practical experience using state-of-the-art digital video, annotation, and archiving for scientific purposes. A different (typically non-Indo-European) language will be investigated each time the course is taught.
Prerequisite: LING 001.
1 credit.
Fall 2011. Altshuler.

## LING 094. Research Project

With permission, students may elect to pursue a research program.
1 credit.
Fall or spring. Staff.

## LING 095. Community-Service Credit: Literacy and Hard-of-Hearing or Deaf People

This course offers credit for community service work. Students may work with children on literacy skills in a mainstream environment or a bilingual-bicultural program, locally or in the greater Philadelphia area. Students will be required to keep a daily or weekly journal of experiences and to write a term paper (the essence of which would be determined by the student and the linguistics faculty mentor). Prerequisites: LING 045; LING 006 or 062; permission of the chairs of both the linguistics and educational studies departments; and the agreement of a faculty member in linguistics to serve as a mentor through the project.
Fall or spring. Staff.

## LING 096. Community-Service Credit: Literacy

This course offers credit for community service work. The prerequisites are LING/EDUC 054, the permission of the chairs of both the linguistics and educational studies departments, and the agreement of a faculty member in linguistics to mentor students through the project. Students will be required to keep a daily or weekly journal of experiences and to write a term paper (the essence of which would

## Linguistics

be determined by the student and the linguistics faculty mentor).
1 credit.
Fall or spring. Staff.

## LING 097. Field Research

This course offers credit for field research on a language. Prerequisites are the permission of the chair of linguistics and the agreement of a faculty member in linguistics to serve as a mentor through the project.
1 credit.
Fall or spring. Staff.

## LING 100. Research Seminar

All course majors in linguistics and linguistics/language must write their senior thesis in this seminar. Only seniors are admitted.
2 credits.
Fall 2011. Fernald, Sanders, Dinkin.

## LING 195. Senior Honors Thesis

All honors majors in linguistics and honors minors who are also course majors must write their thesis in this seminar.
2 credits.
Fall 2011. Fernald, Sanders, Dinkin.

## LING 199. Senior Honors Study

Honors majors may write their two research papers for 1 credit in this course. Honors minors may take this course for 0.5 credit. Fall 2011 or spring 2012. Fernald.

## Seminars

## LING 105. Seminar in Phonology: Contact and Change

This seminar studies language contact and its results; the relation between internal and external linguistic change; dialects and koine formation; and pidgins and creoles.
Prerequisite: LING 001,045 , or 050 , or permission of the instructor.
1 or 2 credits.
Not offered 2011-2012.

## LING 106. Seminar in Morphology

This seminar will consider recent developments in the theory of morphology. Topics vary.
Prerequisite: LING 043.
1 or 2 credits.
Not offered 2011-2012.
LING 107. Seminar in Syntax
Prerequisite: LING 040 or 050 .
1 or 2 credits.
Not offered 2011-2012.

## LING 108. Seminar in Semantics

This seminar will consider recent developments in the theory of semantics. Topics vary.
Prerequisite: LING 040.
1 or 2 credits.
Not offered 2011-2012.

## LING 116. Language and Meaning

 (See PHIL 116)This seminar counts for distribution in HU under the philosophy rubric and in SS under the LING rubric.
2 credits.
Fall 2011. Eldridge.
LING 119. Evolution, Culture, and Creativity
(See SOAN 119)
2 credits.
Not offered 2011-2012.

## LING 120. Anthropological Linguistics:

 Endangered Languages(Cross-listed as SOAN 080B)
In this seminar, we address some traditional issues of concern to both linguistics and anthropology, framed in the context of the ongoing, precipitous decline in human linguistic diversity. With the disappearance of languages, cultural knowledge (including entire technologies such as ethnopharmacology) is often lost, leading to a decrease in humans' ability to manage the natural environment. Language endangerment thus proves relevant to questions of the language/ecology interface, ethnoecology, and cultural survival. The seminar also addresses the ethics of fieldwork and dissemination of traditional knowledge in the Internet age.
Prerequisite: One course in linguistics or anthropology or permission of the instructor. 1 credit.
Not offered 2011-2012.
LING 134. Psycholinguistics Seminar (See PSYC 134)
1 credit.
Spring 2012. Grodner.

DEBORAH J. BERGSTRAND, Professor (part time)
PHILIP J. EVERSON, Professor ${ }^{2}$
CHARLES M. GRINSTEAD, Professor ${ }^{2}$
AIMEE S.A. JOHNSON, Professor ${ }^{2}$
STEPHEN B. MAURER, Professor ${ }^{3}$
HELENE SHAPIRO, Professor (part time)
DON H. SHIMAMOTO, Professor
JANET C. TALVACCHIA, Professor
GARIKAI CAMPBELL, Associate Professor ${ }^{4}$
CHERYL P. GROOD, Associate Professor
THOMAS J. HUNTER, Associate Professor and Chair
STEVE C. WANG, Associate Professor
LINDA CHEN, Assistant Professor ${ }^{3}$
LYNNE STEUERLE SCHOFIELD, Assistant Professor
SCOTT COOK, Visiting Assistant Professor
SEAN LAVERTY, Visiting Assistant Professor
NSOKI MAVINGA, Visiting Assistant Professor
DAVID M. MCCLENDON, Visiting Assistant Professor
KEVIN J. ROSS, Visiting Assistant Professor
ENRIQUE TREVIÑO, Visiting Assistant Professor
KAITLYN E. LITWINETZ, Academic Support Coordinator
STEPHANIE J. SPECHT, Administrative Assistant
${ }^{1}$ Absent on leave, fall 2011.
${ }^{2}$ Absent on leave, spring 2012.
${ }^{3}$ Absent on leave, 2011-2012.
${ }^{4}$ Absent on administrative leave, 2011-2012.

## Overview of Curriculum

Mathematics and statistics are among the great achievements of human intellect and at the same time powerful tools. As Galileo said, the book of the universe "is written in the language of mathematics." The goal of the department is to enable students to appreciate these achievements and use their power. To that end, majors and minors in the department receive a firm foundation in pure mathematics and the opportunity to apply it-to statistics, physical science, biological science, computer science, social science, operations research, education, and finance-the list grows.
Students typically enter our department with strong skills, but there is always room for improvement and new knowledge. Majors and minors grow in:

- Reasoning skills: logical argument and abstraction;
- Formulation skills: developing mathematical models;
- Communication skills: expressing
mathematical ideas and information clearly and precisely on paper, orally, and electronically;
- Comprehension skills: absorbing mathematical ideas and information presented on paper, orally, and electronically;
- Computation skills: mental, by hand, and by machine, as appropriate.

Through core courses, students learn fundamental concepts, results, and methods. Through elective courses, they pursue special interests. In the process, students develop a further appreciation for the scope and beauty of our discipline.
Graduates of the department follow many careers paths, leading them to graduate school, in mathematics, statistics, or other fields, to professional schools, or to the workplace.

## Introductory Courses

Most first-year students entering Swarthmore have had calculus while in high school and place out of at least one semester of Swarthmore's calculus courses, whether they continue with calculus or decide, as is often best, to try other sorts of mathematics. See the discussion of placement later. However, some entering students have not had the opportunity to take calculus or need to begin again. Therefore, Swarthmore offers a beginning calculus course (MATH 015) and several courses that do not require calculus or other sophisticated mathematics experiences. These courses are STAT 001 (Statistical Thinking, both semesters), MATH 003 (Introduction to Mathematical Thinking, spring semester), and STAT 011 (Statistical Methods, both semesters). MATH 003 is a writing course. MATH 029 (Discrete Mathematics, both semesters) also does not require any calculus but is a more sophisticated course; thus, some
calculus is a useful background for it in an indirect way. Once one has had or placed out of two semesters of calculus, many other courses are available, especially in linear algebra and several-variable calculus.

## Placement and Credit on Entrance to Swarthmore

## Placement Procedure

To gain entrance to mathematics or statistics courses at any time during one's Swarthmore years, students are expected to take at least one of the following exams: the Advanced Placement (AP) or International Baccalaureate (IB) exams, Swarthmore's Calculus Placement Exam, or Swarthmore's Math/Stat Readiness Exam. Students who do take AP or IB exams may be required to take the departmental exams as well, or parts thereof. Versions of the Calculus Placement Exam and the Readiness Exam are sent to entering first-year students over the summer, along with detailed information about the rules for placement and credit.

## Advanced Placement/International Baccalaureate Credit

Placement and credit mean different things. Placement allows students to skip material they have learned well already by starting at Swarthmore in more advanced courses. Credit confers placement as well but also is recorded on the student's Swarthmore transcript and counts toward the 32 credits needed for graduation.
The Swarthmore Calculus Placement Exam is used for placement only, not credit. Credit is awarded on the basis of the AP and the IB exams, as follows:

- 1 credit (for STAT 011) for a score of 4 or 5 on the Statistics AP Test of the College Board.
- 1 credit (for MATH 015) for a score of 4 on the AB or BC Calculus AP Test of the College Board (or for an AB subscore of 4 on the BC Test) or for a score of 5 on the Higher Level Mathematics Test of the IB.
- 1.5 credits (for MATH 015 and the first half of MATH 025) for a score of 5 on the AB Calculus AP Test (or for an AB subscore of 5 on the BC Test) or a score of 6 or 7 on the higher-level IB. Students who receive this credit and want to continue calculus take MATH 026.
- 2 credits (for MATH 015 and 025 ) for a main score of 5 on the BC Calculus AP Test. Alternatively, any entering student who places out of MATH 015 or 025 may receive credit for those courses by passing the final exams in these courses with a grade of straight C or better. These exams must normally be taken during the student's first semester at

Swarthmore, at the time when the final exam is given for the course. Students who wish to take these exams must arrange to do so with the departmental placement coordinator and should do so during their first semester at Swarthmore.
Students who are eligible on entrance for credit for a course, but who take the course anyway, will lose the entrance credit.
First-year students seeking advanced placement and/or credit for calculus taken at another college or university must normally validate their work by taking the appropriate external or Swarthmore placement examination, as described earlier. The department does not grant credit directly for college courses taken while a student is in high school. For work beyond calculus completed before entering Swarthmore, students should consult the departmental placement coordinator to determine the Swarthmore courses into which they may be placed and additional materials they may need to present for this placement. The department will not normally award credit for work above the first-year calculus level completed before entering Swarthmore.

## The Academic Program

## Major and Minor Application Process

Students apply for a major in the middle of the second semester of the sophomore year. Before all the usual steps of the College's Sophomore Paper process, applicants to the Mathematics and Statistics Department should begin by completing our online Major/Minor Application Form, available at www.swarthmore.edu/NatSci/math_stat/sopho more_form.html
After the sophomore paper process is over, students may apply to add or change a major or minor at any time, but applications will normally be held until the next time that sophomore applications are considered (around March 1).

## Course Major

## Acceptance into the Major

The normal preparation for a major in mathematics is to have obtained credit for, or placement out of, at least four of the following five course groups by the end of the sophomore year: Calculus I (MATH 015), Calculus II (MATH 025 or 026), Discrete Mathematics (MATH 029), Linear Algebra (MATH 027 or any flavor of 028), and Several Variable Calculus (MATH 033, 034, or 035). In any event, all majors must complete the Linear Algebra and Several Variable Calculus requirement by the end of the first semester of the junior year.

To be accepted as a major or a minor, a candidate normally should have a grade point average of at least $\mathrm{C}+$ in courses taken in the department to date, including courses in the fall term of the first year, for which we have shadow grades. A candidate should have at least one grade at the B level. Students should be aware that upper-level courses in mathematics are typically more demanding and more theoretical than the first- and second-year courses. This is an important factor in considering borderline cases. In some cases, applicants may be deferred pending successful work in courses to be designated by the department.

## Basic Requirements

By graduation, a mathematics major must have at least 10 credits in mathematics and statistics courses. At least 5 of the credits counted in the 10 must be for courses numbered over 040 . (Courses numbered under 10 do not count toward the major in any event.) Furthermore, every major is required to obtain credit for, or place out of, each of the following course groups: MATH 015; MATH 025 , or 026; MATH 027,028 , or 028 ; MATH 033,034 , or 035 ; MATH 063; and MATH 067. The two upper-level core courses, MATH 063
(Introduction to Real Analysis) and MATH 067 (Introduction to Modern Algebra), will be offered at least every fall semester. At least one of these two should be taken no later than the fall semester of the junior year. Majors are expected to complete both MATH 063 and 067 before the spring semester of the senior year; permission to delay taking either course until the senior spring must be requested in writing as early as possible but in any event no later than the beginning of the fall semester of the senior year. Finally, course majors must satisfy the departmental comprehensive requirement by passing MATH 097, Senior Conference. Normally, at least 3 of the 5 credits for courses numbered over 040 must be taken at Swarthmore, including MATH 097 and at least one of the core courses MATH 063 and 067. Note that MATH 097 is given in the fall only.
Note that placement counts for satisfying the requirements but not for the 10 -credit rule. Those students who are placed out of courses without credit must take other courses to obtain 10 credits. If you believe you are eligible for credit for courses taken before Swarthmore (because of AP or IB scores) but these credits are not showing on your transcript, please see the Registrar.
The two required core courses, Introduction to Real Analysis (MATH 063) and Introduction to Modern Algebra (MATH 067), are offered every fall semester, and we try to create enough sections to keep them relatively small and seminar-like. We hope, but cannot promise, to
offer one or the other of 063 and 067 each spring as well.
Mathematics majors are encouraged to study in some depth an additional discipline that makes use of mathematics. We also recommend that they acquire some facility with computers. Students bound for graduate work should obtain a reading knowledge of French, German, or Russian.

## Special Emphases

The preceding requirements allow room to choose an optional special emphasis within the mathematics major. For instance:
A student may major in mathematics with an emphasis on statistics by taking the following courses at the advanced level: (1) the core analysis course (MATH 063); (2) Mathematical Statistics I (STAT 061); (3) Probability (MATH 105) or Mathematical Statistics II (STAT 111);
(4) Data Analysis and Visualization (STAT 031); (5) the Senior Conference (MATH 097); and (6) another mathematics course numbered over 040 . Students are encouraged but not required to select the core algebra course (MATH 067) if they choose this emphasis. When a student does an emphasis in statistics, STAT 031 counts as if it were numbered over 040.

Students interested in mathematics and computer science should consider a mathematics major with a minor in computer science or an Honors Program with a mathematics major and a computer science minor. Details on these options are in the catalog under computer science.
Students thinking of graduate work in social or management science, or a master's in business administration, should consider the following options.
Basic courses: single-variable calculus (two semesters), one or more practical statistics courses (STAT 061 and 031), linear algebra, discrete math, several-variable calculus, and introductory computer science; advanced courses: (1) Modeling (MATH 056); (2) at least one of Probability (MATH 105), Mathematical Statistics I (STAT 061), and possibly Mathematical Statistics II (STAT 111); (3) at least one of Combinatorics (MATH 069) or Operations Research (ENGR 057); (4) the three required core courses (MATH 063, MATH 067 and MATH 097); and (5) Differential Equations (MATH 043 or 044 ). Because this program is heavy (one who hopes to use mathematics in another field must have a good grasp both of the relevant mathematics and of the intended applications), one of the core course requirements may be waived with permission of the department.
Students thinking of graduate work in operations research should consider the
following options. Basic courses: same as previous paragraph. Advanced courses: (1) the three required core courses (MATH 063, MATH 067 and MATH 097); (2) Combinatorics (MATH 069) and Topics in Discrete Mathematics (MATH 059 or 079); (3) Mathematical Statistics (STAT 061); and (4) at least one of Number Theory (MATH 058), Modeling (MATH 056), or Probability (MATH 105).

## Course Minor

## Acceptance into the minors

The requirements for acceptance into either course minor, such as prerequisite courses and grade average, are the same as for acceptance into the major. Students may not minor in both mathematics and statistics.

## Basic requirements to complete the mathematics course minor (for Class of '15 and later)

By graduation, a mathematics course minor must have 6 credits in mathematics or statistics, at least 3 of which must be for courses numbered 045 or higher. Also, at least 1 of these 3 credits must be for MATH 063 or 067. Also, at least 2 of these 3 credits must be taken at Swarthmore.

## Basic requirements of the statistics course minor

By graduation, a statistics course minor must have 6 credits in mathematics or statistics. Every statistics course minor must obtain credit for, or place out of, STAT 031 and STAT 061. At least one of STAT 031 and STAT 061 must be taken at Swarthmore. Note that, starting in 2012, CPSC 021 is a prerequisite for both STAT 031 and STAT 111. (Placement out of CPSC 021 by the CS Department will also suffice.)

## Honors Major

All current sophomores who wish to apply for Honors should indicate this in their Sophomore Paper, should work out a tentative Honors program with their departmental adviser, and should submit the College's Honors Program Application along with their Sophomore Paper. (All Sophomore Paper forms and Honors forms are available from the registrar or the registrar's website.) Honors applications are also accepted at the end of the sophomore year or during the junior year. Students, in consultation with their advisers, often change their Honors Programs anyway as time goes on.

## Basic requirements

To be accepted as an Honors major in mathematics, a student should have a grade
point average in mathematics and statistics courses to date of at least B+.
An Honors math major program consists of three preparations of two credits each, for a total of six distinct credits. One preparation must be in algebra and one in analysis (real or complex). The student must also satisfy all requirements of the mathematics major with the exception of the comprehensive requirement (MATH 097, Senior Conference).

## Preparations

The Department offers preparations in the fields listed below. Each preparation is subject to External Examination, including a 3-hour written examination and a 45 -minute oral examination. Each preparation consists of a specified pair of credits. The specified credits are listed after each field.

Algebra (067 and 102)
Real Analysis (063 and 101)
Complex Analysis (063 and 103)
Discrete Mathematics (069 and either 059 or 079)

Geometry (either 055 or 075 , and 106)
Probability (061 and 105)
Statistics (061 and 111)
Topology (104, a 2-credit seminar)
Since no course is allowed to count in two honors preparations, it is not possible for a student to offer both Real Analysis and Complex Analysis as fields. Similarly, one may take only one of Probability and Statistics as fields.
The external examination component of the program is meant to prompt students to learn their core subjects really well and to show the examiners that they have done so-that is, show that they deserve Honors. However, no three fields cover everything a strong student would ideally learn as an undergraduate. Honors majors should consider including in their studies a number of advanced courses and seminars beyond what they present for Honors.

## Senior Honors Study/ Portfolio

None is required or offered.

## Honors Minor

For the honors portion of their program, minors must complete one preparation chosen from those in the previous section.

## Transfer Credit

Courses taken elsewhere may count for the major. However, the number of upper-level transfer credits for the major is limited. Normally, at least 3 of the 5 upper-level courses used to fulfill the major must be taken at Swarthmore, including at least one of the
core courses MATH 063 and MATH 067. Exceptions should be proposed and approved during the sophomore paper process, not after the fact. Also, the usual College rules for transfer credit apply: you must see the professor in charge of transfer twice: in advance to obtain authorization, and afterwards to get final approval and a determination of credit. In particular, for MATH 063 and 067, you are responsible for the syllabus we use. If your course elsewhere turns out not to cover it all, you will not get full credit (even though the transfer course was authorized beforehand) and you will not complete the major until you have demonstrated knowledge of the missing topics. Similarly, for honors preparations you are responsible for the syllabi we use; we will not offer special honors exams based on work done at other institutions.

## Off-Campus Study

Students planning to study abroad should obtain information well in advance about the courses available at the institution they plan to attend and check with the department about selecting appropriate courses. It may be difficult to find courses abroad equivalent to our core upperlevel courses, or to our honors preparations, since curricula in other countries are often organized differently.

## Teacher Certification

Swarthmore offers teacher certification in mathematics through a program approved by the state of Pennsylvania and administered by the College's Educational Studies Department. For further information about the relevant set of requirements, please refer to the Educational Studies section of the Bulletin. One can obtain certification either through a Mathematics Major or through a Special Major in Mathematics and Education, in either case if taken with appropriate electives.

## Courses

Note 1: For courses numbered under 100, the ones digit indicates the subject matter, and the other digit indicates the level. In most cases, a ones digit of 1 or 2 means statistics, 3 to 6 means continuous mathematics, and 7 to 9 means noncontinuous mathematics (algebra, number theory, and discrete math). Courses below 10 do not count for the major, from 10 to 39 are first- and second-year courses, from 40 to 59 are intermediate, in the 60 s are core upper-level courses; from 70 to 89 are courses that have one or more core courses as prerequisites, and in the 90 s are independent reading courses.
Note 2: There are several sets of courses below where a student may not take more than one of
them for credit. For instance, see the descriptions of MATH 033, 034 and 035. In such cases, if a student does take more than one of them, each group is treated for the purpose of college regulations as if they have the same course number. See the Repeated Course Rule in section 8.2.4

## STAT 001. Statistical Thinking

Statistics provides methods for collecting and analyzing data and generalizing from their results. Statistics is used in a wide variety of fields, and this course provides an understanding of the role of statistics in these fields and in everyday life. It is intended for students who want an appreciation of statistics, including the ability to interpret and evaluate statistical claims critically but who do not imagine they will ever need to carry out statistical analyses themselves. (Those who may need to carry out statistical analyses should take STAT 011.) This course cannot be counted toward a major in mathematics, is not a prerequisite for any other course, and cannot be taken for credit after or simultaneously with any other statistics course, including AP Statistics and ECON 031.
Prerequisite: Four years of traditional high school mathematics (precalculus).
1 credit.
Each semester.
Fall 2011 and spring 2012. Wang.

## MATH 003. Introduction to Mathematical Thinking

Students will explore the world of mathematical ideas by sampling logic, number theory, geometry, infinity, topology, probability, and fractals, while we emphasize the thinking and problem-solving skills these ideas stimulate. Class meetings will involve presentation of new material; group work on problems and puzzles; and lively, maybe even passionate discussions about mathematics. This course is intended for students with little background in mathematics or those who may have struggled with math in the past. It is not open to students who already have received credit on their Swarthmore transcripts for mathematics, Advanced Placement credit included, or who concurrently are taking another mathematics course, or who have placed out of any Swarthmore mathematics course. (See "Placement Procedure" earlier.) Students planning to go on to calculus should consult with the instructor. This course does not count toward a major in mathematics.
Writing course.
1 credit.
Spring 2012. Staff.

## MATH 007. Elementary Topics in Mathematics in Applied Contexts

This course is offered occasionally and is interdisciplinary in nature. It provides an introduction to some area of mathematics in the context of its use in another discipline. In fall 2010 this was a course in biomathematics. 1 credit.
Not offered 2011-2012.

## STAT 011. Statistical Methods

STAT 011 prepares students to carry out basic statistical analyses with the aid of computer software. Topics include basic summary statistics and graphics, design of surveys and experiments, one and two-sample $t$-tests and tests of proportions, chi-square tests, and an introduction to linear regression and analysis of variance. The course is intended for students who want a practical introduction to statistical methods and who intend to do, or think they may eventually do, statistical analysis, especially in the biological and social sciences. Students who receive credit on entrance for the Statistics AP Exam should not take this course; they have placed out of it and will lose their AP credit if they take it. Note that STAT 011 overlaps considerably with ECON 031; both courses cover similar topics, although ECON 031 focuses more on economic applications while STAT 011 draws examples from a variety of disciplines.
Prerequisite: Four years of traditional high school mathematics (precalculus).
1 credit.
Each semester.
Fall 2011. Ross, Schofield.
Spring 2011. Schofield.

## MATH 015. Elementary Single-Variable Calculus

A first-semester calculus course with emphasis on an intuitive understanding of the concepts, methods, and applications. Graphical and symbolic methods will be used. The course will mostly cover differential calculus, with an introduction to integral calculus at the end. Applications to biological science and social science will receive special attention.
Prerequisite: Four years of traditional high school mathematics (precalculus) and placement into this course through Swarthmore's Math/Stat Readiness Examination or Calculus Placement Examination (see "Placement Procedure" section earlier).
1 credit.
Fall 2011. Grood, Mavinga.

## STAT 021. Elementary Topics in

 Statistics: Quantitative BiologyThis course will explore current areas of research in paleobiology and macroevolution. For instance, does evolutionary change generally occur gradually or in short bursts? How reliably does the fossil record preserve information about ecosystems? What factors make species more likely to go extinct? To answer these and other questions, paleobiologists use a range of statistical and mathematical techniques. We will emphasize conceptual understanding and applications of such quantitative methods, rather than their underlying theory or proofs. Class meetings will include a combination of lectures, discussion of journal articles, and conversations with leading paleontologists via Skype.
Prerequisite: Bio 2, or Stat 11 or equivalent. 1 credit.
Fall 2011. Wang.

## MATH 025. Further Topics in SingleVariable Calculus

The continuation of MATH 015, this course covers the fundamental theorem, integration, geometric series, Taylor polynomials and series, and an introduction to differential equations.
Prerequisites: MATH 015 or placement by examination (see "Advanced Placement and Credit Policy" section).
1 credit.
Each semester.
Fall 2011. Cook, McClendon. Spring 2011. Staff.

## MATH 026. Advanced Topics in SingleVariable Calculus

For students who place out of the first half of MATH 025. This course goes into more depth on sequences, series, and differential equations than does MATH 025 and includes power series and convergence tests. This course, or MATH 025 , is required of all students majoring in mathematics, physics, chemistry, or engineering. Students may not take MATH 026 for credit after MATH 025 without special permission.
Prerequisite: Placement by examination (see "Advanced Placement and Credit Policy" section).
1 credit.
Fall 2011. Hunter.

## MATH 027. Linear Algebra

This course covers systems of linear equations, matrices, vector spaces, linear transformations, determinants, and eigenvalues. Applications to other disciplines are presented. Students may
take only one of MATH 027 , MATH 028 , and MATH 028S for credit.
Prerequisite: A grade of C or better in some math course numbered 025 or higher or placement by examination (see "Advanced Placement and Credit Policy" section).
1 credit.
Each semester.
Fall 2011. Johnson, Treviño. Spring 2012. Staff.

MATH 028. Linear Algebra Honors Course
More theoretical, abstract, and rigorous than MATH 027. The subject matter will be equally as valuable in applied situations, but applications will be emphasized less. MATH 028 is intended for students with exceptionally strong mathematical skills, especially if they are thinking of a mathematics major. Students may take only one of MATH 027, MATH 028, and MATH 028S for credit.

Prerequisite: A grade of B or better in some math course numbered 025 or higher, or placement by examination, including both placement out of calculus and placement into this course via Part IV of Swarthmore's Calculus Placement Exam (see "Placement Procedure" section).
1 credit.
Fall 2011. Grood. Spring 2011. Staff

## MATH 028S. First-Year Seminar: Linear Algebra Honors Seminar

MATH 028S covers the same material as the lecture-based MATH 028 but uses a seminar format (maximum 12 students) with additional meetings. Hands-on student participation takes the place of most lectures. Students may take only one of MATH 027 , MATH 028 , and MATH 028S for credit.
Prerequisite: Placement by examination, including both placement out of calculus and placement into this course via Part IV of Swarthmore's Calculus Placement Exam (see "Placement Procedure" section).
1 credit.
Fall 2011. McClendon.

## MATH 029. Discrete Mathematics

An introduction to noncontinuous mathematics. The key theme is how induction, iteration, and recursion can help one discover, compute, and prove solutions to various problems-often problems of interest in computer science, social science, or management. Topics will include algorithms, graph theory, counting, difference equations, and finite probability with special emphasis on how to write mathematics. While it does not use any calculus, MATH 029 is a more
sophisticated course; thus, some calculus is a useful background in an indirect way.
Prerequisite: Strong knowledge of at least precalculus, as evidenced by taking another mathematics course numbered 15 or above, or through our placement examinations (see
"Placement Procedure" section). Familiarity with some computer language is helpful but not necessary.
Writing course.
1 credit.
Fall 2011. Bergstrand.

## STAT 031. Data Analysis and Visualization

This course will study methods for exploring and modeling relationships in data. We introduce modern techniques for visualizing trends and formulating hypotheses. We will also discuss methods for modeling structure and patterns in data, particularly using multiple regression and related methods. The format of the course emphasizes writing assignments and interactive problem solving using real datasets.
Statistics Prerequisites: Credit for AP Statistics, STAT 011, STAT 061, or ECON 031; or STAT 001 and permission of the instructor.
Computer Science Prerequisite: CPSC 021.
Writing course.
1 credit.
Spring 2012. Wang.

## MATH 033. Basic Several-Variable Calculus

This course considers differentiation and integration of functions of several variables with special emphasis on two and three dimensions. Topics include partial differentiation, extreme value problems, Lagrange multipliers, multiple integrals, line and surface integrals, Green's, Stokes', and Gauss' theorems. The department strongly recommends that students take MATH 034 instead, which is offered every semester and provides a richer understanding of this material by requiring linear algebra (MATH 027 or 028) as a prerequisite. Students may take only one of MATH 033, MATH 034, and MATH 035 for credit.
Prerequisite: MATH 025 , or 026 or placement by examination (see "Advanced Placement and Credit Policy" section). Students who have taken linear algebra at Swarthmore or elsewhere may not take MATH 033 without the instructor's permission.
1 credit.
Fall 2011. Cook.
MATH 034. Several-Variable Calculus
Same topics as MATH 033 except in more depth using the concepts of linear algebra. The
department strongly recommends that students take linear algebra first so that they are eligible for this course. Students may take only one of MATH 033, MATH 034, and MATH 035 for credit.
Prerequisite: MATH 025 , or 026 ; and MATH 027,028 , or 028 S .
1 credit.
Each semester.
Fall 2011. Shapiro. Spring 2012. Staff.

## MATH 035. Several-Variable Calculus Honors Course

This version of MATH 034 will be more theoretical, abstract, and rigorous than its standard counterpart. The subject matter will be equally as valuable in applied situations, but applications will be emphasized less. It is intended for students with exceptionally strong mathematical skills and primarily for those who have completed MATH 028 or 028 S successfully. Students may take only one of MATH 033, MATH 034, and MATH 035 for credit.
Prerequisite: A grade of C or better in MATH 028 or 028 S , or permission of the instructor, or in the fall for entering students who have placed out of linear algebra, permission of the departmental placement coordinator. 1 credit.
Fall 2011. Grinstead. Spring 2012. Staff.

## STAT 032. Topics in Statistics: Data Analysis Projects in Public and Social Policy

In spring 2011 this was a Community-Based Learning project course in data analysis. Students worked in teams on a semester-long data analysis problem. Projects were drawn from data from local organizations in order to attempt to answer questions of direct importance to them. A key objective of the course is to expose students to the variety of challenges faced by the data analyst. Topics may include multiple regression, analysis of variance, analysis of covariance, and other related methods. Students research the scientific background of their problem and consult with the local organizations from which their data came. Prerequisite: STAT 011, or permission of the instructor.
1 credit.
Not offered 2011-2012.

## MATH 043. Basic Differential Equations

This course emphasizes the standard techniques used to solve differential equations. It will cover the basic theory of the field with an eye toward practical applications. Standard topics include first-order equations, linear differential equations, series solutions, first-order systems
of equations, Laplace transforms, approximation methods, and some partial differential equations. Compare with MATH 044. Students may not take both MATH 043 and 044 for credit. The department prefers majors to take MATH 044.
Prerequisites: Several-variable calculus or permission of the instructor.
1 credit.
Spring 2012. Staff.

## MATH 044. Differential Equations

An introduction to differential equations that has a more theoretical flavor than MATH 043 and is intended for students who enjoy delving into the mathematics behind the techniques. Problems are considered from analytical, qualitative, and numerical viewpoints, with an emphasis on the formulation of differential equations and the interpretations of their solutions. This course does not place as strong an emphasis on solution techniques as MATH 043 and thus may not be as useful to the more applied student. Students may not take both MATH 043 and 044 for credit. The department prefers majors to take MATH 044.
Prerequisites: Linear algebra and severalvariable calculus or permission of the instructor.
1 credit.
Spring 2012. Staff.

## MATH 046. Theory of Computation

(See CPSC 046)
1 credit.
Spring 2012.

## MATH 053. Topics in Analysis

Course content varies from year to year depending on student and faculty interest. Recent topics have included financial mathematics, dynamical systems, and Fourier analysis. Prerequisites: Linear algebra and several-variable calculus.
1 credit.
Alternate years.
Not offered 2011-2012.

## MATH 054. Partial Differential Equations

The first part of the course consists of an introduction to linear partial differential equations of elliptic, parabolic, and hyperbolic type via the Laplace equation, the heat equation, and the wave equation. The second part of the course is an introduction to the calculus of variations. Additional topics depend on the interests of the students and instructor.
Prerequisites: Linear algebra, several-variable calculus, and either MATH 043, MATH 044, PHYS 050, or permission of the instructor.

1 credit.
Alternate years.
Spring 2012. Staff.

## MATH 055. Topics in Geometry

Course content varies from year to year. In recent years, the emphasis has been on introductory differential geometry. See also MATH 075.
Prerequisites: Linear algebra and severalvariable calculus or permission of the instructor.
1 credit.
Alternate years.
Not offered 2011-2012.

## MATH 056. Modeling

An introduction to the methods and attitudes of mathematical modeling. Because modeling in physical science and engineering is already taught in courses in those disciplines, applications in this course will be primarily to social and biological sciences. Various standard methods used in modeling will be introduced: differential equations, Markov chains, game theory, graph theory, and computer simulation. The emphasis, however, will be on how to apply these subjects to specific modeling problems, not on their systematic theory. The format of the course will include projects as well as lectures and problem sets.
Prerequisites: Linear algebra and severalvariable calculus or permission of the instructor.
1 credit.
Alternate years.
Fall 2011. Laverty.

## MATH 057. Topics in Algebra

Course content varies each year, depending on student and faculty interest. Recent offerings have included coding theory, groups and representations, finite reflection groups, and matrix theory. See also MATH 077.
Prerequisites: Linear algebra.
1 credit.
Alternate years.
Spring 2012. Staff.

## MATH 058. Number Theory

The theory of primes, divisibility concepts, and multiplicative number theory will be developed. Prerequisites: Linear algebra and severalvariable calculus or permission of the instructor.
1 credit.
Alternate years.
Not offered 2011-2012.

## MATH 059. Topics in Discrete Mathematics

Topics vary each year. Past topics have included combinatorial matrix theory, graph theory, combinatorial algorithms, number theoretic algorithms, and representation theory using combinatorial structures and techniques. . In 2011 the theme will be to study a small fraction of the problems of Paul Erdös. See also MATH 079Prerequisites: MATH 029 and at least one higher-numbered mathematics course. 1 credit.
Alternate years.
Fall 2011. Grinstead.
STAT 061. Probability and Mathematical Statistics I
This course introduces the mathematical theory of probability, including density functions and distribution functions, joint and marginal distributions, conditional probability, and expected value and variance. It then develops the theory of statistics, including parameter estimation and hypothesis testing. The emphasis is on proving results in mathematical statistics rather than on applying statistical methods. Students needing to learn applied statistics and data analysis should consider STAT 011 or 031 in addition to or instead of this course.
Prerequisites: MATH 033 or 034 or permission of the instructor.
1 credit.
Fall 2011. Everson, Schofield.
MATH 063. Introduction to Real Analysis
This course concentrates on the careful study of the principles underlying the calculus of real valued functions of real variables. Topics include continuity, compactness, connectedness, uniform convergence, differentiation, and integration. Required additional meetings.
Prerequisites: Linear algebra and severalvariable calculus or permission of the instructor.
Writing course.
1 credit.
Fall 2011. Johnson. Spring 2012. Staff

## MATH 067. Introduction to Modern

 AlgebraThis course is an introduction to abstract algebra and will survey basic algebraic systems-groups, rings, and fields. Although these concepts will be illustrated by concrete examples, the emphasis will be on abstract theorems, proofs, and rigorous mathematical reasoning. Required additional meetings.
Prerequisite: Linear algebra or permission of the instructor.

Writing course.
1 credit.
Fall 2011. Bergstrand, Shimamoto.

## MATH 069. Combinatorics

This course continues the study of noncontinuous mathematics begun in MATH 029. The topics covered include three broad areas: counting theory, graph theory, and design theory. The first area includes a study of generating functions and Polya counting. The second area is concerned with relations between certain graphical invariants. Topics such as extremal graph theory and Ramsey theory may be introduced. The third area introduces combinatorial structures such as matroids, codes, and Latin squares.
Prerequisites: MATH 029 and at least one other course in mathematics.
1 credit.
Alternate years.
Not offered 2011-2012.
MATH 073. Advanced Topics in Analysis An advanced version of MATH 053, sometimes offered instead, and requiring the core course in analysis. In Spring 2011, this is likely to be a course in Functional Analysis, given by a professor from Bryn Mawr College.
Prerequisites: Linear algebra and MATH 063. 1 credit.
Not offered 2011-2012.

## MATH 075. Advanced Topics in Geometry

An advanced version of MATH 055, sometimes given instead, and typically requiring MATH 063, 067, or both.
Prerequisites: See the instructor. 1 credit.
Not offered 2011-2012.

## MATH 077. Advanced Topics in Algebra

An advanced version of MATH 057, sometimes given instead, and requiring the core course in algebra.
Prerequisites: Linear algebra and MATH 067. 1 credit.
Spring 2012 (if offered). Staff.

## MATH 079. Advanced Topics in Discrete Mathematics

An advanced version of MATH 059 , sometimes offered instead of MATH 059.
Prerequisites: MATH 029 and 069.
1 credit.
Not offered 2011-2012.
MATH 093/STAT 093. Directed Reading
MATH 096/STAT 096. Thesis

## MATH 097. Senior Conference

This course is required of all senior mathematics majors in the Course Program and must be taken at Swarthmore. It provides an opportunity to delve more deeply into a particular topic agreed on by the student and the instructor. This focus is accomplished through a written paper and either an oral presentation or participation in a poster session.
0.5 credit.

Fall 2011. Talvacchia.

## Seminars

## MATH 101. Real Analysis II

This seminar is a continuation of Introduction to Real Analysis (MATH 063). Topics may include the inverse and implicit function theorems, differential forms, calculus on manifolds, and Lebesgue integration.
Prerequisite: MATH 063.
1 credit.
Spring 2012. Staff.

## MATH 102. Modern Algebra II

This seminar is a continuation of Introduction to Modern Algebra (MATH 067). Topics covered usually include field theory, Galois theory (including the insolvability of the quintic), the structure theorem for modules over principal ideal domains, and a theoretical development of linear algebra. Other topics may be studied depending on the interests of students and instructor.
Prerequisite: MATH 067.
1 credit.
Fall 2011. Shipiro. Spring 2012. Staff.

## MATH 103. Complex Analysis

A brief study of the geometry of complex numbers is followed by a detailed treatment of the Cauchy theory of analytic functions of a complex variable: integration and Cauchy's theorem, power series, residue calculus, conformal mapping, and harmonic functions. Various applications are given, and other topics-such as elliptic functions, analytic continuation, and the theory of Weierstrassmay be discussed.
Prerequisite: MATH 063.
1 credit.
Alternate years.
Fall 2011. Shimamoto.

## MATH 104. Topology

An introduction to point-set, combinatorial, and algebraic topology: topological spaces, classification of surfaces, the fundamental group, covering spaces, simplicial complexes, and homology (including related algebra). Prerequisites: MATH 063 and 067.

2 credits.
Alternate years.
Spring 2012. Hunter.

## MATH 105. Probability

Advanced topics in probability theory. Topics may include branching processes, card shuffling, the Central Limit Theorem, generating functions, the Laws of Large Numbers, Markov chains, optimal stopping theory, percolation, the Poisson process, renewal theory, and random walks.
Prerequisite: STAT 061.
1 credit.
Alternate years.
Not offered 2011-2012.

## MATH 106. Advanced Topics in Geometry

The course content varies from year to year among differential geometry, differential topology, and algebraic geometry. In 2011, the topic expected to be advanced differential geometry.
Prerequisites: MATH 055 and 063 or permission of the instructor.
1 credit.
Alternate years.
Not offered 2011-2012.

## STAT 111. Mathematical Statistics II

This seminar is a continuation of STAT 061. It deals mainly with statistical models for the relationships between variables. The general linear model, which includes regression, variance, and covariance analysis, is examined in detail. Topics may also include nonparametric statistics, sampling theory, and Bayesian statistical inference.
Prerequisites: Linear algebra and a grade of $\mathrm{C}+$ or better in STAT 061; CPSC 021.
1 credit.
Spring 2012. Ross.

Coordinator: CRAIG WILLIAMSON (English Literature)<br>Committee: Tariq al-Jamil (Religion)<br>Stephen P. Bensch (History)<br>Michael W. Cothren (Art History)<br>Steven Hopkins (Religion)<br>Michael Marissen (Music)<br>Rosaria V. Munson (Classics)<br>Ellen M. Ross (Religion) ${ }^{2}$<br>William Turpin (Classics)

${ }^{2}$ Absent on leave, spring 2012.

Swarthmore's Medieval Studies Program offers students the opportunity to study in an interdisciplinary and cross-cultural fashion a variety of often interrelated medieval civilizations-European, Mediterranean, Middle Eastern, Islamic, South and West Asian-from the 4th to the 15th centuries. The program draws upon a variety of critical and cross-disciplinary approaches to explore medieval cultures, their distinctive qualities and historical connections, their material and spiritual productions, their artistic creations, and their relation to earlier and later cultures.
The heart of the Medieval Studies Program is its interdisciplinary approach. The faculty and students in this program believe that the medieval period, its history, languages and literatures, art and architecture, religion and philosophy, music and meaning, are best studied from a variety of critical perspectives in which discipline and dialogue go hand in hand, where each person's knowledge is tested and expanded by another's approach, and where we come together in the words of Chaucer's Clerk to "gladly lerne and gladly teche."

## The Academic Program

Students may major or minor in medieval studies in either the Course or Honors Program. Students must take work in a variety of medieval subjects to be drawn from art history, history, literature, music, religion, and philosophy. Majors often do research abroad on college-sponsored fellowships during the summer of their junior year and then write a thesis which they present as seniors to an interdisciplinary Medieval Studies Committee or a panel of honors examiners.

## Requirements

All students who major or minor in medieval studies, either in honors or course, must fulfill the program's distribution requirements by taking medieval courses from the following distribution areas: 1 . art history 2 . history 3 . literature (English, classics, etc.) 4. music 5. religion or philosophy. The list of Swarthmore
medieval studies courses as well as medieval courses at Bryn Mawr and Haverford is regularly updated on the program website.

## Course Major

Course majors must take at least 8 credits in medieval subjects, including at least one medieval course in four of the five distribution areas (must include history), and pass a senior comprehensive which includes a written and oral exam given by the student's instructors in her or his medieval courses. These examinations are intended to be a culminating exercise to facilitate the review and integration of the various subjects and methods involved in the interdisciplinary field of medieval studies.

## Honors Major

Honors majors must take at least one medieval course in four of the five distribution areas (must include history). The Honors Program itself will include four double-credit preparations in medieval subjects which reflect the interdisciplinary nature of the major and must include work in at least three of the distribution areas. The preparations may be constituted by some combination of the following: seminars, preapproved two-course combinations, courses with attachments, or a thesis. Senior Honors Study for honors majors in medieval studies will follow the policies of the individual departmental preparations used in the program. Honors majors will have a 90 - to 120 -minute oral panel examination with all four examiners present. These examinations are intended to be a culminating exercise to facilitate the review and integration of the various subjects and methods involved in the interdisciplinary field of medieval studies. Honors major normally do not have a separate minor as part of their Medieval Studies Honors Program, but they may apply one of their four honors preparations toward an honors minor. In such a case, a student must fulfill all the requirements set by the relevant department or program of that honors minor.

## Course Minor

Course minors must take 5 credits in medieval subjects in at least three distribution areas. Only one of these credits can also be in the department of the student's major.

## Honors Minor

Honors minors must take 5 credits in medieval subjects in at least three distribution areas. The honors preparation in a medieval subject should reflect the interdisciplinary nature of the minor and may be satisfied by one of the following: a seminar, a preapproved two-course combination, a course with an attachment, or in special cases a thesis. The minor preparation must be in a department distinct from the student's major. Senior Honors Study and written and oral honors exams will follow the pattern of the department in which the preparation is offered.
Courses and seminars in the various departments which are counted as medieval studies courses are listed in the College Catalog and online. Students may also take medieval courses at Bryn Mawr or Haverford as part of their program.

## Courses

The following medieval studies courses are currently offered at Swarthmore. Majors and minors are also allowed to include medieval courses from Bryn Mawr, Haverford, and the University of Pennsylvania in their curriculum. ARTH 014. Medieval Survey ARTH 045. Gothic Art and Architecture
CLAS 060. Dante's Divine Comedy
ENGL 010. Survey I: Beowulf to Milton
ENGL 014. (LING 014). Old English/History of the Language
ENGL 016. Chaucer
ENGL 019. Chaucer and Shakespeare
ENGL 046. Tolkien and Pullman and Their Literary Roots
HIST 001A. The Barbarian North
HIST 001T. Cross and Crescent: Muslim-
Christian Relations in Historical Perspective
HIST 002A. Medieval Europe
HIST 006A. The Formation of the Islamic Near East
HIST 012. Chivalric Society: Knights, Ladies, and Peasants
HIST 014. Friars, Heretics, and Female Mystics: Religious Turmoil in the Middle Ages
HIST 015. Medieval Towns
HIST 016. Sex, Sin, and Kin in Early Europe
LATN 014. Medieval Latin
MUSI 020. Medieval and Renaissance Music

MUSI 047. Fetter Chamber Music Program (in which one can focus on medieval repertory) RELG 008B. The Qur'an and Its Interpreters RELG 011B. The Religion of Islam: The Islamic Humanities
RELG 014B. Christian Life and Thought in the Middle Ages
RELG 020B. Prophets and Visionaries: Christian Mysticism Through the Ages
RELG 030B. The Power of Images: Icons and Iconoclasts
RELG 031B. Religion and Literature: From the Song of Songs to the Hindu Saints
RELG 053. Gender, Sexuality and the Body in Islam
MDST 096. Thesis
MDST 180. Senior Honors Thesis

## Seminars

ARTH 147. Visual Narrative in Medieval Art
ENGL 102. Chaucer and Medieval Literature
HIST 111. Medieval Mediterranean
RELG 100. Holy War, Martyrdom, and Suicide in Christianity, Judaism, and Islam
RELG 108. Poets, Saints, and Storytellers: The Poetry and Poetics of Devotion in South Asian Religions
RELG 114. Love and Religion
RELG 119. Islamic Law and Society
RELG 127. Heresy and Secrecy

SIBELAN FORRESTER, Professor and Chair ELEONORE BAGINSKI, Administrative Coordinator CASSY BURNETT, Administrative Assistant

## Arabic

AMAN ATTIEH, Assistant Professor
BRAHIM EL GUABLI, Lecturer
Chinese
ALAN BERKOWITZ, Professor ${ }^{2}$
HAILI KONG, Professor
LALA ZUO, Assistant Professor
WOL A. KANG, Lecturer
JYUN-HONG LU, Lecturer
KIRSTEN E. SPEIDEL, Lecturer
French
JEAN-VINCENT BLANCHARD, Associate Professor ${ }^{9}$ MICHELINE RICE-MAXIMIN, Associate Professor ${ }^{11}$
CARINA YERVASI, Associate Professor
ALEXANDRA GUEYDAN, Assistant Professor ${ }^{3}$
ANTONIA LUNGHI, Visiting Lecturer
CAROLE NETTER, Lecturer
German Studies
HANSJAKOB WERLEN, Professor
SUNKA SIMON, Associate Professor
CHRISTOPHER SCHNADER, Lecturer

## Japanese

WILLIAM O. GARDNER, Associate Professor ${ }^{1}$
JASON HERLANDS, Visiting Assistant Professor
YOSHIKO JO, Lecturer
ATSUKO SUDA, Lecturer
Russian
SIBELAN FORRESTER, Professor and Chair
BRIAN JOHNSON, Visiting Assistant Professor
MARINA ROJAVIN, Visiting Assistant Professor
BEATA ANNA MOSKALA-GALLAHER, Lecturer
Spanish
MARÍA LUISA GUARDIOLA, Professor
AURORA CAMACHO DE SCHMIDT, Associate Professor ${ }^{1}$
LUCIANO MARTÍNEZ, Assistant Professor
OLGA SENDRA FERRER, Visiting Instructor
ELENA VALDEZ, Visiting Instructor
JULIA CHINDEMI VILA, Lecturer
PATRICIA VARGAS, Lecturer
Language Resource Center
MICHAEL JONES, Language Resource Center Director JOHN WORD, Language Resource Center Technologist

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## The Academic Program

Our courses balance traditional objects of study with emerging interdisciplinary projects on topics such as urban modernity, gender and sexuality, and media representations and manipulations of cultural values. Our curriculum engages the classics of world literature while also adapting to reflect the latest redefinitions and debates occurring within the Humanities. The linguistic knowledge students acquire in our courses enables them to speak and write confidently about texts and contexts, to go abroad and encounter the world and its residents in very different, more informed and meaningful ways.
Along with demonstrated competence in the language, a foreign literature major will normally complete a minimum of 8 credits in courses in advanced language, literature, or culture, and a culminating exercise such as a thesis, an oral or written comprehensive examination, or honors examinations. Depending on the program, one or more courses for the major may be taken in English. The department encourages interdisciplinary approaches and pertinent special majors. Students interested in more than one literature are encouraged to consider a major in comparative literature. Students with strong interest in learning languages and their mechanics should also take note of the related major in Linguistics and Languages. The department collaborates with educational studies to help students who wish to get teacher certification.

## The Language Requirement

To receive the degree of Bachelor of Arts or Bachelor of Science, candidates must fulfill a foreign language requirement. The foreign language requirement can be fulfilled by:
(a) Successfully studying 3 years or the "block" equivalent of a single foreign language in grades 9 through 12 (work done before grade 9 cannot be counted, regardless of the course level);
(b) Achieving a score of 600 or better on a standard achievement test of a foreign language;
(c) Passing either the final term of a collegelevel, yearlong, introductory foreign language course or a semester-long intermediate foreign language course; or
(d) Learning English as a foreign language while remaining demonstrably proficient in another.
If you have fulfilled your language requirement, the department encourages you to use your time at Swarthmore to become truly proficient in that language, or to discover a new one.

Students whose placement recommendation is above the language sequence should consider taking introductory and/or advanced courses, many of which fulfill the College's writing requirement.

## Placement Tests

The Modern Languages and Literatures Department offers placement tests so as to appropriately position students in language classes when they arrive on campus. New students who have previously studied or have fluency in a language offered at Swarthmore should plan to take a placement test either online (French, German, and Spanish), during orientation week/the start of classes (Arabic, Chinese, and Japanese), or to meet with the section head (Russian). Students who have French/German/Spanish AP/IB are also required to take the online placement test. Upper-class students interested in taking placement test should contact Michael Jones in the Language Resource Center for information and instructions (mjones1, 610.328.8036).
For French only, first-year students with a 531 or higher on their online French placement test are required to take the written literature/culture essay placement test during orientation week to be correctly placed in a French class.
Note: Placement Tests are not a substitute for an official standard achievement test of a foreign language (such as the College Board exam or the International Baccalaureate). Therefore, they do not serve as proof of achievement for the purpose of fulfilling the language requirement. These tests are only intended to assist instructors in placing students in the appropriate Swarthmore course.
For additional information on placement visit each program's website.

## Advanced Placement and International Baccalaureate Credit

The department will grant 1 credit for incoming students who achieved a score of 4 or 5 on Advanced Placement Chinese, French, German, Japanese, Russian or Spanish examinations once they have successfully completed a onecredit course in that language at the College.
The department will grant 1 credit for incoming students who have achieved a score of 6 or 7 in a foreign language on the International Baccalaureate once they have successfully completed a 1-credit course in that language at the College.
Students who took an AP or IB exam should consult the department administrative coordinator, Eleonore Baginski (ebagins1) for more information.

Note: Students with French/German/Spanish AP-IB scores are nonetheless required to take the online placement test.

## Explanatory Note On First- And Second-Year Language Courses

Courses numbered 001-002, 003, and, in some languages also 004 , carry 1.5 credits per semester. Four semesters in this sequence are equivalent to two or sometimes more years of work at the college level.
These courses encourage development of communicative proficiency through an interactive task-based approach, and provide students with an active and rewarding learning experience as they strengthen their language skills and develop their cultural competency: These courses meet alternately as sections for grammar presentation and small groups for oral practice and may also require work in regular scheduled tutorials or in the Language Resource Center.
Students who start in the 001-002 sequence must complete 002 to receive credit for 001 . However, students placing directly in 002 can receive 1.5 semester credits for that course. Please note that students must register for both parts of the course in the 001-004 sequence.

## Teacher Certification

We offer teacher certification in modern languages (French, German, and Spanish) through a program approved by the state of Pennsylvania. For further information about the relevant requirements, please refer to the Educational Studies section of the College Bulletin or see the Educational Studies Department website:
www.swarthmore.edu/educationalstudies.xml.

## Explanatory Note Of Foreign Language Teaching And Pedagogy Courses

 The Foreign Language Teaching and Pedagogy program is a service-learning program designed to give Swarthmore students practice teaching in their target language by offering early foreign language education to school age children. Swarthmore students teach their foreign languages to local elementary school students in an after-school program that meets two times per week for six weeks. Swarthmore students study foreign language acquisition and prepare goal-oriented lesson plans in the pedagogy session that meets over the course of the semester and concurrently with the service (teaching) component of the program. The program brings Swarthmore students into the classroom as language teachers, gives them tools to identify educational goals for language learning, and offers support for the creation of lesson plans. The goal of the program at theelementary school is to help young children expand their comprehension of the world around them and bring them to a closer understanding and acceptance of cultures other than their own. This course is required for K-12 certification in Foreign Languages for majors in Educational Studies. Prerequisites for this course are native fluency or the equivalent of fourth-semester language competencies in one of the seven languages offered in MLL. Courses are listed under the teaching target language. See ARAB 013A, CHIN 013A, FREN 024, GMST 024, JPNS 014A, RUSS 012A, and SPAN 024, which are cross-listed with EDUC 072 . Each course carries 0.5 credits per semester.

## Off-Campus Study

Students on financial aid may apply that aid to designated programs of study abroad.
Study abroad is particularly encouraged for students of Arabic; academic credit (full or partial) is generally approved for participation in programs of varying duration in different Arab countries that are recommended by the Arabic section. These include but are not limited to universities and programs in Egypt, Jordan, Lebanon, Morocco, Oman, Syria, Tunisia, and Yemen.
Study abroad is particularly encouraged for students of Chinese; academic credit (full or partial) is generally approved for participation in several programs of varying duration in the People's Republic of China and in Taiwan, recommended by the Chinese section. In the People's Republic these include, but are not limited to, the Inter-University Program (IUP) Program at Tsing-hua University, the Associated Colleges in China (ACC) Program, the CET Program in Harbin and the Middlebury program in Kunming. In Taiwan, these include the International Chinese Language Program (ICLP), the Mandarin Training Center in Taipei and the Chinese Language Center, National Cheng Kung University in Taiwan.
All French/Francophone studies majors and minors are required to complete a study abroad program in a French-speaking country. Linguistically qualified students of French are encouraged to apply to the Swarthmore Program in Grenoble at the University of Grenoble, for one or two semesters in the sophomore or junior year. This program is particularly suited for majors in the humanities and the social sciences.
Students of German studies are strongly encouraged to spend at least a semester in a German-speaking country. There are several excellent opportunities to participate in an approved program, such as the Columbia

Consortium Program in Berlin, the Macalester College German Study Program in Berlin/Vienna, or the Dickinson college program in Bremen. Students should consider going abroad in the spring semester. This will enable them to participate fully in the semester schedule of German and Austrian Universities.
Students of Japanese are strongly encouraged to participate in study abroad programs. Swarthmore College participates in a regular exchange program with Tokyo University (the AIKOM program), and the Japanese Section has prepared a carefully selected list of other recommended programs in Kyoto, Nagoya, and elsewhere. Students interested in study abroad should consult with the head of the Japanese Section for more information.
Students in Russian are strongly encouraged to spend at least one semester in the A.C.T.R., C.I.E.E., or Middlebury programs or at the Smolny Institute through Bard College, among others in Russia.
All Spanish majors and minors are required to complete a study abroad program in a Spanishspeaking country. Swarthmore College offers students interested in studying abroad several programs listed in the Spanish website www.swarthmore.edu/x20060.xml. To ensure full immersion, all courses taken abroad must be taken in Spanish. We strongly suggest that majors and minors as well as non-specialists meet with a Spanish faculty member to discuss the possibilities and find the program that best suits their academic needs and interests.
Students who plan to do graduate work are reminded that, in addition to the language of specialization, a reading knowledge of other languages is often required for admission to advanced studies.
The department also certifies credit for offcampus study of languages that are not taught at Swarthmore, such as Catalan, Farsi, Hungarian, Italian, Polish, Twi, and so on.

## Literatures in Translation

Students who are already proficient in a particular foreign language are urged to select an appropriate literature/culture course taught in the original language. LITR courses provide students with the opportunity to study cultural material that they cannot read in the original and often to study literature in a comparative context.
In many language programs, these courses cannot be substituted for the introductory course sequence between 010 and 020 to satisfy departmental prerequisites for a major or minor in the original languages, but many of these courses can satisfy the 8 credit requirement of a foreign literature/studies major as each section specifies.

LITR 009CH. First-Year Seminar: Heaven, Earth, and Man: Ways of Thought in Traditional Chinese Culture (Cross-listed as CHIN 009)
This introductory course explores the most influential currents of thought and culture in traditional China, through directed readings and discussions of original sources in translation. No prerequisites and no knowledge of Chinese or of China are required.
1 credit.
Fall 2013. Berkowitz.

## LITR 013R. The Russian Novel

(Cross-listed as RUSS 013)
The Russian novel represents one of Russia's most fundamental and enduring contributions to world culture. This course surveys the development of the Russian novel from the early 19th century to the Soviet period by examining seminal works, including novels by Dostoevsky, Tolstoy and Bulgakov. The course examines these works in terms of their literary, social and political context, highlighting issues such as sexism, racism, Orientalism, terrorism, and imperialism, as well as Russia's national identity.
Writing course.
1 credit.
Fall 2011. Johnson.
LITR 015G. First-Year Seminar: Between Appetite and Aesthetics: A Cultural History of Food
This course examines literary and other texts, works of visual art, and films that focus on food and taste in their gustatory and metaphoricalsymbolic representations. Topics discussed are food and knowledge, the physiology/metaphor of taste, food and memory, eroticism and food ("eye candy," oral pleasures), food/religion, anthropophagy/communion, production/ consumption, and hospitality/sacrifice. The reading list includes, among others, Walter Benjamin, Georg Simmel, Marcel Proust, Franz Kafka, Vladimir Nabokov, Sigmund Freud, Claude Levi-Strauss, Stanley Ellin, F.T. Marinetti, Roland Barthes, Elias Canetti, Emile Zola, and Tanja Blixen.
1 credit.
Not offered 2011-2012.

## LITR 015R. First-Year Seminar: East European Prose in Translation

(Cross-listed as RUSS 015)
Novels and stories by the most prominent 20thcentury writers of this multifaceted and turbulent region. Analysis of individual works and writers with the purpose of appreciating the religious, linguistic, and historical diversity of Eastern Europe in an era of war, revolution,
political dissent, and outstanding cultural and intellectual achievement. Readings, lectures, writing and discussion in English; qualified students may do some readings in the original language(s).
Writing course.
1 credit.
Fall 2011. Forrester.

## LITR 015S. First-Year Seminar: Children in Latin American Literature

Is the child narrator a privileged storyteller? How does literature represent transforming events, the separation and death of loved ones, war, displacement, or joy through the voice of a child? What are a child's narrative strategies? Because boys and girls do not generally write to publish, what is the role of an adult memory in reconstructing a textual childhood? The course includes masterful Latin American and Latino works of fiction and autobiography, complemented by poetry, film and essays.
Eligible for LASC credit.
1 credit.
Spring 2012. Camacho de Schmidt.

## LITR 016CH. Substance, Shadow, and Spirit in Chinese Literature and Culture (Cross-listed as CHIN 016)

This course will explore the literary and intellectual world of traditional Chinese culture, through original writings in English translation, including both poetry and prose. Topics to be discussed include Taoism, Confucianism, and the contouring of Chinese culture; immortality, wine, and allaying the mundane; and the religious dimension, disengagement, and the appreciation of the natural world. The course also will address cultural and literary formulations of conduct and persona and the expression of individualism in an authoritarian society.
1 credit.
Fall 2012. Berkowitz.

## LITR 017J. First-Year Seminar: The World of Japanese Drama

(Cross-listed as JPNS 017 and THEA 017)
This first-year seminar will explore the unique dramatic traditions of Japan from diverse angles, including a study of dramatic texts, videos of performance, and films based on famous dramatic works. Our seminar will focus on the three great dramatic traditions of Noh masked drama, Bunraku puppet theater, and Kabuki. We will also examine the cultural background of these dramatic forms, including the influence of Buddhism, Shintô, and shamanism, as well as the philosophical background and methodology of training and performance.

1 credit.
Not offered 2011-2012.

## LITR 017R. First-Year Seminar: Love and

 Sex in Russian Literature(Cross-listed as RUSS 017)
Best known for political priorities and philosophical depth, Russian literature has also devoted many works to the eternal concern of love and sex. We will read significant and provocative works from traditional folk tales through the 20th century to discuss their construction of these most "natural" impulsesand how they imagine the relationship of human attraction to art, politics and philosophy. Writing course.
1 credit.
Spring 2012. Forrester.

## LITR 020A. Arab Literature in Its Cultural Context

This course presents an overview of the development of literature in the Arabic language, from the pre-Islamic period and early Muslim writings through the flowering of AlAndaluz, the Nahda that followed the Ottoman period, and the rise of new Arab states to the brilliant creativity of contemporary novelists. The course is taught in English translation, though students with sufficient skills in Arabic are welcome to do some or all of the reading in the original. Eligible for Islamic Studies. 1 credit.
Spring 2012. Staff.

## LITR 020G. Expressions of Infinite Longing: German Romanticism and its Discontents

In this course, we will first read works by the young Goethe that demonstrate a radical reshaping of subjectivity in the later part of the 18th century. This modern subjectivity is at the center of writings by early German romantics, texts that mark the beginning of a revolutionary period in German literature whose critical recastings of aesthetic, philosophical, and social questions are still echoed in modern literary criticism. After the failed enlightenment view of history as human progress, the search for novel poetic representations created a new mythology intended to fuse "poetry and prose, originality and criticism, the poetry of art and the poetry of nature" (F. Schlegel). The second part of the course will focus on writers struggling with the failures of that promise and the disenchantment of the romantic world. Authors read include Friedrich Schlegel, Johann Ludwig Tieck, Novalis, Friedrich Hölderlin, Heinrich von Kleist, E.T.A. Hoffmann, and Wilhelm Müller. In English.

1 credit.
Not offered 2011-2012.

## LITR 021J. Modern Japanese Literature

 (Cross-listed as JPNS 021)An introduction to Japanese fiction from the Meiji Restoration (1868) to the present day, focusing on how literature has been used to express the personal voice and to shape and critique the concept of the modern individual. We will discuss the development of the mode of personal narrative known as the "I novel" as well as those authors and works that challenge this literary mode. In addition, we will explore how the personal voice in literature is interwoven with the great intellectual and historical movements of modern times, including Japan's encounter with the West and rapid modernization, the rise of Japanese imperialism and militarism, World War II and its aftermath, the emergence of an affluent consumer society in the postwar period, and the impact of global popular culture and the horizon of new transnational identities in the 21 st century. All readings and discussions will be in English.
1 credit.
Not offered 2011-2012.

## LITR 021R. Dostoevsky (in Translation)

(Cross-listed as RUSS 021)
Writer, gambler, publicist, and visionary Fedor Dostoevsky is one of the great writers of the modern age. His work inspired Nietzsche, Freud, Woolf, and others and continues to exert a profound influence on thought in our own society to the present. Dostoevsky confronts the "accursed questions" of truth, justice, and free will set against the darkest examples of human suffering: murder, suicide, poverty, addiction, and obsession. Students will consider artistic, philosophical, and social questions through texts from throughout Dostoevsky's career. Students with knowledge of Russian may read some or all of the works in the original.
1 credit.
Spring 2012. Johnson.

## LITR 022G. Food Revolutions: History, Politics, Culture

Behind our current unsustainable system of industrialized food production lies a long history of technical and market innovations, political exigencies, and shifts in consumer culture. In our class, we will focus on key moments that set this chain of events in motion, including: the French revolution, Napoleon's food requirements for LaGrande Armée, slavery and colonial food production, nutritional welfare for the emerging proletariat, technological breakthroughs (canning, freezing), the homogeneization of taste, and the
convergence of military and agricultural production methods (mechanization of scale) after WWII. As the social and environmental costs of a commodified food system become evident, a great number of resistance centers to these exploitative practices have emerged, especially in the Global South. We will discuss the social, ethical, and ecological aspects of these movements, and reflect on possibilities of our own involvement in this important "food fight."
Eligible for ENVS credit.
1 credit.
Not offered 2011-2012.
LITR 023CH. Modern Chinese Literature: A New Novelistic Discourse (1918-1948) (Cross-listed as CHIN 023)
Modern Chinese literary texts created between 1918 and 1948, presenting a series of political, social, cultural, and ideological dilemmas underlying 20th-century Chinese history. The class will discuss fundamental issues of modernity and new literary developments under the impact of the May Fourth Movement. No previous preparation in Chinese required. All texts are in English translation, and the class is conducted in English.
1 credit.
Fall 2011. Kong.

## LITR 024J. Japanese Film and

 Animation(Cross-listed as JPNS 024/FMST 057)
This course offers a historical and thematic introduction to Japanese cinema, one of the world's great film traditions. Our discussions will center on the historical context of Japanese film, including how films address issues of modernity, gender, and national identity. Through our readings, discussion, and writing, we will explore various approaches to film analysis, with the goal of developing a deeper understanding of formal and thematic issues. A separate unit will consider the postwar development of Japanese animation (anime) and its special characteristics. Screenings will include films by Ozu, Mizoguchi, Kurosawa, Imamura, Kitano, and Miyazaki.
1 credit.
Spring 2012. Gardner.

## LITR 026J. Masculinities in Japanese Film and Fiction

(Cross-listed as JPNS 026)
Macho or pansy? Boyish or manly? In this course, we will consider representations of masculine gender and sexuality in works of modern Japanese fiction and film. We will consider historical and cultural constructions of masculinity in various guises, whether
normative, transgressive, or gratuitously extreme. Topics will include adolescence, romance, success, masochism, incest, prostitution, violence, class background, homosociality, and repression, among others. 1 credit.
Fall 2011. Herlands.

## LITR 026R. Russian and East European Science Fiction

(Cross-listed as RUSS 026)
Science fiction enjoyed surprisingly high status in Russia and Eastern Europe, attracting such prominent mainstream writers as Karel Čapek, Mikhail Bulgakov, and Evgenii Zamiatin. In the post-Stalinist years of stagnation, science fiction provided a refuge from stultifying official Socialist Realism for authors like Stanisław Lem and the Strugatsky brothers. This course will concentrate on 20th-century science fiction (translated from Czech, Polish, Russian and Serbian) with a glance at earlier influences and attention to more recent works, as well as to Western parallels and contrasts. 1 credit.
Next offered 2012-2013.

## LITR 028R. Tolstoy

(Cross-listed as RUSS 028)
Novelist, Christian philosopher, pacifist, and educator, Leo Tolstoy's monumental thought inspired communities of "Tolstoyans" and influenced Gandhi, Martin Luther King, Jr., and Nelson Mandela. Tolstoy's treatment of moral and historical issues in literature continues to inspire and provoke readers today. This course will examine Tolstoy's major novels (War and Peace, Anna Karenina), along with earlier and later works, and explore his context in the culture, literature, and history of the time. 1 credit.
Not offered 2011-2012.

## LITR 029. Sign Language Literature and Folklore

(See LING 029)
1 credit.
Spring 2012. Sutton-Spence.

## LITR 033R. Terror in Russia: Method, Madness, and Murder <br> (Cross-listed as RUSS 033)

In the 19th century, the Russian Empire saw a rise of political terrorism sponsored by leftist and anarchist political factions plus a new legal system with juries likely to acquit. After a central role in the 1917 Revolution, political terror underwent further transformation in the 20th century, turned against Soviet citizens under Stalin and erupting on both sides of the
ongoing conflict in Chechnya. Poetry, prose, film, and journalism.
1 credit.
Fall 2011. Rojavin.

## LITR 040R. Bulgakov

(Cross-listed as RUSS 040)
Doctor, dramatist, and dissident, Mikhail Bulgakov is one of the most significant authors of the Soviet period. His writings embody scrupulous honesty; recognition of moral complexity; deeply thoughtful awareness of political, religious, and philosophical traditions; and the life-affirming force of humor. In addition to his masterpiece Master and Margarita, we will study his short stories and dramatic works, and explore his oeuvre in the context of Soviet society. 1 credit.
Not offered 2011-2012.

## LITR 041J. Fantastic Spaces in Modern

 Japanese Literature (Cross-listed as JPNS 041)As Japanese society has transferred rapidly in the 20th century and beyond, a number of authors have turned to the fantastic to explore the pathways of cultural memory, the vicissitudes of interpersonal relationships, the limits of mind and body, and the nature of storytelling itself. In this course, we will consider the use of anti-realistic writing genres in Japanese literature from 1900 to the present, combining readings of novels and short stories with related critical and theoretical texts. Fictional works examined will include novels, supernatural tales, science fiction, and cyberfiction by authors such as Tanizaki Junichirô, Abe Kôbô, Kurahasi Yumiko, and Murakami Haruki.
Writing course.
1 credit.
Not offered 2011-2012.

## LITR 045A. Contemporary Thought in the Arab World

(Cross-listed as ARAB 045)
This survey course will trace some of the main themes, problems and issues debated among Arab thinkers and intellectuals since the latter part of the 19th century. The course will start with the 19th century but emphasize discussions following the military defeat of 1967 and the ensuing cultural and political crisis. Within this discussions related to "turath" (Islamic tradition or heritage), the different strategies of its reading and interpretation, and the possibilities of using these readings of Islam to confront the contemporary challenges of a globalized world will be the center of attention in the course.

Readings for the course will comprise three types of texts: historical and social background, translations of texts by the different thinkers under discussion, and articles and essays that interpret and critique these thinkers.
Eligible for ISLM credit.
1 credit.
Not offered 2011-2012.
LITR 045R. Poetry in Translation/Translating Poetry
(Cross-listed as RUSS 045)
This course will study the history, practice, and politics of poetic translation from antiquity to the present, including work from Arabic, Chinese, French, German, Greek, Hebrew, Irish, Japanese, Latin, Polish, Russian, Sanskrit, and Spanish. The course has a strong practical component: All students will work on translations of their own throughout the semester (from languages they know or with native speakers or literal versions), and the final project may include a portfolio of translations. Especially suitable for students interested in comparative literature.
1 credit.
Not offered 2011-2012.

## LITR 047J. Japanese Food Cultures

 (Cross-listed as JPNS 047J)Many people first encounter Japan through its cuisine, but few know the history or logistics behind how that piece of California roll landed at the end of their chopsticks. This course approaches the connection between food and Japanese culture from a multidisciplinary standpoint. We will consider the role of food in constructing national, ethnic, regional, classconscious, and gendered bodies and identities across Japan's history. We will interrogate representations of food in literary and visual arts. We will look at the ways in which food and its representations are produced, marketed, and circulated on both domestic and international levels. And we will not neglect to highlight the sensual pleasures-and concomitant dangers-of relationships defined by our appetites.
1 credit.
Spring 2012. Herlands.

## LITR 047R. Russian Fairy Tales

(Cross-listed as RUSS 047)
Folk beliefs are a colorful and enduring part of Russian culture. This course introduces a wide selection of Russian fairy tales in their esthetic, historical, social, and psychological context.
We will trace the continuing influence of fairy tales and folk beliefs in literature, music, visual arts, and film. The course also provides a general introduction to study and interpretation
of folklore and fairy tales, approaching Russian tales against the background of the Western fairy-tale tradition (the Grimms, Perrault, Disney, etc.).
No fluency in Russian is required, although students with adequate language preparation may do some reading, or a course attachment, in the original.
1 credit.
Spring 2012. Johnson.

## LITR 051G. European Cinema

(Cross-listed as FMST 051)
The course introduces post-war directors (Bergman and Fellini), British and French New Waves, Eastern European Cinema (Tarkovsky, Wajda), Post-New Wave Italian auteurs, Spanish cinema after Franco (Erice, Saura, Almodovar), New German cinema (Fassbinder, Herzog, Wenders), British cinema after 1970 (Roeg, Leigh, Loach, Greenaway) and Danish Cinema: Dogme 95 and others. The course addresses key issues and concepts in European cinema such as realism, authorship, art cinema, and political modernism, with reference to significant films and filmmakers and in the context of historical, social, and cultural issues. 1 credit.
Not offered 2011-2012.

## LITR 051J. Japanese Poetry and Poetics

 (Cross-listed as JPNS 051)Japanese poetic forms such as haiku, renga, and tanka have had a great impact on modern poetry across the world, and have played a central role in the development of Japanese literature and aesthetics. This course will examine Japanese poetry from its roots in ancient oral tradition though the internet age. Topics include the role of poetry in courtship, communication, religion, and ritual; orality and the graphic tradition; the influence of poetic models from China and the West; social networks and game aesthetics in renga linked poetry; and haiku as a worldwide poetic form. Course projects will include translation and composition in addition to analytical writing. Readings will be in English, and there are no language requirements or other prerequisites; however, the course will include a close examination of Japanese poetic sound, syntax, meter, and diction, or how the poems "work" in the original language.
1 credit.
Not offered 2011-2012.

## LITR 054G. German Cinema

(Cross-listed as GMST 054/FMST 054)
This course is an introduction to German cinema from its inception in the 1890s until the present. It includes an examination of early exhibition forms, expressionist and avant-garde
films from the classic German cinema of the Weimar era, fascist cinema, postwar rubble films, DEFA films from East Germany, New German Cinema from the 1970s, and post 1989 heritage films. We will analyze a cross-match of popular and avant-garde films while discussing mass culture, education, propaganda, and entertainment as identity- and nationbuilding practices.
Eligible for FMST credit, fulfills national cinema requirement.
Writing course.
1 credit.
Not offered 2011-2012.

## LITR 055CH. Contemporary Chinese Cinema: The New Waves (1984-2005)

 (Cross-listed as CHIN 055/FMST 055)Cinema has become a special form of cultural mirror representing social dynamics and drastic changes in mainland China, Hong Kong, and Taiwan since the mid-1980s. The course will develop a better understanding of changing Chinese culture by analyzing cinematic texts and the new wave in the era of globalization. All films are English subtitled, and the class is conducted in English.
1 credit.
Fall 2012. Kong.

## LITR 059FG. Re-envisioning Diasporas

This co-taught course will address the historical, cultural, representational, and theoretical specificities of diasporas through examining how French and Francophone, Spanish and Latin American, and German visual and literary productions deal with questions of race and ethnicity, gender and sexuality, nationality and globalization from a perpetual state of "elsewhere." How does this experience mark the conceptualization, aesthetics, and politics of the artistic process and textuality? What role do language, body memories, and visualization/projection play in the works we will discuss? How do virtual and real-life diasporic communities interact with their imagination and reception? Students are encouraged to do work in their first and secondary languages.
Seminar-style class taught in English. 1 credit.
Spring 2012. Simon, Yervasi.

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## LITR 069CH. Taste and Aesthetics in Chinese Cultural Traditions

(Cross-listed as CHIN 069)
This course will explore various dimensions of taste and aesthetics in traditional Chinese culture, from the earliest times into the recent past. Broader aspects of the course will include concept, form, and substance in classical literary, and philosophical formulations; ritual practice and ceremonial performance; and continuities and disjunctures in private vs. public and individual vs. societal taste. More focused readings and discussions will concern food, alcohol, tea, and the culinary arts; appreciation, aesthetics, and poetics in music, painting, calligraphy, literature, sculpture, and theater; the harmony of the human body and the evaluation of beauty and suitability in men and women; landscape appreciation and visions of the natural world; leisure and the passa tempo pursuits of Go, flower and tree arrangement and elegant gatherings.
1 credit.
Spring 2013. Berkowitz.

## LITR 070R. Translation Workshop

(Cross-listed as LING 070R and RUSS 070)
This workshop in literary translation concentrates on translation theory and practice, working in poetry, prose, and drama as well as editing. Students will participate in an associated series of bilingual readings and will produce a substantial portfolio of work. Students taking the course for LING credit will write a final paper supported by a smaller portfolio of translations.
Excellent knowledge of a language other than English (equivalent to a 004 course at Swarthmore or higher) is highly recommended or, failing that, access to at least one very patient speaker of a foreign language. 1 credit.
Next offered in 2012-2013.

## LITR 071F. French Cultural and Critical Theory

We will read key texts in French critical and cultural theory (from M. Foucault, J. Lacan, J. Derrida, J. Baudrillard, G. Deleuze, among many others) to formulate specific questions about how subjects come about through their use of language and other forms of discourse. There are no prerequisites for the course, as it aims first and foremost to be an introduction to the topic. This course is taught in English.
Eligible for INTP credit.
1 credit.
Not offered 2011-2012.

## LITR 072F. French Literature in Translation

This course is designed to provide students with a broad knowledge of French literature, from before the Revolution to the present. Among the authors included on the syllabus are: Molière, Voltaire, Balzac, Baudelaire, Proust, Camus and Sartre. Students will read works in their entirety, discuss their significance in class, and listen to short lectures to situate the readings in a historical and cultural context.
1 credit.
Spring 2012. Blanchard.

## LITR 075S. U.S. Latina/o Literature

This course offers an introduction to contemporary Latina/o literature and culture from the twentieth and twenty-first centuries. It considers various literary traditions, such as Chicano/a, Nuyorican, Cuban-American and Dominican American. The course will explore how these texts align themselves and/or challenge U.S. American, Latin American and European conceptualizations of nationhood, identity, race, and sexuality. It will also address common concerns of U.S. Latina/o writers such as immigration and transmigration, bilingualism and linguistic hybridity, and border culture. Authors will include Junot Díaz, Miguel Piñero, Irete Lazo and Dahlma Llanos
Figueroa, among others. Readings, assignments, and class discussions are in English.
Eligible for GSST and LASC credit.
1 credit.
Fall 2012. Martínez.

## LITR 076AF. Contemporary Arab Women Writers

This course examines the literary production by Arab women in the context of nationalism, and political struggles against neo-colonialism and imperialism. We will move beyond the gendered terms that often frame the interest regarding Arab women, and lead to a discourse of victimization, to focus on how women writers articulate their subjectivities and agency through innovative aesthetics. How have specific Arab women writers successfully challenged societal roles? Can their aesthetics disrupt narratives of violence of the civil wars? How do they negotiate with imperialist gendered fantasies and the trafficking in exotic images? And how Arab feminism differ from Western feminist discourse on Arab women? Sources include short stories, novels, memoirs and polemical essays spanning from North Africa to the Middle East.

## LITR 077G. Contested Truth(s): Questions of Modernity in German Philosophy and Literature

(Cross-listed as INTP 091 and PHIL 077)
During the last decades of the 18th century, a powerful sense of rupture from the past, a distinctive consciousness of living in a modern culture, was both felt in daily life and articulated in texts of literature and philosophy. The version of that consciousness appearing in Germany was especially systematic and powerful, and it has exerted a lasting influence. It held in view the existence of a radically different present, the values of making one's own life and of judging for oneself as an individual, the development of democratic practices and ideals, the emergence of intensely knowledge-based systems of commodityproduction, increased urbanization, and the development of modern legal systems. The promise of freedom and, simultaneously, the abnegation of that promise in modern life are reflected and articulated in German texts of literature and philosophy from 1781 to the present, from the Romantic poets to the intellectuals of the Frankfurt School. In our course, we will trace the emerging theoretical questions (and answers) arising from cultural and political life of the last two hundred years, as formulated by such writers and thinkers as Kant, Hegel, Hölderlin, F. Schlegel, Schiller, Kleist, Marx, Heine, Nietzsche, Heidegger, Benjamin, Adorno, Horkheimer, Gadamer, Kafka, Celan, and Sebald.
1 credit.
Spring 2012. Eldridge, Werlen

## LITR 081CH. Transcending the Mundane: Taoism in Chinese Literature and Culture

## (Cross-listed as CHIN 081)

Chinese civilization has been imbued with Taoism for some two and one-half millennia, from popular belief and custom to intellectual and literary culture. In addition to consideration of the texts and contexts of both philosophical and religious Taoism, the class will examine the articulation and role of Taoism in Chinese literature and culture and the enduring implications of the Taoist ethos. All readings will be in English.
Prerequisite: One introductory course on Chinese culture or religion or permission of the instructor.
1 credit.
Spring 2013.

Eligible for GSST and ISLM credit.
1 credit.
Fall 2012. Attieh, Gueydan.

## LITR 083J. War and Postwar in Japanese Culture

## (Cross-listed as JPNS 083)

What was the Japanese experience of the World War II and the Allied Occupation? We will examine literary works, films, and graphic materials (photographs, prints, advertisements, etc.), together with oral histories and historical studies, to seek a better understanding of the prevailing ideologies and intellectual struggles of wartime and postwar Japan as well as the experiences of individuals living through the cataclysmic events of midcentury. Issues to be investigated include Japanese nationalism and imperialism, women's experiences of the war and home front; changing representations and ideologies of the body, war writing and censorship, the atomic bombings of Hiroshima and Nagasaki, Japanese responses to the occupation, and the war in postwar memory. Prerequisite: HIST 075 or permission of the instructor.
1 credit.
Not offered 2011-2012.

## LITR 091CH. Special Topics in Chinese Literature and Culture in Translation (Cross-listed as CHIN 091) <br> No prerequisite and no knowledge of China required; all readings in English. <br> 1 credit. <br> Spring 2012. Kong.

## Arabic

Knowledge of Arabic contributes not only to our geopolitical connectivity with Arabic speaking countries; it also contributes to the interdisciplinary program of studies in Islamic studies and to students' work in programs in anthropology, comparative literature, history, linguistics, religion, sociology, and other fields. Study of Arabic language through the third year and study abroad are particularly recommended for students who want to develop proficiency for research or fieldwork. Interested students are urged to begin studying the language early in their academic careers, to have time to develop a useful level of language proficiency and to be prepared to study in an immersive program abroad.
First-, second-, and third-year Arabic are offered every year; first-year Arabic has no prerequisites and is open to everyone except native speakers. Native or heritage speakers of Arabic should consult with the Arabic faculty for placement. Courses in literature in translation, culture, and film, when available, are also open to all students. Students of Arabic language are urged to take these courses and others related to the Arab world in Islamic studies, sociology and anthropology, history,
political science, and religion to gain perspective on classical and contemporary Arabic culture.
Introductory and Intermediate Arabic are intensive courses that carry 1.5 credits per semester. Study abroad is particularly encouraged for students of Arabic; academic credit (full or partial) is generally approved for participation in programs recommended by the Arabic section. These include, but are not limited to universities and non-university programs in Egypt, Jordan, Lebanon, Morocco, Oman, Syria, Tunisia, and Yemen.
Courses in Arabic Language, Literature, and Culture
As a Tri-College language program, Arabic is offered at the first- and second-year level at Swarthmore, Bryn Mawr, and Haverford Colleges. Third-year Arabic language, other advanced language courses, and introductory courses in Arabic literature and culture are offered at Swarthmore. Other courses are available at the University of Pennsylvania and elsewhere in the Philadelphia area.

## The Academic Program

Coursework in Arabic can be part of a special major or a special honors major, as well as part of a major or minor in comparative literature.
Arabic is a central component of Swarthmore's Islamic Studies program, an interdisciplinary program that focuses on the diverse range of lived experiences and textual traditions of Muslims as they are articulated in various countries and regions throughout the world. Arabic is also a valuable addition to programs in Humanities and the Social Sciences and can be part of the major in Languages and Linguistics, through the Linguistics Department.

## Special Major

Students may arrange to do a special major or an honors special major in Arabic after consultation with faculty in Arabic and the department chair. Work abroad will be incorporated when appropriate. Independent study or courses at Bryn Mawr or the University of Pennsylvania will usually be necessary for this special major.

## Application Process Notes for the Major or the Minor

Applicants for a Special Major in Arabic must consult with the Arabic section head and be approved by the relevant faculty members and the department of Modern Languages and Literatures.

## International Baccalaureate Credit

Students presenting IB credit in Arabic language or literature should consult with the faculty in Arabic.

## Transfer Credit

The Arabic faculty will assist students in estimating credit for study of Arabic language and related topics abroad. Transfer credit (from study abroad or from courses taken at other institutions in North America) will be evaluated after students return to campus.

## Off-Campus Study

Study abroad is crucial to Arabic because it allows immersion and significant cultural exposure, which are especially important given the longer time needed to acquire a language less similar to English. Modern Standard Arabic is the official or co-official language of Algeria, Bahrain, Chad, Djibouti, Egypt, Iraq, Jordan, Kuwait, Lebanon, Libya, Morocco, Oman, Palestinian West Bank and Gaza, Qatar, Somalia, Sudan, Syria, Tunisia, Mauritania, United Arab Emirates, and Yemen. In addition to the Arab countries, where Arabic speakers are concentrated, large numbers of Arabic speakers live in Iran and France (about 600,000 speakers each), and Turkey (about one million), and a substantial number of speakers live in Israel and parts of Africa. Given the rapid changes in much of the Arab world, students are urged to consult closely with the faculty in Arabic as well as the Off-Campus Study Office in planning study abroad.

## Research and Service-Learning Opportunities

## Academic Year Opportunities

Arabic participates in the Modern Languages and Literatures Service-Learning Pedagogy course, and several students have taught Arabic in the local elementary school. Some study abroad programs can arrange internships or other kinds of special opportunities for students.

## Summer Opportunities

Like other programs in the Humanities, Arabic welcomes student proposals for guided summer research and will advise students applying for a Humanities Research Fellowship at the College.

## Life After Swarthmore

Career possibilities utilizing foreign language skills parallel the opportunities of liberal arts graduates in general, but with a stronger focus on international or multicultural aspects. The obvious career paths for Arabic Special Majors are the professions in which foreign language is
a primary skill-language teaching, translation and interpretation, or working with nongovernmental agencies (NGOs). But as communication, travel, and business endeavors have expanded in the global marketplace, now even relatively small organizations may have a need to communicate with partners, clients, or customers in other languages, in the U.S. as well as in other countries.

## Courses

## ARAB 001-002. Intensive Elementary Modern Standard Arabic

Students who start in the 001-002 sequence must complete 002 to receive credit for 001.
The purpose of this course is to develop students' proficiency and communication in modern standard Arabic in the four basic language skills: listening, speaking, reading (both oral and for comprehension), and writing. Cultural aspects are built into the course. This course as well as subsequent Arabic-language courses helps students to advance rapidly in this language and prepares them for more advanced work on literary Arabic, as well as to work, travel, or study abroad. By the end of this course, the majority of students should be expected to reach a level of intermediate low, according to the ACTFL proficiency rating.

## ARAB 001.

1.5 credits.

Fall 2011. Attieh, El Guabli.
ARAB 002.
1.5 credits.

Spring 2012. Attieh, El Guabli.

## ARAB 003. Intermediate Modern Standard Arabic I

This course builds on skills in comprehension, listening, reading and writing developed in earlier courses. Students will gain increased vocabulary and understanding of more complex grammatical structures. They will begin to approach prose, fiction, and non-fiction written in the language. Students will also increase their proficiency in Arabic script and sound system, widen their working vocabulary, learn key grammatical concepts, and practice conversation and dictation.
1.5 credits.

Fall 2011. Attieh, El Guabli.

## ARAB 004. Intermediate Modern Standard Arabic II

This course is the continuation of ARAB 003. Because the material covered in this course hinges heavily on the previous course, students are expected to review and be familiar with the previous lessons they took in Arab 001, 002 and 003.

Eligible for ISLM credit.
1.5 credit.

Prerequisites: ARAB 003 or equivalent or permission of the department.
Spring 2012. Staff, El Guabli.

## ARAB 005A. Arabic Conversation

A conversation course concentrating on the development of intermediate skills in speaking and listening through texts and multimedia materials in Modern Standard Arabic. The aim of the course is for the student to acquire wellrounded communication skills and sociocultural competence. The selected materials seek to stimulate students' curiosity and engagement with the ultimate goal of awakening a strong desire to express themselves in the language. Students are required to read chosen texts (including Internet materials) and prepare assignments for the purpose of generating discussion in class. Moreover, students have to write out skits or reports for oral presentation in Arabic before they present them in class. The class is conducted entirely in Arabic. The class may be divided into smaller groups if needed to facilitate conversation.
Prerequisite: For students presently or previously in ARAB 003 or ARAB 004 or the equivalent.
0.5 credit.

Spring 2012. El Guabli.

## ARAB 006A. Advanced Arabic Conversation

A conversation course concentrating on the development of advanced skills in speaking and listening through texts and multimedia materials in Modern Standard Arabic. The aim of the course is for students to acquire wellrounded communication skills and sociocultural competence. The selected materials seek to stimulate students' curiosity and engagement with the ultimate goal of awakening a strong desire to express themselves in the language. Students are required to read chosen texts (including Internet materials) and prepare assignments to generate discussion in class. Moreover, students have to write out skits or reports for oral presentation in Arabic before they present them in class. The class is conducted entirely in Arabic. The class may be divided into smaller groups if the need arises to facilitate conversation.
Prerequisite: For students presently or previously in ARAB 011 or above.
0.5 credit.

Spring 2012. El Guabli.

## ARAB 011. Advanced Arabic I

This course will: (1) conduct a quick review of the basic structures, grammar, and the 1000 most frequent words of Modern Standard Arabic (MSA) learned in earlier courses, (2) introduce the next 750 high frequency words in a variety of contexts with strong cultural content, (3) drill students in the more advanced grammatical structures of MSA, and (4) train students in developing reading skills that will assist them in comprehending a variety of MSA authentic reading passages of various genres and performing reading tasks ranging from Intermediate to Intermediate High on the ACTFL scale. Prerequisites: Successful completion of ARAB 004 and consent of the instructor.
1 credit.
Fall 2011. El Guabli.

## ARAB 012. Advanced Arabic II

This course will: (1) conduct a quick review of the basic structures, grammar, and the first 1750 most frequent words of Modern Standard Arabic (MSA) learned in earlier courses, (2) introduce the next 750 high frequency words in a variety of contexts with strong cultural content, (3) drill students in the more advanced grammatical structures of MSA, and (4) train students in developing reading skills that will assist them in comprehending a variety of MSA authentic reading passages of various genres and performing reading tasks ranging from Intermediate to Intermediate High on the ACTFL scale.
Prerequisites: Successful completion of ARAB 011 and consent of the instructor. 1 credit.
Spring 2012. Staff.

## ARAB 013A. Foreign Language Teaching and Pedagogy

(Cross-listed as EDUC 072)
Students can serve the Swarthmore community by teaching a foreign language to local elementary school students in an after-school program that meets two times/week. Students must teach for the entire 6-week session, two days per week. During the evening pedagogy sessions held on campus, we will discuss writing weekly lesson plans, foreign language acquisition in children, teaching methodologies and approaches. We use a common goaloriented curriculum among all the languages. Students must register for the language or educational studies course that they will be teaching and for a service time (A) M/W or (B) T/Th.
0.5 credit.

Fall 2011. Johnson. Spring 2012. Staff.

## ARAB 020. Arab Literature in Its Cultural

 Context
## (Cross-listed as LITR 020A)

This course presents an overview of the development of literature in the Arabic language, from the pre-Islamic period and early Muslim writings through the flowering of AlAndaluz, the Nahda that followed the Ottoman period, and the rise of new Arab states to the brilliant creativity of contemporary novelists. The course is taught in English translation, though students with sufficient skills in Arabic are welcome to do some or all of the reading in the original.
Eligible for ISLM credit.
1 credit.
Spring 2012. Staff.

## ARAB 045. Contemporary Thought in the Arab World <br> (Cross-listed as LITR 045A)

This survey course will trace some of the main themes, problems and issues debated among Arab thinkers and intellectuals since the latter part of the 19th century. The course will start with the 19th century but emphasize discussions following the military defeat of 1967 and the ensuing cultural and political crisis. Within this discussions related to "turath" (Islamic tradition or heritage), the different strategies of its reading and interpretation, and the possibilities of using these readings of Islam to confront the contemporary challenges will be the center of attention in the course. Readings for the course will comprise three types of texts: historical and social background, translations of texts by the different thinkers under discussion, and articles and essays that interpret and critique these thinkers.
Eligible for ISLM credit.
1 credit.
Not offered 2011-2012.

## ARAB 054. Cinema in the Arab World

 1 credit.Not offered 2011-2012.

## ARAB 093. Directed Reading

Attieh.

## LITR 076AF. Contemporary Arab Women Writers

This course examines the literary production by Arab women in the context of nationalism, and political struggles against neo-colonialism and imperialism. We will move beyond the gendered terms that often frame the interest regarding Arab women, and lead to a discourse of victimization, to focus on how women writers articulate their subjectivities and agency through innovative aesthetics. How have specific Arab women writers successfully
challenged societal roles? Can their aesthetics disrupt narratives of violence of the civil wars? How do they negotiate with imperialist gendered fantasies and the trafficking in exotic images? And how Arab feminism differ from Western feminist discourse on Arab women? Sources include short stories, novels, memoirs and polemical essays spanning from North Africa to the Middle East. Taught in English. Eligible for ISLM and GSST credit.
1 credit.
Fall 2012. Attieh, Gueydan.

## Chinese

## The Academic Program

Students may major or minor in Chinese in both the Course and Honors Programs. The Chinese major contains components of language, literature and culture. Study abroad is strongly encouraged and supported, and contributes directly to a major or minor in Chinese. Students of Chinese also may choose a special major in interdisciplinary Chinese studies (see below), or a major in Asian studies (see under Asian studies), where Chinese language courses above the first-year level as well as Chinese literature and culture courses and credit for study abroad normally may be counted toward the major.
Students interested in majoring or minoring in Chinese should consult with the section head of Chinese as soon as possible.
First- through fourth-year Chinese language courses are offered each year, as is an introductory course on reading Classical Chinese. First-year Chinese and the Introduction to Classical Chinese have no prerequisites and are open to the entire student community. Literature, culture, and film courses in translation also are offered each year and are open to all students. Students of Chinese are particularly urged to take these classes as a means of gaining perspective on traditional and modern Chinese literature and culture over more than two millennia, from early times into the contemporary. Seminars welcome students not majoring or minoring in Chinese, with permission of the instructor. Introductory and intermediate Chinese language courses are intensive and carry 1.5 credits per semester. Students should plan to take these courses as early as possible so that studying in China can be incorporated into their curriculum.

## Course Major in Chinese

1. A minimum of nine credits in courses numbered 003B and above.
2. Mandatory completion of the following courses: $020,021,033$ or equivalent; at least
one course or seminar on modern Chinese literature/film in translation, and at least one course or seminar on pre-modern literature/culture in translation.
3. Study abroad in a program approved by the section is strongly recommended; transferred credits normally may be counted toward the major.
4. A minimum of six credits of work must be completed at Swarthmore.
5. A culminating exercise, honors seminar, or thesis.
6. Senior Colloquium.

## Course Minor in Chinese

1. A minimum of five credits of work in courses numbered 004B and above.
2. At least two credits in Chinese language courses numbered 004B and above.
3. At least two credits in classical or modern literature/culture/film.
4. A minimum of three credits of work must be completed at Swarthmore.
5. Study abroad in a program approved by the section is strongly recommended; transferred credits normally may be counted toward the minor.
6. Senior Colloquium.

## Honors Major in Chinese

Requirements for the honors major in Chinese essentially are the same as those for the course major, excepting the culminating exercise. An honors major in Chinese will consist of examinations in Chinese language, literature and culture. Work done abroad may be incorporated, where appropriate. Honors preparations in Chinese consist of 2-credit seminar; designated pairs of courses (or 1-credit attachment to designated 1-credit course); or a 2 -credit thesis. Senior honors study is mandatory and normally is done in the spring semester of the senior year. Work is arranged on an individual basis, and candidates may receive up to one credit for completion of the work. Honors examinations normally will consist of three 3-hour written examinations and a 30-minute oral for each examination. Honors students of Chinese may also consider a special major in interdisciplinary Chinese studies that is coordinated by the section head of Chinese, or an honors major in Asian studies (see under Asian studies).

## Honors Minor in Chinese

It is possible to prepare for an honors minor in Chinese in either Chinese language or in Chinese literature in translation. Requirements for the honors minor in Chinese essentially are
the same as those for the course minor. The honors preparation will consist of a 2-credit seminar, or a designated pair of courses (or a 1credit attachment to a designated 1 -credit course). Senior honors study is mandatory and normally is done in the spring semester of the senior year; work is arranged on an individual basis, and candidates will have the option of receiving 0.5 credit for completion of the work. The Honors examination normally will consist of one 3 -hour written examination and a 30minute oral examination.
Students of Chinese may also consider an honors minor in Asian studies (see under Asian studies).

## Special Major in Interdisciplinary Chinese Studies

1. A minimum of 10 credits in courses numbered 003B and higher.
2. Must complete the following courses: 012 or higher; at least three additional courses on language/literature/culture/film, at least one concerning the modern period and at least one concerning the pre-modern period.
3. Study abroad in a program approved by the section is strongly recommended; transferred credits normally may be counted toward the major.
4. A minimum of six credits of work must be completed at Swarthmore.
5. At least one and up to three credits can be earned from other departments on China-related subjects with the approval of the Chinese section.
6. A culminating exercise, honors seminar or thesis.
7. Senior Colloquium.

## Off-Campus Study

Study abroad is particularly encouraged for students of Chinese; academic credit (full or partial) is generally approved for participation in several recommended programs of varying duration in the People's Republic of China and in Taiwan. In the People's Republic, these include, but are not limited to, the InterUniversity Program (IUP) Program at Tsinghua University, the Associated Colleges in China (ACC) Program, the CET Program in Harbin, and the Middlebury program in Kunming. In Taiwan, these include the International Chinese Language Program (ICLP), the Mandarin Training Center in Taipei, and the Chinese Language Center, National Cheng Kung University in Taiwan.

## Courses

## CHIN 001B-002B. Introduction to Mandarin Chinese

Students who start in the 00lB-002B sequence must complete $002 B$ to receive credit for $001 B$.
An intensive introduction to spoken and written
Mandarin Chinese, with emphasis on oral practice. Designed to impart an active command of basic grammar. Introduces 350 to 400 characters and develops the ability to read and write in simple modern Chinese.
1.5 credits

CHIN 001B.
Fall 2011. Speidel, Kang.
CHIN 002B.
Spring 2012. Speidel, Kang.
CHIN 003B, 004B. Second-Year Mandarin Chinese
Designed for students who have mastered basic grammar and 350 to 400 characters. Combines intensive oral practice with writing and reading in the modern language. Emphasis is on rapid expansion of vocabulary, idiomatic expressions, and thorough understanding of grammatical patterns. Prepares students for advanced study at the College and in China.
1.5 credits.

CHIN 003B.
Fall 2011. Zuo, Lu.
CHIN 004B.
Spring 2012. Zuo, Lu.

## CHIN 005. Chinese for Advanced Beginners I

Designed for students of Chinese heritage who are able to communicate in Chinese on simple daily life topics and perhaps read Chinese with a limited vocabulary (about 100 characters). An intensive introduction to spoken and written Mandarin Chinese, with emphasis on the development of reading and writing ability. Prepares students for advanced studies at the College and in China.
Prerequisite: Permission of the instructor.
1 credit.
Fall 2011. Kang.

## CHIN 006. Chinese for Advanced Beginners II

Designed for students of Chinese heritage who are able to communicate in Chinese with a command of basic grammar and a vocabulary (about 800 characters). An intensive introduction at the intermediate level to Mandarin Chinese, with emphasis on the development of reading and writing ability. Prepares students for advanced studies at the College and in China.

Prerequisite: CHIN 005 , or CHIN 002 B, or equivalent language skills.
1 credit.
Spring 2012. Staff.
CHIN 009. First-Year Seminar: Heaven, Earth, and Man: Ways of Thought in Traditional Chinese Culture
(Cross-listed as LITR 009CH)
This introductory course explores the most influential currents of thought and culture in traditional China, through directed readings and discussions of original sources in translation. 1 credit.
Fall 2013. Berkowitz.
CHIN 011. Third-Year Chinese
Concentrates on strengthening and further developing skills in reading, speaking, and writing modern Chinese, through a diversity of materials and media.
Classes are conducted in Chinese, with precise translation also a component.
Prerequisite: CHIN 004B or equivalent language skills.
1 credit.
Fall 2011. Zuo.

## CHIN 011A. Third-Year Chinese Conversation

This course meets once a week for 75 minutes and concentrates on the further development of skills in speaking and listening through multimedia materials (including selected movies and clips). Students are required to read chosen texts (including Internet materials and short stories) and prepare assignments for the purpose of generating discussion in class. Moreover, students will write out skits or reports for oral presentation in Chinese before they present them in class. The class is conducted entirely in Chinese.
Prerequisite: CHIN 004B or equivalent
language skills.
0.5 credit.

Fall 2011. Lu.
CHIN 012. Advanced Chinese
A multimedia course concentrating on greatly expanding skills in understanding and using modern Chinese in a broad variety of cultural and literary contexts, through a diversity of authentic materials in various media, including the Internet.
Prerequisite: CHIN 011 or equivalent language skills.
1 credit.
Spring 2012. Zuo.

## CHIN 012A. Advanced Chinese

## Conversation

This 0.5 -credit course meets once a week for 75 minutes and concentrates on the further development of skills in speaking and listening through multimedia materials (including movies and clips). Students are required to read chosen texts (including Internet materials and short stories) and prepare assignments for the purpose of generating discussion in class. Moreover, students will write out skits or reports for oral presentation in Chinese before they present them in class.
The class is conducted entirely in Chinese. Prerequisite: CHIN 011 and/or 011A or equivalent language skills.
0.5 credit.

Spring 2012. Kang.

## CHIN 013A. Foreign Language Teaching and Pedagogy

(Cross-listed as EDUC 072)
This course has two elements that are developed together throughout the course of the semester. Students can serve the Swarthmore community by teaching a foreign language to local elementary school students in an afterschool program that meets two times/week. Students must teach for the entire 6-week session, two days per week. During the evening pedagogy sessions held on campus, we will discuss writing weekly lesson plans, foreign language acquisition in children, teaching methodologies and approaches. We use a common goal-oriented curriculum among all the languages. Students must register for the language or educational studies course that they will be teaching and for a service time (A) M/W or (B) $\mathrm{T} / \mathrm{Th}$.

## 0.5 credit.

Fall 2011. Johnson. Spring 2012. Staff.

## CHIN 015. Architecture and Space in Pre-Modern China

(Cross-listed as ARTH 015)
This course emphasizes four issues in the history of architecture and urbanism in premodern China: (1) the development of traditional Chinese timber frames; (2) the emergence of architectural forms on the basis of different social identities, such as the Buddhist, Taoist, Confucian and literati cultures; (3) the spatial strategies of urban planning in imperial cities; and (4) the influence of traditional Chinese architecture on the form and structure of the architecture in Japan and Korea. Through visual analysis and critical reading, special attention will be given to how architectural and urban structures deliver political ideologies and sanctify social relations, both symbolically and practically.

1 credit.
Spring 2012. Zuo.
CHIN 016. Substance, Shadow, and Spirit in Chinese Literature and Culture (Cross-listed as LITR 016CH)
This course will explore the literary and intellectual world of traditional Chinese culture through original writings in English translation, including both poetry and prose. Topics to be discussed include Taoism, Confucianism, and the contouring of Chinese culture; immortality, wine, and allaying the mundane; and the religious dimension, disengagement, and the appreciation of the natural world. The course also will address cultural and literary formulations of conduct and persona, and the expression of individualism in an authoritarian society.
1 credit.
Fall 2012. Berkowitz.

## CHIN 020. Readings in Modern Chinese

This course aims to perfect the student's Mandarin Chinese skills and at the same time to introduce a few major topics concerning Chinese literature and other types of writing since the May Fourth Movement. All readings, writing, and discussion are in Chinese.
Prerequisite: Three years of Chinese or the equivalent.
1 credit.
Fall 2011. Kong.

## CHIN 021. Topics in Modern Chinese

Reading and examination of individual authors, selected themes, genres, and periods, for students with strong Chinese-language proficiency. All readings, writings, and discussions are in Chinese.
Prerequisite: CHIN 020 or its equivalent.
Writing course.
1 credit.
Spring 2012. Kong.

## CHIN 023. Modern Chinese Literature: A

 New Novelistic Discourse (1918-1948)(Cross-listed as LITR 023CH)
Modern Chinese literary texts created between 1918 and 1948, presenting a series of political, social, cultural, and ideological dilemmas underlying 20th-century Chinese history. The class will discuss fundamental issues of modernity and new literary developments under the impact of the May Fourth Movement. All texts are in English translation, and the class is conducted in English.
1 credit.
Fall 2011. Kong.

## CHIN 033. Introduction to Classical Chinese <br> (Cross-listed as LING 033)

This is an introductory course on reading one of the world's great classical languages. Classical Chinese includes both the language of China's classical literature as well as the literary language used for writing in China for well over 2 millennia until earlier this century. Complemented with readings in English about Chinese characters and classical Chinese, this course imparts the principal structures of the classical language through an analytical presentation of the rudiments of the language and close reading of original texts. It is not a lecture course and requires active, regular participation on the part of the student, with precise translation into English an integral component. The course is conducted in English. The course is open to all interested students and has no prerequisites; no previous preparation in Chinese is required.
1 credit.
Fall 2011. Berkowitz.

## CHIN 035. Readings in Classical Chinese

In this class, we will read some fantastic, enduring writings from Classical China, all in the original. Readings will cover many genres, including stories, biographies, history, philosophy, and poetry, and will range over the centuries of ancient and imperial China.
Prerequisite: one semester of classical Chinese or permission of the instructor.
1 credit.
Spring 2013. Berkowitz.

## CHIN 055. Contemporary Chinese Cinema: The New Waves (1984-2005) <br> (Cross-listed as LITR 055CH/FMST 055)

Cinema has become a special form of cultural mirror representing social dynamics and drastic changes in mainland China, Hong Kong, and Taiwan since the mid-1980s. The course will develop a better understanding of changing Chinese culture by analyzing cinematic texts and the new wave in the era of globalization. All films are English subtitled, and the class is conducted in English.
1 credit.
Fall 2012. Kong.
CHIN 069. The Art of Living: Taste and Aesthetics in Chinese Cultural Traditions
(Cross-listed as LITR 069CH)
This course will explore various dimensions of taste and aesthetics in traditional Chinese culture-from the earliest times into the recent past. Broader aspects of the course will include
concept, form, and substance in classical literary, and philosophical formulations; ritual practice and ceremonial performance; and continuities and disjunctures in private vs. public and individual vs. societal taste. More focused readings and discussions will concern food, alcohol, tea, and the culinary arts; appreciation, aesthetics, and poetics in music, painting, calligraphy, literature, sculpture, and theater; the harmony of the human body and the evaluation of beauty and suitability in men and women; landscape appreciation and visions of the natural world; leisure and the passa tempo pursuits of Go, flower and tree arrangement, and elegant gatherings.
No prerequisites, no knowledge of Chinese required; all readings in English.
1 credit.
Spring 2013. Berkowitz.

## CHIN 081. Transcending the Mundane: Taoism in Chinese Literature and

 Culture(Cross-listed as LITR 081CH)
Chinese civilization has been imbued with Taoism for some 2.5 millennia, from popular belief and custom to intellectual and literary culture. In addition to consideration of the texts and contexts of both philosophical and religious Taoism, the class will examine the articulation and role of Taoism in Chinese literature and culture and the enduring implications of the Taoist ethos. All readings will be in English.
Prerequisite: One introductory course on Chinese culture or religion or permission of the instructor.
1 credit.
Spring 2013. Berkowitz.

## CHIN 090. Practicum in Bridging Swarthmore and Local Chinese Communities

Students will engage in directed projects in local Chinese communities under the supervision of the instructor. The projects will concern tutoring and translation or other social services within the immigrant groups. Fieldwork will be tied to theoretical and applied academic learning and will foster intercultural understanding and intellectual growth. A final written project will be required for credit. Speakers of any Chinese language/dialects are particularly welcome, as are students of Chinese language and others who wish to develop their interest in this area. Credit is awarded CR/NC.
1 credit.
Spring 2013. Kong.

CHIN 091. Special Topics in Chinese Literature and Culture in Translation: (Cross-listed as LITR 091CH)
No prerequisite and no knowledge of Chinese required; all readings in English.
1 credit.
Spring 2012. Kong.

## CHIN 092. Special Topics in Chinese

 Literature and Culture in ChineseThis course will concentrate on selected themes, genres, or critical problems in Chinese literature.
All readings are in Chinese.
Prerequisite: Four years of Chinese or the equivalent.
1 credit.
Not offered 2011-2012.
CHIN 093. Directed Reading
CHIN 096. Thesis
CHIN 099. Senior Colloquium

## Seminars

## CHIN 103. Lu Xun and His Legacy in 20th-Century China

This seminar is focused on topics concerning modernity, political/social change, gender, and morality through close examination of intellectuals' responses to the chaotic era reflected in their literature writings in 20thcentury China. Literary forms, styles, and changing aesthetic principles are also included for discussion. Literary texts, chosen from Lu Xun to Gao Xingjian, will be analyzed in a social and historical context. All texts are in English translation, and the seminar is conducted in English.
2 credits.
Spring 2012. Kong.

## CHIN 104. Chinese Poetry

This seminar will explore Chinese poetry throughout ancient and imperial China. We will read and discuss a good many of the most renowned poems and poets, and trace the immutable role of poetry in Chinese traditional culture. We will learn how to read a Chinese poem, investigate predominant styles and genres, and trace texts and writers in context. And we will follow the development and significance of themes and imagery, examine the formulation of a literary aesthetics, and savor the telling of stories and the expression of feeling and philosophy through the medium of poetry. Readings will be in English, with many poems also explicated through the original Chinese. No knowledge of Chinese is required, but previous background in some aspect of

Chinese literature, history, and culture will be helpful.
2 credits.
Fall 2012. Berkowitz.
CHIN 105. Fiction in Traditional China: People and Places, Journeys, and Romances
In this seminar, we will explore the most celebrated and influential examples of novelistic literature in traditional, premodern China. We will look at these extended, elaborate writings in terms of overt structure and content as well as backgrounded literary and cultural material, and we will address their production and consumption in literati and popular contexts. We also will consider these writings in terms of the formulation of enduring cultural contours of allegory and lyricism, individual and society, aesthetics and emotion, imagination and realism, heroism and valor. All readings will be in English translation. 2 credits.
Not offered 2011-2012.

## CHIN 106. Seminar in Traditional Chinese Literature <br> 2 credits.

Not offered 2011-2012.

## CHIN 108. The Remaking of Cinematic China: Zhang Yimou, Wong Kar-wai, and Ang Lee

The seminar focuses on three leading filmmakers, Zhang Yimou, Wong Kar-wai, and Ang Lee, and their cinematic products, which have not only won international praises but also fundamentally reconstructed the national cinemas. We will explore their impact on the formation of the new wave of Chinese-language cinemas since the mid-1980s and its recent new developments by examining all possible aspects in the context of social and cultural change. 2 credits.
Spring 2013. Kong.

## CHIN 109. Daoism

This seminar will look at the texts and contexts of both philosophical and religious Daoism, from intellectual and literary culture to popular belief and custom. It will explore the ways of Daoism from early into modern times: texts and contexts; sectarian religion and individual praxis; cultural taproot and personal mindset; cosmology and alchemy; gods, saints, priests, and recluses; aesthetics and the arts.
All readings will be in English.
Eligible for ASIA credit.
2 credits.
Fall 2011. Berkowitz.

CHIN 199. Senior Honors Study

## Chinese Courses Not Currently Offered

CHIN 008. First-year Seminar: Literary and Cinematic Presentation of Modern China (Cross-listed as LITR 008CH)
CHIN 009. First-Year Seminar: Heaven, Earth, and Man: Ways of Thought in Traditional Chinese Culture (Cross-listed as LITR 009CH)
CHIN 017. The Legacy of Chinese Narrative Literature: The Story in Dynastic China (Crosslisted as LITR 017 CH )
CHIN 018. The Classical Tradition in Chinese
Literature (Cross-listed as LITR 018CH)
CHIN 019. First-Year Seminar: Singular Lives and Cultural Paradigms in Early and Imperial China (Cross-listed as LITR 019CH)
CHIN 025. Contemporary Chinese Fiction: Mirror of Social Change (1949-2005) (Crosslisted as LITR 025 CH )
CHIN 027. Women Writers in 20th-Century
China (Cross-listed as LITR 027CH)
CHIN 056. History of Chinese Cinema (1905-
2005) (Cross-listed as LITR 056CH)

CHIN 063. Comparative Perspectives: China in the Ancient World (Cross-listed as LITR 063 CH )
CHIN 066. Chinese Poetry (Cross-listed as LITR 066CH)
CHIN 069. The Art of Living: Taste and Aesthetics in Chinese Cultural Traditions (Cross-listed as LITR 069CH)
CHIN 071. Invaded Ideology and Translated Modernity: A Comparative Study of Modern Chinese and Japanese Literatures at Their Formative Stages (1900-1937) (Cross-listed as LITR 071 CH )

## French and Francophone Studies

In French and francophone studies, you will be introduced to important periods and figures of literatures written in French and films made in the French-speaking world. You will expand your knowledge and appreciation of the diversity of French-speaking cultures and develop an appreciation of literary value by receiving training in literary and critical analysis. Courses in French and Francophone studies provide an opportunity to understand the historical and social forces underlying these various literatures and cultures.

## The Academic Program

French and francophone studies is offered as a major or minor in the Course Program and as a major or minor in honors. The prerequisite to
take upper-level courses (numbered 20 and higher) for both course and honors students is FREN 012, the equivalent, or evidence of special competence.
All French and francophone studies majors and minors, including students preparing a secondary school certificate, are required to complete a study abroad program in a Frenchspeaking country. Students in French are encouraged to apply to the Swarthmore Program in Grenoble at the University of Grenoble for one or two semesters in the sophomore or junior year. This program is particularly suited for majors in the humanities and the social sciences.
Majors and minors in the Course and Honors Programs are expected to be proficient in spoken and written French to do the larger part of their work in French, i.e., discussions and papers in courses and seminars and all oral and written examinations, including oral defense of the senior paper and Honors examinations.

## Course Major

## Requirements

1. Take eight advanced courses or seminars numbered 004 or above for a minimum of 8 credits. Note that AP, IB credits and FREN 005 will not count toward the major. FREN 007 can only count once to fulfill the major credit requirement.
2. Off-campus study is required for all majors. It is strongly recommended that majors participate in the Swarthmore Program in Grenoble. See the "Off-Campus Study" section for rules on transfer of credit.
3. Take one advanced course with a Francophone component.
4. Take Senior Colloquium (FREN 091) in fall semester of senior year. This includes the writing of an original, independent research paper of 30 pages on a topic chosen in discussion with the senior colloquium professor and adviser or one other professor in the program. The defense of the paper with the entire French and Francophone faculty takes place at the end of the fall semester.
French and Francophone Studies also offers courses in French literature in translation, but no more than one such course may count to satisfy the requirements in the major. To graduate with a major in French and Francophone studies, students must have a grade average of C or better within the discipline, have studied in a French-speaking country, and have completed our culminating exercise, described below.

## Acceptance Criteria

To be accepted as a course major, students must have taken French 004 or the equivalent, earning grades no less than a C .

## Course Minor

## Requirements

1. Complete 5 credits in courses or seminars numbered 004 or above. Three or four of these credits must be completed on the Swarthmore campus (See \#2 below). Note that AP, IB credits and FREN 005 will not count toward the minor. FREN 007 can only count once to fulfill the minor credit requirement.
2. Complete at least a six-week program of study in a French-speaking country. It is strongly recommended that minors spend at least one semester abroad in the Swarthmore Program in Grenoble. Students who participate in the Grenoble Program may count two credits toward their minor. Students who participate in other approved programs may only count one credit toward their minor. See the Study Abroad section for rules on transfer of credit.
3. Complete Senior Colloquium (FREN 091) in the fall semester of the senior year, which includes the writing of an original, independent research paper of 20 pages on a topic chosen in discussion with the senior colloquium professor.
French and Francophone studies also offers courses in French literature in translation, but no more than one such course may count to satisfy the requirements in the minor.
To graduate with a minor in French and Francophone studies, you must have a grade average of C or better within the discipline, studied in French-speaking country, and have completed FREN 091 Senior Colloquium.

## Acceptance Criteria

To be accepted as a course minor, you must have taken French 004 or the equivalent, earning grades no less than a C .

## Honors Major

## Requirements

Majors in the Honors Program are expected to complete the requirements of majors in course, including taking Senior Colloquium (FREN 091) in the fall semester of the senior year.

1. Take eight advanced courses or seminars numbered 004 or above for a minimum of 8 credits. Note that AP, IB credits and FREN 005 will not count toward the honors major. FREN 007 can only count once to fulfill the honors major credit requirement.
2. Study abroad is required for all honors majors. It is strongly recommended that honors majors participate in the Swarthmore Program
in Grenoble. See the Study Abroad section for rules on transfer of credit.
3. Take one advanced course with a

Francophone component.
4. Take Senior Colloquium (FREN 091) in fall semester of senior year. This includes the writing of an original, independent research paper of 30 pages on a topic chosen in discussion with the senior colloquium professor and adviser or one other professor in the program. The defense of the paper with the entire French and Francophone faculty takes place at the end of the fall semester.
5. Complete at least two advanced courses (above FREN 012) before taking a seminar.
6. Work on three preparations, two of which must be done through seminars while the third may be a seminar, a two-credit thesis, or an approved paired course preparation.
French and Francophone Studies also offers courses in French literature in translation but no more than one such course may count to satisfy the requirements in the honors major.

## The Honors Exam for Majors and Preparations

Majors in the Honors Program must do three preparations (consisting of six units of credit). Two of the preparations must be done through seminars chosen from the list below. The third preparation may be a seminar, a two-credit thesis, or an approved paired course preparation.
Seminars (spring semester only; not all are offered every two years):

FREN 102. Le monde comique de Molière
FREN 104. Roman du XIXe siècle
FREN 106. La Modernité
FREN 108. Littérature et cinéma modernes et contemporains
FREN 110. Histoires d'îles
FREN 111. Représentations coloniales
FREN 112. Ecritures francophones
FREN 114. Théâtre d'écritures françaises
FREN 115. Paroles de femmes

## Mode of Examination:

A three-hour written examination, and a onehalf hour oral examination, both in French, will be required for each preparation.

## Acceptance Criteria

Candidates are expected to have a "B" average in course work both in the department and at the College, have taken FREN 004 or the equivalent, and have demonstrated interest in and aptitude for the study of literature or culture in the original language.

## Honors Minor

## Requirements

Minors in the Honors Program are expected to complete the requirements of minors in course, including taking Senior Colloquium (FREN 091) in the fall semester of the senior year.

1. Complete 5 credits in courses or seminars numbered 004 or above. Four of these credits must be completed on the Swarthmore campus. Note that AP, IB credits and FREN 005 will not count toward the minor. FREN 007 can only count once to fulfill the minor credit requirement.
2. Complete at least a six-week program of study in a French-speaking country. It is strongly recommended that minors spend at least one semester abroad in the Swarthmore Program in Grenoble. Students who participate in the Grenoble Program may count two credits toward their minor. Students who participate in other approved programs may only count one credit toward their minor. See the Study Abroad section for rules on transfer of credit.
3. Complete Senior Colloquium (FREN 091) in the fall semester of the senior year, which includes the writing of an original, independent research paper of 20 pages on a topic chosen in discussion with the senior colloquium professor.
4. Complete at least two advanced courses (above FREN 012) before taking a seminar.
5. Work on one two-credit seminar preparation or an approved paired course preparation. French and Francophone studies also offers courses in French literature in translation but no more than one such course may count to satisfy the requirements in the honors minor.

## The Honors Exam for Minors and Preparations

Minors must do a single, two-credit seminar preparation (consisting of two units of credit) or an approved paired course preparation.
Seminars (spring semester only; not all are offered every two years):

FREN 102. Le monde comique de Molière
FREN 104. Roman du XIXe siècle
FREN 106. La Modernité
FREN 108. Littérature et cinéma modernes et contemporains
FREN 110. Histoires d'îles
FREN 111. Représentations coloniales
FREN 112. Ecritures francophones
FREN 114. Théâtre d'écritures françaises
FREN 115. Paroles de femmes

## Mode of Examination

A three-hour written examination, and a onehalf hour oral examination, both in French, will be required for the preparation.

## Acceptance Criteria

Candidates are expected to have a " B " average in course work both in the department and at the College, have taken FREN 004 or the equivalent, and have demonstrated interest in and aptitude for the study of literature or culture in the original language.

## Thesis / Culminating Exercise

The culminating exercise in French and Francophone studies consists of completing FREN 091 Senior Colloquium in which you will write an independent research thesis of $20-$ 30 pages and defend it in front of a panel of faculty members.

## Application Process Notes for the Major or the Minor

In addition to the process described by the Dean's Office and the Registrar's Office for how to apply for a major, we also ask that you speak with the French and Francophone Studies section head or one of your professors in French and Francophone Studies to discuss your options.
If after applying you are deferred, you may apply again in the fall by addressing the reasons for your deferral.

## Off-Campus Study

Study abroad programs are vital to the French and Francophone program. French majors and minors are strongly encouraged to attend the Swarthmore Program in Grenoble. Students in the Grenoble Program can earn 4 or 4.5 credits in a semester. Majors may count up to 4.5 credits toward their French major. Minors may count 2 of these credits toward their French minor. Students wishing to seek credit from other disciplines must consult the rules in the appropriate credit-granting department. There are also other options to study abroad available to students who have completed course work above the equivalent of fourth semester. Students may receive 1 or a maximum of 2 French credits for study abroad in any of these preapproved programs according to the following criteria:

1. Grenoble Program

- 4 or 4.5 credits in MLL (French) from

Grenoble's semester-long program
2. Preapproved Programs (see list below)

Important: To earn 2 credits with a semesterlong study abroad program other than Grenoble, students must take at least one French course above FREN 012 in the semester in which they return to campus.

- 2 credits total in MLL (French) for an
internship program in a Francophone country
- 1 credit for course work
- 1 credit for thesis
- 2 credits total in MLL (French) for Internships in Francophone Europe (IFE)
- 1 credit for two courses within the IFE curriculum (intensive courses): 1/2 credit each (e.g. "La vie politique en France," "La société française et ses relations mondiales," etc.)
- 1 credit for thesis
- 2 credits total in MLL (French) for
academic study in a Francophone country
- 1 credit for two courses within the program's own curriculum: $1 / 2$ credit each (e.g. "Stylistiques," "La France aujourd'hui," etc.)
- 1 credit for courses at a university or
- 1 credit for each university course, up to 2 credits for 2 courses
Any student attending a preapproved program in a non-francophone country, and planning to enroll in a French course there, may petition for one credit upon their return to campus. To earn this credit, students must take a one-credit French course in the semester immediately following their return to campus. This credit may count toward the major or the minor, but not toward the completion of the language sequence.

3. Preapproved Summer Programs

Any student may study in a preapproved summer program that is at least 6 weeks long and earn 1 credit in MLL (French). Only Minors in French and Francophone studies may have this credit count towards the completion of their course requirements.
Programs accepted by the
French/Francophone Studies section for transfer:
France
The Swarthmore Program in Grenoble, France
Internships in Francophone Europe (Paris and Brussels)
Academic Programs Abroad, Paris
Pont-Aven School of Contemporary Art

Vassar-Wesleyan in Paris
Smith College in Paris (full year only)
Sweet Briar in Paris (full year only)
Bryn Mawr in Avignon (Summer)
West Africa /North Africa
School for International Training (SIT)
Senegal
SIT Mali
SIT Morocco
University of Pennsylvania in St. Louis, Senegal
Kalamazoo College in St. Louis, Senegal

## Research and Service-Learning Opportunities

Both independent research and service-learning student-teaching are important ways to continue using your language and critical analysis skills.

## Academic Year Opportunities

Each semester MLL offers a Service-Teaching Pedagogy course in which students teach French to local elementary students after or while completing FREN 004 (or 4th semester course of foreign language equivalent). It offers first-hand experience teaching in the classroom and provides training in classroom management, writing lesson plans, and effective use of communicative method language instruction. Student-teachers share common curricular goals, use a communicative method without a textbook, and teach exclusively in the target language. To enhance the studentteachers' professionalism, this course includes a weekly pedagogy session for help with learning how to prepare lessons with goal-oriented curriculum, teaching practice, debriefing on the weeks' teaching, and discussion of readings about foreign language acquisition, methodologies, and approaches.

## Summer Opportunities

Students are encouraged to use the summer to travel to Francophone countries and explore research for their senior thesis papers. Please speak with French and Francophone studies faculty to find out about options for doing this summer work.

## Teacher Certification

Students may choose to use French and Francophone studies as a specialization in a teacher certification program or for a special major in educational studies. Although students may develop their own course of study, they must complete FREN 012, or the equivalent, and study abroad for at least one semester in a French-speaking country.

## Life After Swarthmore

Opportunities for a major/minor in French and Francophone studies after graduation are varied. Our curriculum provides students with valuable skills in cultural analysis, communication in another language, and the ability to understand and adapt to cross-cultural situations. Many majors and minors in French and Francophone studies continue their research with Fulbright awards, go to graduate school, law school, and medical school, and follow diverse career paths in teaching, journalism, business, and NGOs. Recent French and Francophone alumni who are Fulbright recipients are continuing their studies in North Africa and the Middle East; those who have gone to graduate school are studying library science, ethnomusicology, French history, public policy, educational policy, and public health. Many alumni are lawyers, teachers, and journalists.

## Courses

Not all advanced courses are offered every year. Students wishing to major or minor in French/Francophone studies should plan their program in consultation with the department.
\# = Francophone
FREN 001-002, 003. Intensive French Students who start in the 001-002 sequence must complete 002 to receive credit for 001.
For students who begin French in college. Designed to impart an active command of the language. Combines the study of grammar with intensive oral practice, writing, and readings in literary and expository prose.
1.5 credits.

FREN 001. Intensive First Year of French Fall 2011. Netter, Lunghi.

FREN 002. Intensive First Year of French Spring 2012. Netter, Yervasi, Lunghi.

## FREN 003. Intensive Intermediate

## French

Fall 2011. Blanchard, Netter, Lunghi.

## FREN 004. Advanced French: La France

 Contemporaine: Culture et SociétéTransformation in culture and society in the Francophone World will be explored primarily through literary texts and also films and historical documents. Particular attention will be paid to perfecting analytical skills in written and spoken French.
Writing course.
1 credit.
Fall 2011 and spring 2012. Blanchard.

## FREN 005. Ultimate French

Ultimate French aims to bring students’ language skills to an advanced level that will allow interactive practice in communication skills through conversation, presentations, and written expression. This course provides immersion into French/Francophone cultures, featuring readings from popular press and newspapers and such visual documents as newscasts, television shows, comic strips, videos, and film. Students study targeted vocabulary and grammar to develop different styles of speaking, a stronger use of syntactical structures in writing, and engage in progressively sophisticated cultural and visual texts. This class is particularly well suited for non major/minor students who wish to perfect their French before going abroad. Note: FREN 005 cannot be applied toward the requirements for the major or minor.
Fall 2012. Yervasi.

## FREN 007. French Conversation

A 0.5 -credit conversation course concentrating on the development of the students' ability to speak French. May be repeated once for credit, but can only count once to fulfill major/minor credit requirement.
Prerequisite: For students previously in FREN 004 or the equivalent Placement Test score. 0.5 credit.

Each semester. Lunghi.

## FREN 012. Introduction aux études littéraires et culturelles françaises et francophones

This course offers students the opportunity to develop skills in textual and cultural analysis through the study of literary works (including prose, poetry, and theater), films, and other documents (articles, essays, and images) from France and the Francophone World.
Prerequisite: FREN 004, the equivalent Placement Test score, 5 on the AP examination, or the equivalent with permission.
Note: FREN 012 is required to take any other French literature or culture courses.
Writing course.
1 credit.
Fall 2011. Yervasi. Spring 2012. RiceMaximin.

## FREN 024. Foreign Language Teaching and Pedagogy

## (Cross-listed as EDUC 072)

This course has two elements that are developed together throughout the course of the semester. Students can serve the Swarthmore community by teaching a foreign language to local elementary school students in an afterschool program that meets two times/week.

Students must teach for the entire 6-week session, two days per week. During the evening pedagogy sessions held on campus, we will discuss writing weekly lesson plans, foreign language acquisition in children, teaching methodologies and approaches. We use a common goal-oriented curriculum among all the languages. Students must register for the language or educational studies course that they will be teaching and for a service time (A) M/W or (B) $\mathrm{T} / \mathrm{Th}$.
0.5 credit.

Fall 2011. Johnson. Spring 2012. Staff.

## FREN 045C. Le monde francophone: Caribbean literatures and culture\#

Studying the literary traditions in Haiti will be the point of departure to examine the culture and history of the first independent black Republic, with particular attention to relations with the French
Départements d'Outre-Mer such as Martinique and Guadeloupe. Students will read works from various authors, many of whom will be on campus to participate in the First Regional Haiti Conference (March 29-April 1, 2012).
Eligible for BLST credit.
1 credit.
Spring 2012. Rice-Maximin.

## FREN 045D. Le monde francophone : African Cinema\#

This course is an introduction to the history of Francophone West African cinemas. Students will study the colonial and postcolonial history and culture of this region, be introduced to key film concepts, and develop their ability to do indepth film analysis. Student must attend weekly screenings.
Eligible for BLST credit.
1 credit.
Spring 2013. Yervasi.

## FREN 053. Littérature et cinéma: La pensée géographique

We will explore the central ideas of Bakhtin's "chronotopes"; Bidima's "constellations" and
"crossings"; Deleuze and Guattari’s "nomadic thought"; Glissant's "relationality"; and Rajchman's "geography of living" in conjunction with the study of French and Francophone literature and film. 1 credit.
Fall 2012. Yervasi.

## FREN 054. Cinéma Français: Jeunesse et Résistance

This course explores youth's dynamic relationship to changes in modern and contemporary French and Francophone societies. We will focus our discussions on
representations of youth and how youth culture is depicted in mainstream and independent films from throughout the French-speaking world. Films will most likely be selected from among the following Francophone countries of production: Belgium, Burkina Faso, Cameroon, Congo, France, Mali, Senegal, and Switzerland. All coursework and class discussion will be in French. No previous preparation or experience in Film and Media studies are required. Students must attend weekly screenings. 1 credit.
Fall 2011. Yervasi.

## FREN 056. Ces femmes qui écrivent.../Reading French Women\#

A study of the work of women from Africa, the Caribbean, France, and Vietnam. Material will be drawn from diverse historical periods and genres.
Eligible for BLST or GSST credit.
1 credit.
Spring 2013. Rice-Maximin.

## FREN 091. Senior Colloquium:

This course will be dedicated to discussions of the various topics chosen by majors and minors for their senior thesis. Although this course is required of French/Francophone majors and minors, it is open to other advanced students. Writing course. Offered each fall.
1 credit.
Fall 2011. Yervasi.

## FREN 093. Directed Reading

## FREN 096. Thesis

## Seminars

## FREN 108. Littérature et cinéma moderne et contemporains: La question de représentation

From realism to the nouveau roman to experimental writing and filming, from Proust to Pennac and Méliès to Mnouchkine, this course looks at the interconnections between history, writing, visual culture, and theoretical questions of representation. Discussions will center on thematic developments of these intersections, and readings and films will be taken from a wide selection of French and Francophone writers and filmmakers.
2 credits.
Spring 2012. Yervasi.

## FREN 111. Le Désir colonial: représentations de la différence dans l'imaginaire français\#

This course addresses how the colonial encounter has shaped modern perceptions of
race, ethnicity, gender, and sexuality through the production, circulation and consumption of deformed images of its colonial subjects. From noble savages and whimpering slaves to hideous monsters and seductive harem girls, we will examine the dynamics of representation embedded in colonial narrations and visual constructions of the "Other," focusing on conceptualizations of power as they relate to race, sexual politics and the gendering of the colonial subject. Primary texts include literature of the slave trade, orientalist fictions and photographs, colonial films, museum exhibitions and world's fairs, and contemporary works of fiction that deal with the legacy and sometimes continue the colonial desire.
Eligible for BLST or GSST credit.
2 credits.
Spring 2013. Gueydan.

## FREN 180. Honors Thesis

FREN 199. Senior Honors Study
Courses with a Francophone component are marked with a \#.

## French Courses Not Currently Offered

FREN 020. Panorama de la littérature française
FREN 022. Panorama du cinéma français et francophone\#
FREN 043. Fictions d'enfance\#
FREN 044. Tyrants and Revolutionaries
FREN 045A. Le monde francophone: Postcolonial cities in the Francophone World\# FREN 045B. Le monde francophone: France and the Maghreb: Postcolonial Writing in a Transnational Context\#
FREN 046. Poésies d'écritures françaises\# FREN 050. Le Roman du XIXe siècle FREN 058. The Representation of Alterity in French Literature and Cinema\# FREN 102. Le Monde Comique de Molière FREN 104. Le Roman du XIXe siècle FREN 106. La Modernité
FREN 110. Histoires d'îles\#
FREN 114. Théâtre d'écritures françaises\#FREN 115. Paroles de femmes\# LITR 061FJ. Manga, Bande Dessinée, and the Graphic Novel: A Transnational Study of Graphic Fiction
LITR 071F. French Cultural and Critical Theory
LITR 073F. Postwar France: The French New
Wave (French and Francophone Literature and Film in Translation)

LITR 075F. Caribbean literature and culture in Translation
LITR 078F. Francophone Cinema

## German Studies

## Core Faculty

Hansjakob Werlen, Professor, Coordinator
Sunka Simon, Associate Professor
Christopher Schnader, Lecturer
Affiliated Faculty
Peter Baumann, Professor (Philosophy)
Richard Eldridge, Professor (Philosophy)
Pieter Judson, Professor (History) ${ }^{1}$
Tamsin Lorraine, Professor (Philosophy)
Michael Marissen, Professor (Music)
Janine Mileaf, Associate Professor (Art) ${ }^{3}$
Braulio Muñoz, Professor (Sociology and Anthropology)
Robert Weinberg, Professor (History)
Thomas Whitman, Associate Professor (Music)
${ }^{1}$ Absent on leave, fall 2011.
${ }^{3}$ Absent on leave, 2011-2012.
The German Studies Program offers students a wide variety of courses in language, literature, film, and culture taught in German, as well as classes in anthropology and sociology, history, music, philosophy, and political science. Stressing the interrelatedness of linguistic competency and broad cultural literacy, German studies classes cover a wide range of literary periods, intellectual history, and film and visual culture. The diverse approaches to German culture(s) prepare students for graduate work in several academic disciplines, as well as for a variety of international careers. German studies can be pursued as course major or minor or as a major and minor in the Honors Program.
Students are expected to be sufficiently proficient in German to do written and oral work in German. To this end, we strongly advise students to spend an academic semester-preferably spring semester-in a German-speaking country before their senior year.

## The Academic Program

Not all advanced courses or seminars are offered every year. Students wishing to major or minor in German studies should plan their program in consultation with the program coordinator. All German courses numbered 50 and above are open to students after GMST 008 or 020. Seminars in German are taught in fall semesters only and are open to students with advanced skills in reading and writing German. For seminar enrollment in our affiliated departments, please consult the guidelines and

German studies adviser of those departments (art, history, music, philosophy, political science, religion, sociology and anthropology).

## Course Major: Options, Requirements, and Acceptance Criteria

- Completion of a minimum of 8 credits in courses numbered 003 and above.
- Majors in course are required to take GMST

091: Special Topics, and enroll in at least one seminar taught in German in their junior or senior year. (See the note on enrolling in seminars)

- Three of the 8 credits may be taken in English from among the courses relevant to German studies listed in the catalog under literature in translation (e.g., LITR 054G or LITR 066G) or from courses listed as eligible for German studies (see list below).
- Comprehensive requirement: Seniors in course are required to submit a bibliography of 20 works to form the basis of a discussion and an extended, integrative paper (approximately 15 double-spaced pages in length) on a topic agreed to by the program coordinator. This paper, due before the date for the comprehensive examination, is complemented by a discussion of the paper with members of the program, in German.
- Students are strongly encouraged to spend a semester in Germany or at least participate in a summer program in a German-speaking country. Of the classes taken abroad, a maximum of 2 credits will normally count toward the major. In cases of double majors, this number might be increased in consultation with the German studies chair. After studying abroad, majors must take two additional German studies classes.


## Typical Course of Study:

Minimum of 5 credits in German above GMST 001 and 002:

GMST 003
GMST 008
GMST 020
GMST 091
GMST Seminar (104 and above, 2 credits)
Maximum of 3 credits taught in English from LITR, such as:

LITR 020: Expressions of Infinite Longing. German Romanticism and its Discontents
LITR 051G: European Cinema
LITR 054G: German Cinema
LITR 066G: History of German Drama
Or the equivalent, taught in English, and from List of Courses eligible for German Studies
(taught in English in other departments, e.g. HIST 035 and PHL 049 or SOAN 101)

## Course Minor: Options, Requirements, and Acceptance Criteria

- Students must complete a minimum of 5 credits in courses and seminars, at least 3 of which are taught in German and numbered 003 or above. Of these courses, GMST 008, 020 and GMST 091: Special Topics are required.
- Up to two credits can come from courses eligible for German studies numbered 008 or above.
- Students are strongly encouraged to spend a semester in Germany or at least participate in a summer program in a German-speaking country. Of the classes taken abroad, a maximum of 2 credits will normally count toward the minor. In case of double majors, this number can be increased in consultation with the German Studies chair.
Typical Course of Study:
GMST 003
GMST 008
GMST 020
GMST 091
1-2 advanced courses or 1 seminar taught in English from the list of courses eligible for German studies (from LITR or from an affiliated department, e.g. HIST 036 and MUSI 035 or PHL 137)


## Honors Major and Minor in German Studies

Majors and minors in the Honors Program are expected to fulfill the minimum requirements for course majors above and be sufficiently proficient in spoken and written German to complete all their work in the language. All majors and minors in honors are strongly advised to spend at least one semester of study in a German-speaking country. Candidates are expected to have a B average in coursework both in the department and at the College.

## Preparations

Honors Major: The honors major requirements are identical to the course major requirements. All honors majors must include GMST 020 and GMST 091 in their course of study. In addition:

1. Honors majors in German studies take three seminars, two taught in German and one taught in English from an affiliated program. In consultation with the German studies chair, two advanced courses in German studies (such as GMST 054 and a second special topics course, GMST 091) may be taken in lieu of one seminar.
2. Honors majors participate in the external examination process required of all Swarthmore honors students and the Senior Honors Study process explained below. (Total: Minimum of 8 credits, 6 credits for seminars +1 credit for GMST $091+1$ credit for GMST 020)
Honors Minor: The honors minor prepares for the examination in German studies by following the minimum course minor requirements. All honors minors must take one seminar taught in German for their honors preparation and complete Senior Honors Study (described below). (Total: 5 credits)

## Senior Honors Study (SHS) and Mode of Examination

For SHS, students are required to present an annotated bibliography of criticism-articles or books-concerning at least five of the texts in each seminar offered for external examination. Students are required to meet with the respective instructor(s) of the seminars being examined by Feb. 15 to discuss their planned bibliography and to meet with the instructors for a second time when the approved bibliography is handed in by May 1 . The annotated bibliography, which carries no credit, will be added to course syllabi in the honors portfolio. The honors examination will take the form of a 3-hour written examination based on each seminar and its SHS preparation as well as a 1-hour oral panel examination based on the three written examinations for majors or a 30to 45-minute oral examination for minors.

## Off-Campus Study

Students of German are strongly encouraged to spend at least a semester in a German-speaking country. There are several excellent opportunities to participate in an approved program, such as the Columbia Consortium Program in Berlin, Duke University in Berlin, the Macalester College German Study Program in Berlin/Vienna, or the Dickinson College Program in Bremen. Students should consider going abroad in the spring semester. This will enable them to participate fully in the semester schedule of German and Austrian Universities.

## Eligible Courses in German Studies

ARTH 005. Modern Art
ARTH 019. Contemporary Art
ARTH 077. Exhibiting the Modern
ARTH 166. Avant-Gardes
GMST 008. Texts in Content: Topics in German Culture and Society from the Reformation Until Today
GMST 020. Introduction to German Studies
GMST 024. German: Teaching and Pedagogy

GMST 052. The Gender of Modernity (Crosslisted GSST 020)
GMST 054. German Cinema (Cross-listed LITR054G and FMST 054)
GMST 091. Special Topics: TBA
GMST 104. Goethe und seine Zeit
GMST 108. Wien und Berlin
GMST 111. Genres
HIST 028. Nations \& Nationalism-E. Europe
HIST 029. Sexuality and Society in Modern Europe
HIST 035. From Emancipation to
Extermination: European Jewry's Encounter with Modernity
HIST 036. Modern Germany
HIST 037. History and Memory; Perspectives on the Holocaust
HIST 125. Fascist Europe
LITR 016. First-Year Seminar: Transcultural Mediations: How Texts Travel
LITR 020. Expressions of Infinite Longing: German Romanticism and its Discontent
LITR 051. European Cinema (Cross-listed as FMST 051)
LITR 066G. History of German Drama
MUSI 003A. Jazz Today: USA, Europe \& the African Heritage
MUSI 006B. Music of Holocaust \& WW II Era MUSI 007A. W.A. Mozart
MUSI 007B. Beethoven and the Romantic Spirit
MUSI 022. 19th Century European Music
MUSI 034. J.S. Bach
MUSI 101. J.S. Bach
MUSI 103. Mahler and Britten
MUSI 105. Beethoven
PHIL 029. Philosophy of Modern Music
PHIL 039. Existentialism
PHIL 048. German Romanticism
PHIL 049. Marx, Nietzsche, Freud
PHIL 114. 19th Century Philosophy
PHIL 139. Phenomenology, Existentialism, and Poststructuralism
POLS 053. The Politics of Eastern Europe: Polities in Transition
POLS 059. Contemporary Euro Politics
POLS 073A. Migration, Immigration and
Globalization in Europe
POLS 107. Comparative Politics: Greater Europe
SOAN 044D. Colloquium: Critical Social Theory
SOAN 044E. Colloq: Modern Social Theory

## Courses

Not all advanced courses or seminars are offered every year. Students wishing to major or minor in German should plan their program in consultation with the section. All courses numbered 050 and above are open to students after GMST 020. (See note on enrolling in seminars.)

GMST 001-002, 003. Intensive German Students who start in the 001-002 sequence must complete 002 to receive credit for 001.
For students who begin German in college. Designed to impart an active command of the language. Combines the study of grammar with intensive oral practice, writing, and readings in expository and literary prose. See the explanatory note on language courses earlier. Normally followed by 008 , or 020 .
1.5 credits.

## GMST 001. Intensive Elementary

 GermanFall 2011. Werlen, Schnader.

## GMST 002. Intensive Elementary

 GermanSpring 2012. Werlen, Schnader.

## GMST 003. Intensive Intermediate German

Fall 2011. Simon, Schnader.

## GMST 005. German Conversation

A 0.5 -credit conversation course, concentrating on the development of the students' speaking skills.
Prerequisite: GMST 008 in a current or a previous semester or the equivalent placement test score.
0.5 credit.

Fall 2011. Schnader.

## GMST 006. German Conversation

A 0.5 -credit conversation course, concentrating on the development of the students' speaking skills.
Prerequisite: GMST 008 in a current or a previous semester or the equivalent Placement Test score.
0.5 credit.

Spring 2012. Schnader.
GMST 008. Texts in Contexts: Topics in German Culture and Society from the Reformation until Today
GMST 008 is a 4th semester course integrating the continued work on advancing the students' linguistic skills with the acquisition of cultural, historical, and literary content about Germanspeaking countries. This course is the gateway
to all upper level courses in the German studies curriculum. Topics alternate every year.
Prerequisite: placement test score or GMST 003

## Topic for Spring 2012: Deutsche Popmusik - Von Gassenhauer bis Hip

 HopIn this course, we will trace the development of German popular music from Weimar era street and vaudeville hits, musical films of the Third Reich and the postwar decades, to post-1968 protest songs, German Schlager, New German Wave, and Hip Hop. While fine-tuning your knowledge of German cultural history, advancing your stylistic, lexical and grammatical competency in German will be the overall goal.
1 credit.
Spring 2012. Simon.

## GMST 020. Introduction to German Studies: Topics in German Literature and Culture

This course serves as the introduction to the interdisciplinary field of German studies. What is German "culture," how has it been defined, which narratives, theories, and events have shaped the national imaginary from the 18 th century to today? Students will develop speaking and writing skills through short assignments and presentations intended to familiarize them with the vocabulary of literary and cultural analysis in German. Topics change every year.
Prerequisite: placement test score or GMST 008.

## Topic for Fall 2011: The German Literary Canon <br> Poems by Johann Wolfgang Goethe, stories by

 Heinrich Kleist, E.T.A. Hoffmann and Gottfried Keller, plays by Büchner and Brecht-these are some of the texts read and analyzed in this introduction to the critical and cultural context of the German literary canon.1 credit.
Fall 2011. Werlen.

## GMST 024. Foreign Language Teaching and Pedagogy <br> (Cross-listed as EDUC 072)

This course has two elements that are developed together throughout the course of the semester. Students can serve the Swarthmore community by teaching a foreign language to local elementary school students in an afterschool program that meets two times/week. Students must teach for the entire 6-week session, two days per week. During the evening pedagogy sessions held on campus, we will discuss writing weekly lesson plans, foreign language acquisition in children, teaching
methodologies and approaches. We use a common goal-oriented curriculum among all the languages. Students must register for the language or educational studies course that they will be teaching and for a service time (A) M/W or (B) $\mathrm{T} / \mathrm{Th}$.
0.5 credit.

Fall 2011. Johnson. Spring 2012. Staff

## GMST 054. German Cinema

(Cross-listed as LITR 054G/FMST 054)
This course is an introduction to German cinema from its inception in the 1890s until the present. It includes an examination of early exhibition forms, expressionist and avant-garde films from the classic German cinema of the Weimar era, fascist cinema, postwar rubble films, DEFA films from East Germany, New German Cinema from the 1970s, and post 1989 heritage films. We will analyze a cross-match of popular and avant-garde films while discussing mass culture, education, propaganda, and entertainment as identity- and nationbuilding practices.
Eligible for FMST credit, fulfills national cinema requirement.
Writing course.
1 credit.
Not offered 2011-2012.

## GMST 091. Special Topics

Advanced literature and culture course in German required for all German majors and minors. For honor students, this class together with an attachment counts as an honors preparation.
Topics change each year and include (partial list):

- Der neue deutsche Krimi
- Die Romantik
- Die deutsche Postmoderne
- Gegenwartsliteratur
- Heinrich von Kleist and E.T.A. Hoffmann
- Populärliteratur

Topic for Spring 2012: Border Lines: A New Swiss Literary Map
Immigration has played an important political, social and cultural role in German-speaking countries since the 60 s and, as that role has grown, so have literary and aesthetic representations of immigrant experiences, redefining and refining questions of national, ethnic, and linguistic identity and cultural translatability. It can be argued that Swiss literature has always been a literature of borders and multiple cultures and that there is no Swiss literature, only literature written by Swiss authors. While texts by authors writing in the Swiss diaspora, such as Melinda Nadj Abonji and Ilma Rakusa focus on themes of integration
and alienation, these concerns have also been at the center of many earlier generation of Swiss writers, including Max Frisch, Friedrich Dürrenmatt, and Adolf Muschg, who explore endles variations of "Fremdsein." This class will explore the multiplicity of cultural border crossings in texts (among others) by Ágota
Kristóf, Dragica Rajcić, Catalin Dorian Florescu, Yusuf Yesilöz, Hugo Lötscher, Abonji, Rakusa, Frisch, Dürrenmatt und Muschg.
1 credit.
Spring 2012. Seyhan (Bryn Mawr), Werlen.

## GMST 093. Directed Reading

## Seminars

Five German seminars are normally scheduled on a rotating basis. Preparation of topics for honors may be done by particular courses plus attachments only when seminars are not available.
Note. Students enrolling in a seminar are expected to have done the equivalent of at least one course beyond the GMST 020 level.

GMST 104. Goethe und seine Zeit
This seminar familiarizes students with arguably the greatest German writer whose literary works revolutionized German poetry, drama, and the novel. Often regarded as the founder of German classicism, Goethe's literary writings, spanning over six decades, defy easy categorization. Texts read in the seminar include the early drama Götz von Berlichingen and the influential epistolary novel The Sorrows of Young Werther, the classical drama Iphigenie auf Tauris, the novels Wilhelm Meisters Lehrjahre and Die Wahlverwandtschaften, early essays on Shakespeare and Gothic architecture, poetry from all periods of his life, and, of course, Faust. We will also look at Goethe's scientific ideas (morphology of plants and theory of optics) in his philosophical and economic worldview.
2 credits.
Not offered 2011-2012.

## GMST 105. Die deutsche Romantik

Romanticism as the dominant movement in German literature, thought, and the arts from the 1790s through the first third of the 19th century. Focus on Romantic aesthetics and poetics, including the influence of German Idealism.
2 credits.
Not offered 2011-2012.

## GMST 108. Wien und Berlin

Between 1871 and 1933, Vienna and Berlin were two cultural magnets drawing such diverse figures as Sigmund Freud, Ludwig Wittgenstein, Gustav Klimt, Gustav Mahler, Leon Trotsky, Gerhard Hauptman, Käthe Kollwitz, Rainer Maria Rilke, Bertolt Brecht, Kurt Tucholsky, Else Lasker-Schüler, Richard Strauss, Arnold Schönberg, and Adolf Hitler.
This course will examine the multiple tensions that characterized "fin-de-siècle" Vienna and Berlin, such as the connection between gender and the urban landscape, the pursuit of pleasure and the attempt to scientifically explore human sexuality, and the conflict between avant-garde experimentation and the disintegration of political liberalism.
2 credits.
Fall 2011. Simon.

## GMST 110. German Literature After World War II

The aim of the seminar is to acquaint students with literary developments in the Germanspeaking countries after the end of World War
II. The survey of texts will address questions of "Vergangenheitsbewältigung" and social critique in the 1950s, the politicization of literature in the 1960s, the "Neue Innerlichkeit" of the 1970s, and literary postmodernity of the 1980s. We will also study the literature of the German Democratic Republic and texts dealing with post-wall, unified Germany. Authors included are Böll, Eich, Grass, Frisch, Bachmann, Handke, Bernhard, Jelinek, Strauss, Wolf, Delius, Plenzdorf, Süskind, and Menasse. 2 credits.
Not offered 2011-2012.

## GMST 111. Genres

This seminar will explore in depth a particular genre of literary and media production.
Scheduled topics include the following:

- Deutsche Lyrik
- Populärliteratur
- Der deutsche Film
- Das deutsche Drama
- Der deutsche Roman

GMST 199. Senior Honors Study

## Japanese

## The Academic Program

Courses in Japanese language, literature, and culture may be combined with courses taken at Haverford, Bryn Mawr and with study abroad toward a special major or a minor in Japanese or may be counted toward a major or minor in Asian studies (see Asian studies). Interested students should consult with the section head of Japanese or with the chair of Asian studies.

## Special Majoring and Minoring in Japanese

Students may construct a special major in Japanese, featuring intensive study in Japanese language, literature, and culture. Japanese special majors will complete their coursework through a combination of study at Swarthmore, courses at Haverford or Bryn Mawr, and study abroad. Students interested in a Japanese special major or minor should consult with the section head of Japanese as soon as possible.
Students seeking a broader exposure to East Asian society and culture may consider a Japanese concentration within the Asian studies major. Students who wish to concentrate on linguistics rather than Japanese literature and culture may construct a special major in Japanese Language and Linguistics, with a combination of advanced language study at Haverford and Bryn Mawr, study abroad and courses and seminars in the Linguistics department at Swarthmore College. Students wishing to pursue this possibility should consult with the Japanese section head.

## Special Major in Japanese Language, Literature and Culture

At least 10 total credits starting with 001 , including at least one credit outside the department, are required for a special major in Japanese. Special majors should complete the following sequence of language courses JPNS $001,002,003,004,012,012 \mathrm{~A}, 013,013 \mathrm{~A}$ or their equivalent. Japanese special majors are strongly encouraged to study abroad in a program approved by the section; transfer credits normally may be counted toward the special major.
Special majors should complete at least two courses on Japanese culture of level 015 and higher and at least two additional courses of level 30 and higher or their equivalent in coursework outside the department. Students are encouraged to combine their study of Japanese literature and culture with coursework in Japanese history, anthropology and sociology, religion, art, music, economics, political science, education, comparative literature, and other related fields within the tricollege consortium. At least two courses on Japanese literature and culture should normally be taken within the department.
All special majors will complete a culminating project.

## Minor in Japanese Language, Literature and Culture

A minimum of 5 credits numbered 004 and above is required for the course minor. At least
one credit must be taken in Japanese literature, film or culture in translation, either in coursework offered by the Japanese section or its equivalent in coursework outside of Swarthmore, with the approval of the section. A minimum of 3 credits should be taken at Swarthmore.
The section strongly encourages study abroad in a section-approved program; transferred credits normally may be counted toward the minor. One credit may be earned from another department on a Japan-related subject with the approval of the section.

## Honors Special Majors and Minors in Japanese

Honors study for qualified students may be substituted for the culminating project in the major. Students are encouraged to consult with the Japanese section head to discuss Honors special majors and honors minors.

## Courses

JPNS 001-002. Introduction to Japanese Students who start in the 001-002 sequence must complete 002 to receive credit for 001.
This intensive introduction to Japanese develops the four language skills of speaking, writing, listening, and reading. The spoken component will cover both formal and casual forms of speech; the written component will introduce the hiragana and katakana syllabaries; and about 200 kanji characters.
1.5 credits.

JPNS 001.
Fall 2011. Jo, Suda.
JPNS 002.
Spring 2012. Jo, Suda.

## JPNS 003-004. Second-Year Japanese

Combines intensive oral practice with writing and reading in the modern language. The course attempts to increase students' expressive ability through the introduction of more advanced grammatical patterns and idiomatic expressions. The course will introduce approximately 300 new kanji characters in addition to the 200 covered in JPNS 001-002.
1.5 credits.

JPNS 003.
Fall 2011. Gardner, Jo.
JPNS 004.
Spring 2012. Gardner, Jo.

## JPNS 012-013. Third-Year Japanese

These courses aim to lead Japanese students into the intermediate-advanced level, deepening students' exposure to Japanese culture through
the study of authentic materials and the application of language skills in diverse linguistic contexts. They will combine oral practice with reading, viewing, and discussion of authentic materials including newspaper articles, video clips, and literary selections. Students will continue to develop their expressive ability through use of more advanced grammatical patterns and idiomatic expressions, and will gain practice in composition and letter writing. These courses will introduce approximately 300 new kanji characters in addition to approximately 500 covered in first- and second-year Japanese.
Prerequisite: Completion of JPNS 004 or demonstration of equivalent language skills.
These courses are recommended to be taken together with JPNS 012A in the fall semester and JPNS 013A in the spring semester, which will provide additional opportunities for application and extension of newly acquired skills.
1 credit.
Fall 2011, spring 2012. Suda.

## JPNS 012A. Japanese Conversation

This course attempts to improve students' command of spoken Japanese at the intermediate level. It meets for 90 minutes each week. Can be repeated for credit. Prerequisite: completion of JPNS 004, or instructor's permission.
0.5 credit.

Fall 2011. Suda.

## JPNS 013A. Readings in Japanese

This course aims to improve students' intermediate-advanced reading skills, while introducing them to the world of Japanese literature in the original. We will examine texts in various genres, such as personal essays, short stories, folk tales, manga, haiku, and free-verse poetry, and discuss the distinctive features of each genre as well as the cultural context for each work. Readings and discussion will be in Japanese. The course may be repeated for credit. Prerequisite: completion of JPNS 012, or instructor's permission.
0.5 credits.

Spring 2012. Gardner.

## JPNS 014A. Foreign Language Teaching and Pedagogy <br> (Cross-listed as EDUC 072)

This course has two elements that are developed together throughout the course of the semester. Students can serve the Swarthmore community by teaching a foreign language to local elementary school students in an afterschool program that meets two times/week. Students must teach for the entire 6-week
session, two days per week. During the evening pedagogy sessions held on campus, we will discuss writing weekly lesson plans, foreign language acquisition in children, teaching methodologies and approaches. We use a common goal-oriented curriculum among all the languages. Students must register for the language or educational studies course that they will be teaching and for a service time (A) M/W or (B) $\mathrm{T} / \mathrm{Th}$.
0.5 credit.

Fall 2011. Johnson. Spring 2012. Staff.

## JPNS 017. First-Year Seminar: The World of Japanese Drama

## (Cross-listed as LITR 017J/THEA 017)

This first-year seminar will explore the unique dramatic traditions of Japan from diverse angles, including a study of dramatic texts, videos of performance, and films based on famous dramatic works. Our seminar will focus on the three great dramatic traditions of Noh masked drama, Bunraku puppet theater, and Kabuki. We will also examine the cultural background of these dramatic forms, including the influence of Buddhism, Shintô, and shamanism, as well as the philosophical background and methodology of training and performance.
1 credit.
Not offered 2011-2012.

## JPNS 019. Topics in Japanese

This fourth-year level advanced Japanese course aims to develop students' language proficiency in reading, writing, listening, and speaking, through examination and discussion of a variety of authentic materials on selected topics such as literature, language, history, education, and society. Readings and discussion will be in Japanese.
Prerequisite: completion of JPNS 013 or equivalent.
1 credit.
Not offered 2011-2012.

## JPNS 021. Modern Japanese Literature

 (Cross-listed as LITR 021J)An introduction to Japanese fiction from the Meiji Restoration (1868) to the present day, focusing on how literature has been used to express the personal voice and to shape and critique the concept of the modern individual. We will discuss the development of the mode of personal narrative known as the "I novel" as well as those authors and works that challenge this literary mode. In addition, we will explore how the personal voice in literature is interwoven with the great intellectual and historical movements of modern times, including Japan's encounter with the West and
rapid modernization, the rise of Japanese imperialism and militarism, World War II and its aftermath, the emergence of an affluent consumer society in the postwar period, and the impact of global popular culture and the horizon of new transnational identities in the 21 st century. All readings and discussions will be in English.
1 credit.
Not offered 2011-2012.

## JPNS 024. Japanese Film and Animation (Cross-listed as LITR 024J/FMST 057)

This course offers a historical and thematic introduction to Japanese cinema, one of the world's great film traditions. Our discussions will center on the historical context of Japanese film, including how films address issues of modernity, gender, and national identity. Through our readings, discussion, and writing, we will explore various approaches to film analysis, with the goal of developing a deeper understanding of formal and thematic issues. A separate unit will consider the postwar development of Japanese animation (anime) and its special characteristics. Screenings will include films by Ozu, Mizoguchi, Kurosawa, Imamura, Kitano, and Miyazaki.
1 credit.
Spring 2012. Gardner.

## JPNS 026. Masculinities in Japanese Film and Fiction

(Cross-listed as LITR 026J)
Macho or pansy? Boyish or manly? In this course, we will consider representations of masculine gender and sexuality in works of modern Japanese fiction and film. We will consider historical and cultural constructions of masculinity in various guises, whether normative, transgressive, or gratuitously extreme. Topics will include adolescence, romance, success, masochism, incest, prostitution, violence, class background, homosociality, and repression, among others. No knowledge of Japanese is required. 1 credit.
Fall 2011. Herlands.

## JPNS 041. Fantastic Spaces in Modern Japanese Literature <br> (Cross-listed as LITR 041J)

As Japanese society has transformed rapidly in the 20th century and beyond, a number of authors have turned to the fantastic to explore the pathways of cultural memory, the vicissitudes of interpersonal relationships, the limits of mind and body, and the nature of storytelling itself. In this course, we will consider the use of anti-realistic writing genres in Japanese literature from 1900 to the present,
combining readings of novels and short stories with related critical and theoretical texts. Fictional works examined will include novels, supernatural tales, science fiction, and cyberfiction by authors such as Tanizaki Junichirô, Abe Kôbô, Kurahashi Yumiko, and Murakami Haruki. Readings will be in English; no previous experience in Japanese studies is required.
Writing course.
1 credit.
Not offered 2011-2012.

## JPNS 047. Japanese Food Cultures

(Cross-listed as LITR 047J)
Many people first encounter Japan through its cuisine, but few know the history or logistics behind how that piece of California roll landed at the end of their chopsticks. This course approaches the connection between food and Japanese culture from a multidisciplinary standpoint. We will consider the role of food in constructing national, ethnic, regional, classconscious, and gendered bodies and identities across Japan's history. We will interrogate representations of food in literary and visual arts. We will look at the ways in which food and its representations are produced, marketed, and circulated on both domestic and international levels. And we will not neglect to highlight the sensual pleasures-and concomitant dangers-of relationships defined by our appetites. No knowledge of Japanese is necessary.
1 credit.
Spring 2012. Herlands.

## JPNS 051. Japanese Poetry and Poetics

 (Cross-listed as LITR 051J)Japanese poetic forms such as haiku, renga, and tanka have had a great impact on modern poetry across the world, and have played a central role in the development of Japanese literature and aesthetics. This course will examine Japanese poetry from its roots in ancient oral tradition though the internet age. Topics include the role of poetry in courtship, communication, religion, and ritual; orality and the graphic tradition; the influence of poetic models from China and the West; social networks and game aesthetics in renga linked poetry; and haiku as a worldwide poetic form. Course projects will include translation and composition in addition to analytical writing. Readings will be in English, and there are no language requirements or other prerequisites; however, the course will include a close examination of Japanese poetic sound, syntax, meter, and diction, or how the poems
"work" in the original language.
1 credit.

JPNS 061. Manga, Bande Dessinée, and the Graphic Novel: A Transnational Study of Graphic Fiction
(Cross-listed as LITR 061FJ)
1 credit.
Not offered 2011-2012.
JPNS 074. Japanese Popular Culture and Contemporary Media
(Cross-listed as LITR 074J)
Japanese popular culture products such as manga (comics), anime (animation), television,
film, and popular music are an increasingly vital element of 21st-century global culture, attracting ardent fans around the world. In this course, we will critically examine the postwar development of Japanese popular culture, together with the proliferation of new media that have accelerated the global diffusion of popular cultural forms. Engaging with theoretical ideas and debates regarding popular culture and media, we will discuss the significance of fan cultures, including the "otaku" phenomenon in Japan and the United States, and consider how national identity and ethnicity impact the production and consumption of popular cultural products. We will also explore representations of technology in creative works, and consider the global and the local aspects of technological innovations, including the internet, mobile phones, and other portable technology. Readings and discussion will be in English. The course will be conducted in a seminar format with student research and presentations comprising an important element of the class. Previous coursework in Japanese studies or media studies is recommended but not required.
1 credit.
Not offered 2011-2012.

## JPNS 083. War and Postwar in Japanese Culture

(Cross-listed as LITR 083J)
What was the Japanese experience of World War II and the Allied Occupation? We will examine literary works, films, and graphic materials (photographs, prints, advertisements, etc.), together with oral histories and historical studies, to seek a better understanding of the prevailing ideologies and intellectual struggles of wartime and postwar Japan as well the experiences of individuals living through the cataclysmic events of midcentury. Issues to be investigated include Japanese nationalism and imperialism; women's experiences of the war and home front; changing representations and ideologies of the body; war writing and censorship; the atomic bombings of Hiroshima and Nagasaki; Japanese responses to the

Occupation; and the war in postwar memory. The course readings and discussions will be in English.
1 credit.
Not offered 2011-2012.
JPNS 094. Independent Study
JPNS 096. Japanese Thesis
Writing course.

## Russian

## The Academic Program

The major in Russian language and literature covers the rise and development of Russian literature and culture up to the present. Students will encounter critical theory and develop skill in critical analysis, approaching Russian and Soviet literature and culture in relationship to historical and social forces. The emphasis in our courses is on culture as well as literature: indeed, understanding Russian literature and other arts is impossible without some background in the history and culture. Because Russian is a small program, we are very responsive to student demand and can develop courses almost to order, if there is sufficient interest. Students interested in a combined Russian language and linguistics major may develop a program with advanced courses and seminars in the language offered at Bryn Mawr or the University of Pennsylvania and the Linguistics Department at Swarthmore College.

## Russian in Combination with Other Programs

In the Course Program, Russian can contribute toward majors in comparative literature, film and media studies, linguistics, and theater, and to the concentrations in interpretation studies and gender and sexuality studies. Thematic courses in Russian culture can support majors or minors in history, music, philosophy, and political science and concentrations in Asian studies, environmental studies, and Islamic studies. A Russian honors minor fits well into an honors major in the humanities or social sciences, and nicely rounds out majors in engineering or the natural sciences. In the Honors Program, Russian contributes toward the major or minor in comparative literature. By including coursework in second language acquisition at Bryn Mawr College, Russian can be part of a special major in educational studies for teacher certification.
There is no distinction between qualification for the Russian Course Program and for the Honors Program. We recommend a minimum of one semester or summer of study in Russia. Majors and minors are urged to build and maintain fluency by taking Russian Conversation (RUSS 006A) and Russian Phonetics (RUSS 008A),
and to support their work in the field with courses in anthropology, art, cognitive science, film and media studies, history, music, philosophy, political science, religion, sociology, theater, and other literatures. RUSS 091, the seminar attachment, may be added to any course numbered 020 or above to convert it to a seminar, for a total of two credits. The additional work is done in the original language and supported by regular meetings with the professor, readings, discussions, and significant writing assignments in Russian. We anticipate that most seminar work will be done in this format. If there is sufficient student demand, we can offer advanced seminars in any of the following areas:

## Seminar Topics:

RUSS 101. Tolstoy
RUSS 102. Russian Short Story
RUSS 103. Pushkin and Lermontov
RUSS 104. Dostoevsky
RUSS 105. Literature of the Soviet Period
RUSS 106. Russian Drama
RUSS 107. Russian Lyrical Poetry
RUSS 108. Russian Modernism
RUSS 109. Chekhov
RUSS 110. Bulgakov
RUSS 111. Tsvetaeva and Mayakovsky
RUSS 112. Akhmatova and Mandelshtam
RUSS 113. Russian and Soviet Cinema
RUSS 114. Folklore in Russian Literature
RUSS 115. The Many Faces of the Russian Literary Anecdote
RUSS 116. The Petersburg Myth in Russian Literature
RUSS 117. Post-Soviet Russian Literature
RUSS 118. Russian Jewish Writers
RUSS 119. Russian Women Writers
RUSS 120. Russian Science Fiction and Fantasy
The Russian section webpage includes descriptions of the possible seminar topics listed above.
The Russian Program offers a course major or minor and an honors major and minor. Courses in Russian literature and culture (and courses in allied subjects, such as East European Prose or the Translation Workshop) may also be part of a special major.

## Course Major

## Requirements

A minimum of eight credits, which must include:

1. RUSS 004 (or placement above 004)
2. RUSS 011 (or equivalent course in Russia)
3. RUSS 013
4. RUSS 091 (Special Topics)
5. Another course in translation
6. Two seminars in Russian literature and culture, or the equivalent of two seminars (see note on Seminars in the summary of the academic program). Students who study abroad in Russia may use one seminar or spetskurs per semester of study in lieu of a Swarthmore seminar.

## Acceptance Criteria

To be accepted as a major or minor, you must have earned a minimum grade of " $B$ " in Russian language and literature courses taken at Swarthmore and present linguistic ability and clear potential for sophisticated study in the original literature, criticism, and cultural history of imperial Russia, the Soviet Union, and PostSoviet Russia.

## Thesis / Culminating Exercise

The culminating exercise for a course major in Russian is one three-hour written examination (answering two questions in Russian, one in English), scheduled after the end of regular exams in the spring semester of senior year.

## Course Minor

## Requirements for a minor in course in Russian

Five or 5.5 credits, which must include:

1. RUSS 004 (or placement above 004);
2. RUSS 011 or RUSS 013, or an equivalent course taken in Russia;
3. One of the following: RUSS 013 (if not used to fulfill \#2 above), another literature/culture course in translation, or a comparable course in Russia or at Bryn Mawr or University of Pennsylvania;
4. One seminar in Russian or the equivalent. Only one of these courses may overlap with a second minor or the student's major. Study abroad in Russia is strongly encouraged.

## Honors Major

Prerequisites for Majors:

1. RUSS 004
2. RUSS 011 (or a comparable course)
3. RUSS 013 plus one other literature course in translation, or one advanced literature course in another language or literature
4. At least two seminars or courses with the seminar attachment in Russian
5. Seminars may be replaced by a course on Russian literature in translation plus an attachment with work in the original language after consultation with the section.
6. The minimum grade for acceptance into the Honors Program is " B " level work in Russian language courses taken at Swarthmore and in RUSS 011 or its equivalent.
At least one semester of study in Russia is strongly encouraged.

## Senior Honors Study

Please see the information on seminars and seminar attachments, above.
At the beginning of final semester, seniors will meet with the Russian section head.

1. Honors majors write three $3,000-3,500$ word papers in Russian, one for each honors preparation, or else one 6,000-word paper which integrates the three honors preparations. These three papers (or one long paper) become part of the portfolio presented to the external examiners, along with the syllabi of the three (2-credit) honors preparations and any other relevant material.
2. Minors will be expected to write one 3,000-3,500-word paper in Russian. This paper will become part of the portfolio presented to the examiner along with the syllabus of the one (2credit) honors preparation and any other relevant material.
3. Majors will take three three-hour written examinations prepared by external examiners, plus one half-hour oral exam for each, based on the contents of the written examination and materials submitted in the portfolio. Minors will take one three-hour written examination prepared by an external examiner and one halfhour oral examination based on the written examination and materials submitted in the portfolio.

## Honors Minor

## Prerequisites for Minors:

1. RUSS 004
2. RUSS 011 (or a comparable course)
3. RUSS 013 plus another course in translation
4. At least one seminar in Russian
5. The minimum grade for acceptance into the Honors Program is " B " level work in language courses taken at Swarthmore and in RUSS 011 or it's equivalent.
At least one semester of study in Russia is strongly encouraged.

## Special Major

Courses in Russian language, literature, and culture may be integrated into special majors of a variety of kinds, for example: Russian area studies, Russian cinema in history, or Russian and East European literature and/or culture.

## Off-Campus Study

Study abroad is strongly encouraged for students of Russian. We recommend four programs (ACTR, CIEE, Middlebury, and the Smolny Institute) for semester and academicyear study in Russia. Credit may also be available for study through other programs, with appropriate documentation. Consult your professor for more information on programs and sources of funding support.

## Research and Service-Learning Opportunities

Russian participates in the Service-Teaching Pedagogy course and can offer support in various ways to students teaching Russian in the elementary school.

## Summer Opportunities

Besides summer abroad study or internships, and the possibility of arranging for summer humanities research under the supervision of Russian program faculty, students interested in summer language study in Russia or in summer programs in the U.S. may apply for financial support from the Olga Lamkert Fund.
Russian is certified as a critical language by U.S. government agencies, meaning that for both summer study and study abroad there is funding available to support students working in Russian, especially if they are working to reach a high level of proficiency. Ask us for information on this financial assistance and support in applying.

## Life After Swarthmore

A major or minor in Russian can enhance a variety of career choices: strong language skills enhance any other program of work, research or study, while knowledge of literature and culture offers subtle or obvious advantages in business, politics, science and medicine. Like other less commonly taught languages, Russian on your college transcript suggests to potential employers or graduate school admissions committees that you are smart and adventurous, willing to try a challenging new subject of study-and able to master it by completing a major or a minor.

## Graduate School and Other Study

Several recent Russian majors and minors have completed area studies M.A. degrees at Harvard University; others have entered the Flagship Program, which aims to bring students to the highest levels of language fluency for subsequent work in politics, scholarship, or NGOs. Students with majors in Russian Literature have gone on to doctoral work in Political Science. Others have done graduate study in Linguistics, English Literature, and Comparative Literature. The systematic nature
of Russian grammar makes it no surprise that some of our majors and minors have gone on to medical school or to graduate work in Physics and Astronomy. One graduate received a Fulbright fellowship to study Russian authors who covered the Spanish Civil War as journalists, and how their writing influenced the later development of Soviet literature as well; another received a Fulbright to study plant genetics in southern Russia and Kazakhstan. One of our former students left the Swarthmore area to dance with the Boston Ballet.

## Career Options/Opportunities

As the paths of study above suggest, Russian can be combined with almost any field to enhance the possibilities available. Whether immediately after graduation or later, our alumni have found work as editors or English teachers in Russia. Some have gone into the State Department and have become medical doctors. Graduate study may lead to careers as college and university professors or directors of university Title VI centers.
Whatever your career choice, chances are we can put you in touch with alumni of Swarthmore's Russian program who will be able to offer you advice, support, and connections in the field.

## Courses

Not all advanced courses or seminars are offered every year. Students wishing to major or minor in Russian should plan their program in consultation with the department faculty. Course majors are required to take Special Topics (RUSS 091).
Seminars in Russian are only offered when there is sufficient demand. Otherwise students who wish to take a literature course in translation for seminar credit must register for a Seminar Attachment (1 additional credit), adding an A to the course number: $21 \mathrm{~A}, 33 \mathrm{~A}$, 41 A , etc. Courses numbered under 20 cannot be taken as seminars.

## RUSS 001-002, 003. Intensive Russian

Students who start in the 001-002 sequence must complete and pass 002 in order to receive credit for 001.
For students who wish to begin Russian in college or who did not move beyond an introduction in high school. Designed to impart an active command of the language. Combines the study of grammar with intensive oral practice, work on phonetics, writing, web materials, and readings in literary and expository prose. Conducted primarily in Russian; normally followed by RUSS 004, RUSS 011 and ideally by RUSS 010 , and RUSS 008A. See the explanatory note on
language courses in the first section of modern languages and literatures.
1.5 credits.

RUSS 001.
Fall 2011. Johnson, Moskala-Gallaher.

## RUSS 002.

Spring 2012. Johnson, Moskala-Gallaher.

## RUSS 003.

Fall 2011. Rojavin, Moskala-Gallaher.

## RUSS 004. Intermediate Intensive Russian

For majors and those interested in reaching advanced levels of proficiency in the language. Advanced conversation, composition, translation, and stylistics. Considerable attention to writing skills, phonetics, and spontaneous speaking. Readings include short stories, poetry, newspapers, and the Russian web.
1.5 credits.

Spring 2012. Rojavin, Moskala-Gallaher.

## RUSS 006A. Russian Conversation

This course meets once a week for 1.5 hours. Students will read newspapers, explore the Internet, and watch videos to prepare for conversation and discussion. Each student will design and complete an individual project based on his or her own interests and goals. This course may be repeated once for credit.
Prerequisite: 004 in current or a previous semester or permission of the instructor. 0.5 credit.

Spring 2012. Moskala-Gallaher.

## RUSS 008A. Russian Phonetics

(Cross-listed as LING 008A)
This course will enable Russian speakers and non-speakers alike to learn to pronounce Russian fluently. Focused work on individual phonemes and the Russian "articulation foundation" will accompany the study of phonetic rules and intonational constructions. We will devote practical attention to issues in both Russian language acquisition and linguistics; individual assignments will reflect each student's experience, interests, and goals. 0.5 credit.

Offered on demand.

## RUSS 010. Advanced Russian

The course includes practice in speaking, understanding, reading and writing Russian through the use of authentic Russian language materials, including film. Students will consolidate previous knowledge of Russian grammar, and will significantly increase their vocabulary and improve their level of coherent language and writing. Students will acquire
conscious knowledge of the meanings of the grammatical forms applied to discourse, i.e. to specific verbal situations, based not only on the underlying linguistic phenomena, but also on the content of lingua-cultural situations.
1 credit.
Offered on demand.

## RUSS 011. Introduction to Russian Culture

This advanced intensive writing course will reinforce previous stages of work in Russian and will focus on composition rather than translation from English. Students will develop advanced skills in comprehension and active use of the written language through the use of authentic Russian language materials. The course will concentrate on contemporary Russian culture and also on changes in the Russian language-with a wide variety of materials from fiction, newspapers, journals and other media sources.
Conducted in Russian.
Prerequisite: RUSS 004 or permission from the instructor.
Writing course.
1 credit.
Fall 2011. Moskala-Gallaher.

## RUSS 012A. Foreign Language Teaching and Pedagogy

## (Cross-listed as EDUC 072)

This course has two elements that are developed together throughout the course of the semester. Students can serve the Swarthmore community by teaching a foreign language to local elementary school students in an afterschool program that meets two times/week. Students must teach for the entire 6-week session, two days per week. During the evening pedagogy sessions held on campus, we will discuss writing weekly lesson plans, foreign language acquisition in children, teaching methodologies and approaches. We use a common goal-oriented curriculum among all the languages. Students must register for the language or educational studies course that they will be teaching and for a service time (A) M/W or (B) T/Th.
0.5 credit.

Fall 2011. Johnson. Spring 2012. Staff.

## RUSS 013. The Russian Novel <br> (Cross-listed as LITR 013R)

The Russian novel represents one of Russia's most fundamental and enduring contributions to world culture. This course surveys the development of the Russian novel from the early 19th century to the Soviet period by examining seminal works, including novels by Dostoevsky, Tolstoy and Bulgakov. The course
examines these works in terms of their literary, social and political context, highlighting issues such as sexism, racism, Orientalism, terrorism, and imperialism, as well as Russia's national identity.
Writing course.
1 credit.
Fall 2011. Johnson.

## RUSS 015. First-Year Seminar: East European Prose in Translation

 (Cross-listed as LITR 015R)Novels and stories by the most prominent 20thcentury writers of this multifaceted and turbulent region. Analysis of individual works and writers to appreciate the religious, linguistic, and historical diversity of Eastern Europe in an era of war, revolution, political dissent, and outstanding cultural and intellectual achievement. Readings, lectures, writing, and discussion in English; students who are able may do some readings in the original languages. Writing course.
1 credit.
Fall 2011. Forrester.

## RUSS 017. First-Year Seminar: Love and Sex in Russian Literature

## (Cross-listed as LITR 017R)

Best known for political priorities and philosophical depth, Russian literature has also devoted many works to the eternal concern of love and sex. We will read significant and provocative works from traditional folk tales through the 20th century to discuss their construction of these most "natural" impulses -and how they imagine the relationship of human attraction to art, politics and philosophy. Writing course.
1 credit.
Spring 2012. Forrester.

## RUSS 021. Dostoevsky (in Translation)

 (Cross-listed as LITR 021R)Writer, gambler, publicist, and visionary Fedor Dostoevsky is one of the great writers of the modern age. His work influenced Nietzsche, Freud, Woolf, and others and continues to exert a profound influence on thought in our own society to the present. Dostoevsky confronts the "accursed questions" of truth, justice, and free will set against the darkest examples of human suffering: murder, suicide, poverty, addiction, and obsession. Students will consider artistic, philosophical, and social questions through texts from throughout Dostoevsky's career. Students with knowledge of Russian may read some or all of the works in the original.
1 credit.
Spring 2012. Johnson.

## RUSS 026. Russian and East European Science Fiction

(Cross-listed as LITR 026R)
Science fiction enjoyed surprisingly high status in Russia and Eastern Europe, attracting such prominent mainstream writers as Karel Čapek, Mikhail Bulgakov, and Evgenii Zamiatin. In the post-Stalinist years of stagnation, science fiction provided a refuge from stultifying official Socialist Realism for authors like Stanisław Lem and the Strugatsky brothers. This course will concentrate on 20th-century science fiction (translated from Czech, Polish, Russian and Serbian) with a glance at earlier influences and attention to more recent works, as well as to Western parallels and contrasts. 1 credit.
Next offered 2012-2013.

## RUSS 028. Tolstoy

(Cross-listed as LITR 028R)
Novelist, Christian philosopher, pacifist, and educator, Leo Tolstoy's monumental thought inspired communities of "Tolstoyans" and influenced Gandhi, Martin Luther King, Jr., and Nelson Mandela. Tolstoy's treatment of moral and historical issues in literature continues to inspire and provoke readers today. This course will examine Tolstoy's major novels (War and Peace, Anna Karenina), along with earlier and later works, and explore his context in the culture, literature, and history of the time. 1 credit.
Not offered 2011-2012.

## RUSS 033. Terror in Russia: Method,

 Madness, and Murder(Cross-listed as LITR 033R)
In the 19th century, the Russian Empire saw a rise of political terrorism sponsored by leftist and anarchist political factions plus a new legal system with juries likely to acquit. After a central role in the 1917 Revolution, political terror underwent further transformation in the 20th century, turned against Soviet citizens under Stalin, and erupted on both sides of the ongoing conflict in Chechnya. This course will focus on the poetry, prose, film, and journalism of this period.
1 credit.
Fall 2011. Rojavin.

## RUSS 040. Bulgakov

(Cross-listed as LITR 040R)
Doctor, dramatist, and dissident, Mikhail Bulgakov is one of the most significant authors of the Soviet period. His writings embody scrupulous honesty; recognition of moral complexity; deeply thoughtful awareness of political, religious, and philosophical traditions;
and the life-affirming force of humor. In addition to his masterpiece Master and Margarita, we will study his short stories and dramatic works, and explore his oeuvre in the context of Soviet society.
1 credit.
Not offered 2011-2012.

## RUSS 045. Poetry in

 Translation/Translating Poetry(Cross-listed as LITR 045R)
This course will study the history, practice, and politics of poetic translation from antiquity to the present, including work from Arabic, Chinese, French, German, Greek, Hebrew, Irish, Japanese, Latin, Polish, Russian, Sanskrit, and Spanish. The course has a strong practical component: All students will work on translations of their own throughout the semester (from languages they know or by working with native speakers or literal versions), and the final project may include a portfolio of translations. Especially suitable for students interested in comparative literature or creative writing.
1 credit.
Not offered 2011-2012.

## RUSS 047. Russian Fairy Tales

(Cross-listed as LITR 047R)
Folk beliefs are a colorful and enduring part of Russian culture. This course introduces a wide selection of Russian fairy tales in their aesthetic, historical, social, and psychological context. We will trace the continuing influence of fairy tales and folk beliefs in literature, music, visual arts, and film. The course also provides a general introduction to study and interpretation of folklore and fairy tales, approaching Russian tales against the background of the Western fairy-tale tradition (the Grimms, Perrault, Disney, etc.). No fluency in Russian is required, though students with adequate language preparation may do some reading, or a course attachment, in the original. 1 credit.
Spring 2012. Johnson.

## RUSS 070. Translation Workshop

 (Cross-listed as LING 070 and LITR 070R)This workshop in literary translation will concentrate on both theory and practice, working in poetry, prose, and drama as well as editing. Students will participate in an associated series of bilingual readings and will produce a substantial portfolio of work. Students taking the course for linguistics credit will write a final paper supported by a smaller portfolio of translations. No prerequisites exist, but excellent knowledge of a language other than English (equivalent to a 004 course at

Swarthmore or higher) is highly recommended or, failing that, access to at least one very patient speaker of a foreign language.
1 credit.
Next offered 2012-2013.

## RUSS 091. Special Topics

For senior course majors. Study of individual authors, selected themes, or critical problems. 1 credit.
Offered on demand.
RUSS 093. Directed Reading
RUSS 094. Independent Study

## Seminars

Seminars in Russian are offered when there is sufficient demand. See the summary of the academic program for a list of seminar topics. The Russian section webpage includes descriptions of possible seminar topics.

## Russian Courses Not Currently Offered

RUSS 016. History of the Russian Language RUSS 024. Russian and East European Cinema RUSS 025. The Poet and Power
RUSS 041. War and Peace in Russian Literature and Culture
RUSS 067. Jews in Russia: Culture, Film, Literature
RUSS 075. Comedy, Satire, Humor

## Spanish

Spanish, the second national language of the United States, is the official language of twenty countries-spoken by close to 500 million people in the world. A living and migrating language with a long history, Spanish is the gateway to one of the most vital and heterogeneous literatures and cultures in the world.

## The Academic Program

Our program incorporates a wide range of themes, texts and geographic areas. While we pay close attention to canonical texts that have shaped a certain understanding of Iberian and Latin American literatures, we also explore the marginal voices and texts that challenge our preconceived notions. We cross the boundaries of literature, incorporating films and documentaries as we consider new critical methods and reading practices.
The Spanish Program provides a strong foundation for graduate studies in Spanish and Latin American literatures, and our students pursue careers in a wide range of disciplines.

Whether you plan to be an engineer, biologist, historian, or political scientist, studying the Spanish language and its cultures will open your mind to fresh perspectives.

## Course Major

The Spanish major consists of eight courses and a culminating senior exercise. The Spanish major seeks to provide training in literary and cultural analysis, as it enables students to acquire linguistic proficiency.

## Requirements

1. Students majoring in Spanish must spend one semester in a Spanish-speaking country enrolled in a program approved by the Section. Only two courses taken abroad that pertain to the curriculum of the section may count toward fulfillment of the major. For full immersion, all courses taken abroad must be taken in Spanish. Language courses taken abroad may receive Spanish credit but will not count toward the major.
2. Upon returning from abroad, students must enroll in a one-credit advanced course in the Section.
3. Students must complete a minimum of eight credits of work in courses numbered 008 and above. One of these courses must be SPAN 022 or 023, except in special cases when the section waives this requirement or approves a similar course taken abroad.
4. Students may only count one of these courses toward the major: 008,010 or 011 . SPAN 006A and SPAN 024 will not count toward fulfillment of the major. Note that neither AP nor IB credits will not count towards the major.
5. One of the eight credits of advanced work may be taken in English from the courses listed in the catalog under "Literatures in Translation" (LITR) provided it is pertinent to the student's Spanish major.
6. All majors are encouraged to take at least one seminar in the section. Students can take a seminar after one advanced course (numbered 050 to 089 ) or with permission of the instructor. Only one seminar in the major will count for two credits.
7. A minimum of four of the eight courses must be taken at Swarthmore College. Only two courses taken abroad may count toward the major.
8. Majors are strongly encouraged to maintain a balance in their overall program, taking advanced work in different historical periods from Spain and Latin America.

## Acceptance Criteria

For admission to the course major, the student needs a minimum of B level work in courses
taken at Swarthmore taught in Spanish or the required introductory-level literature course (SPAN 022 or 023 ), demonstrated ability and interest in language and literature, and a minimum C average in course work outside the department.
Prerequisite: SPAN 004 or its equivalent is the language prerequisite for entering the Spanish major. It does not count as one of the 8 credits required for the major.

## Thesis / Culminating Exercise

Along with development of analytical literary and cultural abilities, majors are expected to reach an advanced level of linguistic proficiency. The Spanish comprehensive exam has oral and written components, both entirely in Spanish.
In their senior year, majors will re-write one of the best term papers they wrote for courses in the section. The new research paper will: a) deepen the original analysis; b) enhance the critical work on which it is based to include ample documentation; and c) increase the paper's length to at least 25 pages, plus bibliography. This first draft of this paper will be turned in to Spanish faculty in the last week of November. The final version will be turned one week after spring break, in March. The oral examination is based on the content of the written essay and on overall course preparation. This essay-and the student's overall course preparation-will provide the basis for the oral examination in May, conducted exclusively in Spanish. The Spanish language ability of majors, revealed in this paper and the oral examination, will be part of the final evaluation.

## Course Minor

## Requirements

1. Completion of at least one semester of study abroad in a Spanish-speaking country in a program approved by the Spanish section. Only two courses taken abroad that pertain to the curriculum of the section may count towards fulfillment of the minor. To ensure full immersion, all courses taken abroad must be taken in Spanish. In special cases, depending on the student's language proficiency, this requirement may be fulfilled with a summerlong study abroad program identified and approved by the section. For summer programs, only one relevant course taken abroad may count towards fulfillment of the minor. Language courses taken abroad may receive Spanish credit but will not count toward the minor.
2. Upon returning from study abroad, students are expected to register in a one-credit advanced course in the section.
3. All minors must take a total of five courses and/or seminar offerings numbered 008 and above. Four of these may not overlap with the student's major or other minor. Note that neither AP nor IB credits will not count towards the minor.
4. Students may only count one of the following towards their minor: 008, 010 and 011. SPAN 006A, SPAN 024 and courses in English translation will not count toward fulfillment of the minor.
5. All minors must take either SPAN 022 or 023 , except in special cases when the section waives this requirement or approves a similar course taken abroad.
6. All minors are strongly encouraged to take seminars offered by the section. Seminars count as one credit toward the minor.
7. To graduate with a minor in Spanish, a student must maintain a minimum grade of $B$ in the discipline, and a C average in course work outside the department. Candidates to the minor must prove their ability and interest in the language, cultures and literatures of the Spanish-speaking world.
Prerequisite: SPAN 004 or its equivalent is the language prerequisite for entering the Spanish minor. It does not count as one of the 5 credits required for the minor.

## Honors Major and Minor

## Requirements

Candidates for the major or minor in Spanish must meet these requirements to be accepted into Honors:

1. A "B" average in Spanish coursework at the College.
2. Completion at Swarthmore of either SPAN 022 or 023 (except in cases when the section waives this requirement or approves a similar course taken abroad) and one course numbered 050 to 089 .
3. Completion of one semester of study in a Spanish-speaking country in a program approved by the Spanish Section. In special cases, depending on the student's language proficiency, honors minors may fulfill this with a summer-long study abroad program identified and approved by the Spanish section.
4. Demonstrated linguistic ability in the language.
5. Present fields for external examination based on either two-credit seminars offered by the section, or the combination of two advanced courses numbered between 050-089 that form a logical pairing.
6. All majors in the Honors Program must do three (3) preparations for a total of six units of
credit while all minors must complete one (1) preparation consisting of two units of credit.

The Honors Exam for Majors and Minors
Majors will take three (3) three-hour written examinations prepared by external examiners, as well as three (3) half-hour oral exams based on the contents of each field of preparation. Minors will take one (1) three-hour written examination prepared by the external examiner, as well as one (1) half-hour oral exam based on the contents of the written examination and their overall preparation in the field presented.
All Honors exams will be conducted exclusively in Spanish.

## Special Majors

Students have the possibility of designing a special major, such as Spanish and Latin American Studies; Spanish within comparative literature; Spanish and linguistics; etc.

## Special Major in Spanish and Educational Studies

The Spanish Program prepares students who wish to pursue a special major in Spanish and educational studies, and also those who are seeking certification to teach Spanish in primary and secondary schools in the Commonwealth of Pennsylvania or the 45 states with which Pennsylvania certification is reciprocal.

## Requirements for the Special Major in Spanish and Educational Studies

 1. Complete six courses in Spanish. None of those courses may be taught in English.2. A student may only count one of these courses for the major: 008,010 or 011.
3. Complete a minimum of five courses in Educational Studies.
4. In consultation with the Spanish adviser, as a culminating exercise, develop a set of original teaching materials with the following criteria:

- Focus on a grammar topic and a specific aspect of language acquisition, such as listening comprehension, speaking skills, discrete reading or writing.
- Incorporate a variety of class exercises or activities.
- Take into account different learning styles.
- The total volume of this portfolio may be the equivalent of a 15-20 page paper.
Note: The special major itself does not constitute preparation toward certification.


## Requirements for the Special Major in Spanish and Educational Studies with Teacher Certification

In addition to the requirements of the Educational Studies Department (Introduction to Education; Educational Psychology; Adolescence; one additional course in educational studies; and Curriculum and Methods/Practice Teaching), including LING 001, students must meet the following requirements:

1. Complete the requirements for the Spanish major. No course taught in English, however, may be included among their 8 -credit total.
2. By the middle of the fall semester of the senior year, complete 10 hours of observation of language classes in the Spanish Program in consultation with the Spanish adviser.
3. Under the guidance of the Spanish adviser, write a short paper on the relevance of observed pedagogical approaches to a K-12 Spanish classroom.
4. In consultation with the Spanish adviser, as a culminating exercise, develop a set of original teaching materials with the following criteria:

- Focus on a grammar topic and a specific
aspect of language acquisition, such as listening comprehension, speaking skills, discrete reading or writing.
- Incorporate a variety of class exercises or activities.
- Take into account different learning styles.
- The total volume of this portfolio may be the equivalent of a 15-20 page paper.


## Application Process Notes for the Major or the Minor

In addition to the process described by the Dean's Office and the Registrar's Office for how to apply for a major/minor, we recommend you to meet with the Spanish faculty to discuss your plans.
If after applying you are denied admission to the major/minor, you may apply again once you have addressed the recommendations made by the Spanish section. If your application is deferred, the Spanish section will make a decision immediately after you have taken the necessary steps to address the reasons for being deferred.

## Off-Campus Study

As learning extends from the classroom walls into the world, study abroad becomes both an enriching intellectual experience and a unique opportunity for personal growth.
Swarthmore College has two Spanish studyabroad programs: one in Argentina, and another
in Spain, this last one in a consortium with Hamilton and Williams colleges. In addition to these programs, students can choose from a wide range of destinations in Spain and Latin America from the list of approved programs that appears in the Spanish website. We strongly suggest that majors and minors as well as non-specialists meet with a Spanish faculty member to discuss their possibilities and find the program that better suits their academic needs and interests. To ensure full immersion, all courses taken abroad must be taken in Spanish. Upon returning from abroad, students must enroll in a one-credit advanced literature course in the section.

## Courses

Students wishing to major in Spanish should plan their program in consultation with the department. Spanish is the only language used in class discussions, readings, and assignments in all courses, except in LITR courses. Students must have taken SPAN 022 or 023 before they can take an advanced literature or film course in Spanish unless they receive special permission from the instructor. Courses numbered 50 to 89 belong to the same level of complexity, requiring the same level of preparation. The numbering does not imply a sequence.

## SPAN 001-002. Intensive First Year of

 SpanishStudents who start in the SPAN 001/002 sequence must complete SPAN 002 to receive credit for SPAN 001.
Note: SPAN 001 is offered in the fall semester only. Students must take SPAN 001 before proceeding to SPAN 002 . This course is intended for students who begin Spanish in college. The first year of Spanish is designed to encourage the development of communicative proficiency through an integrated approach to the teaching of all four language skillslistening and understanding, reading, writing, and speaking. It also fosters awareness of the Spanish-speaking world through authentic cultural materials (films, music, news) and information, thus deepening the student's living understanding of the multi-faceted Spanishspeaking world.
1.5 credits.

## SPAN 001.

Offered each fall.
1.5 credits.

Fall 2011. Valdez, Chindemi Vila.
SPAN 002.
Offered each spring.
Spring 2012. Valdez, Chindemi Vila.

## SPAN 002B. Intensive Spanish for Advanced Beginners

SPAN 002B is intended for those students who have had at least a year of Spanish but have not yet attained the level of SPAN 003. This intensive, accelerated course covers the materials of SPAN 001 / SPAN 002 in one semester, allowing for the review of basic concepts learned in the past. It encourages development of communicative proficiency through an interactive task-based approach, and provides students with an active and rewarding learning experience as they strengthen their language skills and develop their cultural competency. Engaging, award-winning shortsubject films from various Spanish-speaking countries are integrated into the lessons, serving as springboards for the vocabulary, grammar, and cultural topics presented. After completing this course, students will be prepared to take SPAN 003 and further advanced courses.
Offered each fall.
1.5 credits

Fall 2011. Sendra Ferrer, Vargas.

## SPAN 003. Intensive Intermediate

 SpanishSPAN 003 is an intensive third semester Spanish course for students who seek to develop fluency and accuracy in order to express, interpret, and negotiate meaning in context. The course presents a functionally sequenced grammar review and expansion that builds on basic concepts. Special emphasis will be placed on the basic skills-listening, speaking, reading, and writing-as building blocks toward proficiency and communication.
Offered each semester.
1.5 credits.

Fall 2011. Guardiola, Sendra Ferrer, Chindemi Vila, Vargas.
Spring 2012. Guardiola, Vargas.
SPAN 004. Intensive Advanced Spanish
This course is designed for students who have already learned the basic aspects of Spanish grammar. Through the careful attention given to literary texts, films, and cultural media, the students develop further their writing and oral skills in Spanish. The course focuses on providing myriad opportunities for students to integrate an advanced understanding of grammar in communication-oriented activities, therefore allowing for the expression of advanced concepts and ideas in speech and writing that will enable students to take upper level Spanish courses in literature and culture.
This course is ideal preparation for study abroad in a Spanish-speaking country.

Offered each semester.
1.5 credits.

Fall 2011. Martinez, Vargas. Spring 2012. Sendra Ferrer, Vargas.

## SPAN 006A. Spanish Communication Workshop

An exciting course that effectively stimulates lively conversational Spanish. This course meets once a week for 1.5 hours; the class will be divided into small groups to facilitate discussion. The aim of the course is for the student to acquire well-rounded communication skills and socio-cultural competence. The selected materials (newspapers, movies, music, literature, etc.) seek to stimulate students' curiosity and engagement with the ultimate goal of awakening a strong desire to express themselves in the language.
Note: Upon returning from abroad, Spanish majors and minors must enroll in a one-credit Spanish course. This course is not appropriate for native speakers. SPAN 006A can be taken only once.
Prerequisite: SPAN 004 or the equivalent or permission of the instructor.
Offered each semester.
0.5 credit.

Fall 2011. Vargas. Spring 2012. Chindemi Vila.

## SPAN 008. Spanish Composition and Conversation

Recommended for students who have finished SPAN 004, have received a 5 in the AP/IB exam or want to improve their Spanish written expression at any point during the course of their studies. This is a practical course for writing and rewriting in a variety of contexts, and it will prepare you to be able to begin to write at an academic level of Spanish. Some of the required assignments and writing tasks are those that reflect the kind of writing assignments that students of Spanish are asked to write as minors and majors. It includes a review of grammar and spelling, methods for vocabulary expansion, and attention to common errors of students of Spanish living in an English-speaking society.
Prerequisite: SPAN 004 or the equivalent or permission of the instructor.
Writing course. Offered each spring.
1 credit.
Spring 2012. Valdez.

## SPAN 010. En busca de Latinoamérica

This course seeks to provide students with a critical understanding of Latin America and to introduce its cultural history. Through a multidisciplinary perspective, we will study the interaction of social, political, ethnic, and gender dynamics and its resulting
transformations in Latin America. After a study of pre-European contact and Amerindian civilizations, we will examine critically the moment of contact between the Old and the New World and the ensuing conflicts that characterized the three centuries of colonial rule in Latin America. Later, we will focus on the nation building process and the cultural campaigns of turn-of-the-century elites, the causes and consequences of U.S. interventions, the dilemmas of economic development, the rise of state terror, and the lives of transnational migrants today. Lectures and textbook readings provide a panoramic analysis of complex cultural processes (colonialism, transculturation, modernization, globalization, etc.); documentaries and films provide other points of entry as we think through the processes that have shaped Latin America. Eligible for LASC credit.
Prerequisite: SPAN 004 or the equivalent or permission of the instructor.
Writing course. Offered each fall. 1 credit.
Fall 2011. Valdez.

## SPAN 011. Culturas de España

Embark on a cultural journey through Spain! Focusing primarily on transcultural and interdisciplinary perspectives, we will explore topics pertaining to all periods of Spanish history, society, culture, literature, politics, art, music, and film. We will devote special attention to contemporary Spanish film and current events. We will study these aspects in relation to different regions (Cataluña, Andalucía, Galicia, País Vasco, and Castilla) and particular cities (Madrid, Barcelona, and Sevilla). We will examine how the medieval concept of Spain ("las Españas") may still apply today with respect to the linguistic, cultural, ethnic, social, and political diversity within the Iberian Peninsula. Other topics for exploration include migration and the emergence of hybrid identities, including those pertaining to culture, gender, and sexuality. The student will develop advanced skills in speaking, writing, and reading in Spanish. Prerequisite: SPAN 004 or the equivalent or permission of the instructor.
Writing course. Offered each spring.
1 credit.
Spring 2012. Sendra Ferrer.

## SPAN 022. Introducción a la literatura española

This course covers representative Spanish works from medieval times to the present. Works in all literary genres will be read to observe times of political and civic upheaval, of soaring ideologies and crushing defeats that
depict the changing social, economic, and political conditions in Spain throughout the centuries. Each reading represents a particular literary period: middle ages, renaissance, baroque, neo-classicism, romanticism, realism, naturalism, surrealism, postmodernism, etc. Emphasis on literary analysis to introduce students to further work in Spanish literature.
Prerequisite: SPAN 004 or the equivalent or permission of the instructor.
Writing course. Offered each fall.
1 credit.
Fall 2011. Guardiola.

## SPAN 023. Introducción a la literatura latinoamericana

At a time when critics question the concept of national literatures, is it possible to speak of the literary production of an almost full continental region as a unit? This course is built on the presupposition that Latin American countries, despite their differences, share a common experience in their birth through conquest and colonization; the chaos of their postindependence periods; the stratification of their societies along lines of race, class, and gender; their struggle for democracy, modernization, and equality; and their complex relationship with the United States, especially during the Cold War. Literature, more than reflecting this history, has been part of its making. In this course, we read a selection of poetry, narratives, and essays among the many texts that give meaning to the Latin American experience. Throughout the semester, we remain engaged in mastering the Spanish language, especially in writing.
Eligible for LASC credit.
Prerequisite: SPAN 004 or the equivalent or permission of the instructor.
Writing course. Offered each spring.
1 credit.
Spring 2012. Camacho de Schmidt.

## SPAN 024A. Foreign Language Teaching and Pedagogy

(Cross-listed as EDUC 072)
This course has two elements that are developed together throughout the course of the semester. Students can serve the Swarthmore community by teaching a foreign language to local elementary school students in an afterschool program that meets two times/week. Students must teach for the entire 6-week session, two days per week ( $\mathrm{M} / \mathrm{W}$ or $\mathrm{T} / \mathrm{Th}$ ). During the evening pedagogy sessions held on campus, we will discuss writing weekly lesson plans, foreign language acquisition in children, teaching methodologies and approaches. We use a common goal-oriented curriculum among all the languages. Students must register for the
language or educational studies course that they will be teaching and for a service time (A) $\mathrm{M} / \mathrm{W}$ or (B) T/Th.
Offered each semester.
0.5 credit.

Fall 2011. Johnson. Spring 2012. Staff.

## SPAN 057. El Caribe hispánico a través

 de la literatura, la música y el cine This course will study the Hispanic Caribbean as depicted in film, music and literature. We will question the accuracy of depictions of Caribbean experience, particularly in terms of gender, race, and class given the region's diversity, history of colonization and slavery, plantation economy, dictatorships, revolutions, exile and migration. Readings will include works by Marqués, Sánchez, Piñera, Arenas, Ponte, Estévez, Bosch, Alcántara Almánzar, Cartagena Portalatín, Peix, Hernández, Santos Febres, and Ferré. Movies: Perico Ripiao, Madagascar and others. Eligible for LASC credit.1 credit.
Spring 2012. Valdez.

## SPAN 061. El "otro" en la literatura y la cultura

An examination of the various manifestations of the "other" in works of Gómez de Avellaneda, Pardo Bazán, Pérez Galdós, Unamuno, Lorca, Matute, Riera and other Spanish writers and artists of the last two centuries. We will study different aspects of history, culture, religion, gender, and language. Separate materials will cover theoretical and critical aspects of the works.
1 credit.
Spring 2013. Guardiola.
SPAN 063. Cine contemporáneo español This course will examine Spanish film from the 1930's until recent trends. Class, gender, race, sexuality, regional and national identity representations will be analyzed to question and revise the traditional notion of an hegemonic, centralist 'Spanish/Castilian' culture. The films of the transition period (1976-82), basically concerned with recuperating a historical past, denied or distorted during the dictatorship, release the radical transformation of contemporary Spanish cinema regarding questions of national identity, sexuality and gender relations. Films will be read as manifestations of movements such as surrealism, social realism, etc. in connection with different historical moments (Civil War, Postwar, transition to democracy, postmodernism). Eligible for FMST credit. 1 credit.
Fall 2012. Guardiola.

## SPAN 069. Ciudad y literatura

The city as a cultural artifact offers writers myriad narrative possibilities: mere location, cultural symbolism, or the link for values and concepts that determine the place of human beings in their own society and historical moment. The Spanish novels we will read use urban space as a reflection of the social and theological rationale in Hispanic culture, where urbanization equals civilization. Madrid and Barcelona are the most important urban centers in Spanish narrative space since the 19th century. The novels we will read present both cities as part of the author's personal story as well as his or her creative vision. We will see these urban representations in novels by Galdós, Pardo Bazán, Baroja, Laforet, Cela, Rodoreda, Roig, and Mendoza.
1 credit.
Fall 2011. Guardiola.

## SPAN 070. Género y sexualidad en Latinoamérica

In recent years, sexual minorities achieved major political victories in several Latin American countries, which opened a new social and legal horizon not only for them but also for the society as a whole by strengthening democratic values. This course seeks to analyze the complex socio-political and cultural process that enabled these changes, and to challenge preconceived notions about gender and sexuality in Latin American shaped in the "progressive" center. A selected body of literature, essays and films will allow us to study the cultural politics of gender and sexuality in Latin America. We will explore these issues through theoretical concepts provided by Latin Americanists active in such fields as cultural studies, history, literary criticism, queer studies, and other relevant disciplines.
Eligible for GSST or LASC credit. 1 credit.
Spring 2012. Martínez.

## SPAN 073. El cuento latinoamericano

We will study modern and contemporary short stories that have transformed Latin American literature and moved its fiction into the forefront of world literature. By focusing on close reading and analysis as emphasized through class discussions, we will outline the distinctive characteristics of the Latin American short story and trace its development. We will also consider the thematic issues and narrative features that characterize works belonging to Fantastic Literature, Magical Realism, the Boom and Post-Boom, and place them within their particular historical and cultural contexts. Authors will include Horacio Quiroga, Jorge Luis Borges, Silvina Ocampo, Juan Rulfo,

Gabriel García Márquez, Julio Cortázar, Julio Ramón Ribeyro, Augusto Monterroso, Luisa Valenzuela and Ana Lydia Vega, among others. Also, we will examine theory and criticism regarding this genre. This course offers students a deeper appreciation of regional differences and cultural richness in Latin America as revealed in the short story genre.
1 credit.
Fall 2011. Martínez.

## SPAN 076. La novela latinoamericana

This course will trace the development of the Latin American novel through the works of canonical and non-canonical writers. Authors will include: Gabriel García Márquez
(Colombia), Alejo Carpentier (Cuba), Mario Vargas Llosa (Perú), Manuel Puig (Argentina), Luis Zapata (México), Mayra Santos-Febres (Puerto Rico) and Julia Álvarez (República Dominicana), among others. Special attention will be given to the presentation of the readings within their socio-historical contexts. Therefore, political and cultural issues will be of primary interest.
Eligible for LASC credit.
1 credit.
Spring 2013. Martínez.

## SPAN 081. Movimientos sociales, literatura y migración en México

The 1910 Revolution defined Mexico's 20th century, and produced an artistic and literary explosion. The revolutionary pact between government and people, however, was seriously eroded in moments like 1968, with the violent repression of the student movement; in 1985, with the authorities' failure to respond to the effects of a major earthquake; and in 1994, with the Indigenous Zapatista insurrection. In the 1990s a historical record-breaking level of outmigration led many to question the viability of the Mexican State. Mexican literature does more than merely reflect the social movements that accompany these large-scale events. In this course we read novels, poetry and essays (chronicles), analyzing the way in which these texts interrogate history and express the aspirations of popular struggles. Authors may include Anzaldúa, Azuela, Garro, Castellanos, Castillo, Fuentes, Revueltas, Leñero,
Poniatowska, Monsiváis, Pacheco, and the Subcomandante Insurgente Marcos.
Eligible for LASC credit.
1 credit.
Fall 2012. Camacho de Schmidt.

## LITR 015S. First-Year Seminar: Children in Latin American Literature

How does the world look from the perspective of a Latin American child? The social sciences tell us that children are not defined by what
they cannot yet understand, say, or do, and that they learn at a fabulous speed. Children are observers, always making sense of their surroundings, while they are relatively unencumbered by the biases, worries, and hurts that come from experience. Regrettably, they are not free from fear. Is the child narrator a privileged storyteller? How does literature represent transforming events, the separation, and death of loved ones, war, displacement, or joy through the voice of a child? What are a child's narrative strategies? Because boys and girls do not generally write to publish, what is the role of an adult memory in reconstructing a textual childhood? The course includes masterful Latin American and Latino works of fiction and autobiography, complemented by poetry, film and essays.
Eligible for LASC credit.
1 credit.
Spring 2012. Camacho de Schmidt.

## LITR 075S. U.S. Latina/o Literature

This course offers an introduction to contemporary Latina/o literature and culture from the twentieth and twenty-first centuries. It considers various literary traditions, such as Chicano/a, Nuyorican, Cuban-American and Dominican American. The course will explore how these texts align themselves and/or challenge U.S. American, Latin American and European conceptualizations of nationhood, identity, race, and sexuality. It will also address common concerns of U.S. Latina/o writers such as immigration and transmigration, bilingualism and linguistic hybridity, and border culture. Authors will include Junot Díaz, Miguel Piñero, Irete Lazo and Dahlma Llanos Figueroa, among others. Readings, assignments, and class discussions are in English.
Eligible for GSST and LASC credit.
1 credit.
Fall 2012. Martínez.

## Seminars

Students wishing to take seminars must have completed at least one course in Spanish numbered 030 or above. Students are admitted to seminars on a case-by-case basis by the instructor according to their overall preparation.

## Spanish 104. La voz de la mujer a través de los siglos

The seminar will look into the work of a few outstanding women writers from Spain throughout the centuries to study the development of a feminine consciousness. The text selection will include works by Santa Teresa, María de Zayas, Gertrudis Gómez de Avellaneda, Carolina Coronado, Emilia Pardo Bazán, Carmen de Burgos, Rosa Chacel,

Carmen Martín Gaite, Carmen Laforet, Mercé Rodoreda, Esther Tusquets, Carme Riera, Almudena Grandes and others. The essential aim of the seminar will be to analyze feminine discourse in the realm of the historical, psychoanalitical, metafictional, and allegorical fiction in order to search for a diversity of feminine voices.
Eligible for GSST credit.
2 credits.
Spring 2012. Guardiola.

## SPAN 109. Elena Poniatowska, la hija de México

This feminist woman of aristocratic origin is Mexico's daughter. She arrived in her mother's country from the South of France as a nine-year old, fleeing World War II. There, she listened deeply to the myriad voices of Mexico City and set out to give them literary expression. In her novels, short stories, testimonies, chronicles, and essays Elena Poniatowska witnesses 50 years of Mexican life. Her signature trait is the fascination and respect she has for her subjects, whether they are celebrities, peasants, prisoners, artists, servants, or street children. Her alliance with the poor has placed her in controversial political positions. The power of her prosehumorous, tender, passionate, sober, always luminous-may present a suffering Mexico to the world, but also one in love with images, color, words, struggle, and life.
Eligible for LASC credit.
2 credits.
Spring 2013. Camacho de Schmidt.

## Spanish Courses Not Currently Offered

SPAN 007. Spanish for Heritage Speakers
SPAN 060. Memoria e identidad
SPAN 066. Escritoras españolas. Una voz propia
SPAN 067. La guerra civil en la literatura y el cine
SPAN 072. Seducciones literarias-traiciones filmicas
SPAN 075. El relato policial latinoamericano
SPAN 077. Desaparecidos: literatura, cine y dictadura
SPAN 082. Un siglo de canto: poseía latinoamericana contemporánea
SPAN 083. El tirano latinoamericano en la literatura
SPAN 084. Los niños en la literatura latinoamericana
SPAN 085. La edad del tiempo: Carlos Fuentes y su obra
SPAN 105. Federico García Lorca

SPAN 106. Visiones narrativas de Carlos Fuentes
SPAN 107. Héroes y villanos: el siglo XIX español y la democratización literaria
SPAN 108. Jorge Luis Borges
SPAN 110. Política y poética: los mundos de Pablo Neruda, Octavio Paz y Ernesto Cardenal LITR 049S. Quixotic Fictions
LITR 070SA. The Persistent Power of Central American Literature
LITR 071S. Latin American Society Through Its Novel (Cross-listed as SOAN 024C)
LITR 072S. Women's Testimonial Literature of Latin America
LITR 073S. La Frontera: The Many Voices of the U.S.-Mexico Border
LITR. 076S. Latino and Latin American
Sexualities
LITR. 079S. The New Latin American Cinema

Music<br>GERALD LEVINSON, Professor of Music<br>MICHAEL MARISSEN, Professor of Music and Chair<br>JOHN ALSTON, Associate Professor of Music<br>BARBARA MILEWSKI, Associate Professor of Music ${ }^{3}$<br>THOMAS WHITMAN, Associate Professor of Music<br>JONATHAN KOCHAVI, Assistant Professor of Music (part time)<br>JANICE HAMER, Visiting Associate Professor of Music (part time)<br>ANDREW HAUZE, Visiting Assistant Professor of Music (part time)<br>ANDREW SHANEFIELD, Visiting Assistant Professor of Music (part time)<br>ELIZABETH SAYRE, Visiting Instructor of Music (part time)<br>MARCANTONIO BARONE, Associate in Music Performance (part time)<br>MICHAEL JOHNS, Associate in Music Performance (part time)<br>I NYOMAN SUADIN, Associate in Music and Dance Performance<br>BERNADETTE DUNNING, Administrative Coordinator<br>SUSAN GROSSI, Administrative Assistant<br>GEOFFREY PETERSON, Concert Manager<br>\section*{Dance}<br>SHARON E. FRIEDLER, Professor of Dance, Director of the Dance Program<br>KIM D. ARROW, Associate Professor of Dance (part time)<br>PALLABI CHAKRAVORTY, Associate Professor of Dance ${ }^{3}$<br>JUMATATU POE, Assistant Professor of Dance (part time)<br>JON SHERMAN, Associate in Dance Performance (part time)<br>C. KEMAL NANCE, Associate in Dance Performance (part time)<br>LADEVA DAVIS, Associate in Dance Performance (part time)<br>NI LUH KADEK KUSUMA DEWI, Associate in Dance Performance (part time)<br>DOLORES LUIS GMITTER, Associate in Dance Performance (part time)<br>LEAH STEIN, Associate in Dance Performance (part time)<br>JAMES McCABE, Visiting Associate in Dance Performance<br>HANS BOMAN, Dance Accompanist<br>BERNADETTE DUNNING, Administrative Coordinator<br>SUSAN GROSSI, Administrative Assistant<br>TARA WEBB, Costume Shop Supervisor and Arts Administration Intern

${ }^{3}$ Absent on leave, 2011-2012.

## Music

The study of music as a liberal art requires an integrated approach to theory, history, and performance, experience in all three fields being essential to the understanding of music as an artistic and intellectual achievement. Theory courses train students to understand and hear how compositions are organized. History courses introduce students to methods of studying the development of musical styles and genres and the relationship of music to other arts and areas of thought. The department encourages students to develop performing skills through private study and through participation in the chorus, gamelan, jazz ensemble, orchestra, wind ensemble, and the Fetter Chamber Music Program, which it staffs and administers.
The department assists instrumentalists and singers to finance the cost of private instruction (See "Individual Instruction" under the heading "Credit for Performance.")

## The Academic Program Course Major

The music major curriculum normally includes the following components. However, we welcome individualized proposals, which will be evaluated and approved on the basis of consultations with the music faculty. We continue to emphasize the importance of depth and mastery of musical skills and understanding, and we also recognize the value of studying the diversity of musical cultures.
A. Required. 5 courses in harmony and counterpoint plus musicianship sections (MUSI 040). MUSI 040 may be taken for 0.0 or 0.5 credit at the student's option.

- MUSI 011 and 040A
- MUSI 012 and 040B
- MUSI 013 and 040C
- MUSI 014 and 040D
- MUSI 015
B. Required. 4.5 courses in Music History and Literature:
- MUSI 020 (Medieval and Renaissance)
- MUSI 094 (Senior Research Topics in Music)
plus at least three of the following:
- MUSI 021 (Baroque and Classical)
- MUSI 022 (19th-Century Europe)
- MUSI 023 (20th Century)
- Any other history course numbered above 023
- Courses with lower course numbers in areas such as Jazz or World Music, including extra or higher-level work, with approval of the instructor.


## Course Majors are strongly advised to take 5 history courses if possible.

C. World Traditions component. This requirement may be fulfilled in either of two ways:

- One of the 4.5 course listed in category B, above, in Music History and Literature is to be a course in non-Western traditions numbered above 023; OR
- Two semesters of participation in the Gamelan or Taiko ensemble. (This also helps fulfill the ensemble requirement in category D , below).


## D. Additional Requirements for Course Majors:

- Keyboard skills
- Score reading or MUSI 018: Conducting and Orchestration
- Department ensemble for at least four semesters
- Senior comprehensive examination (MUSI 094, 0.5-credit course)


## The following is a description of these additional requirements:

Keyboard skills. This program is designed to develop keyboard proficiency to a point where a student can use the piano effectively as a tool for studying music. Students learn to perform repertoire and, in addition, play standard harmonic progressions in all keys. The department offers a free weekly private lesson to any student enrolled in a Harmony and Counterpoint numbered 011 or higher who needs work in this area and requires it of all students in MUSI 012. Music majors and minors who have completed the theory sequence but who need further instruction are still eligible. No academic credit is given for these lessons. All music majors are expected to be able to perform a two-part Invention of J. S. Bach (or another work of similar difficulty) by their senior year.

Score reading. By the end of their senior year, all majors are expected to be able to read an orchestral score that includes c-clefs and some transposing instruments. Students may take MUSI 018 (Conducting and Orchestration) to satisfy this requirement.
Department ensemble. The department requires majors and minors to participate in any of the departmental ensembles (Orchestra, Chorus, Wind Ensemble, Jazz Ensemble, and Gamelan). We also recommend that students participate in other activities, such as playing in Chamber Music ensembles or seeking out servicelearning experiences that incorporate music.
Comprehensive examination. During their senior year, majors in the Course Program will take the departmental comprehensive examination, which normally consists of the study of a single musical work (selected in advance by the student, subject to the approval of the department) which demonstrates skills in the three areas of analysis, historical research, and performance. Majors in course will enroll in MUSI 094 (Senior Research Topics in Music) in the spring semester of their senior year to help them prepare for their senior comprehensive examination.

## Course Minor

Required. At least two courses in harmony and counterpoint plus musicianship sections (MUSI 040):

- MUSI 011 and 040A
- MUSI 012 and 040B

Required. At least two courses in music history and literature:

- MUSI 020 (Medieval and Renaissance)
- MUSI 021 (Baroque and Classical)
- MUSI 022 (19th-Century Europe)
- MUSI 023 (20th Century)
- Another history course numbered above 023 (or a lower-level history course, with approval of the faculty)
Required. At least one of the following:
- Harmony and counterpoint (MUSI 013 or higher)
- Upper-level history course
- MUSI 019 (Composition)

Additional Requirements

- Department ensemble for at least two semesters; and at least one of the following, subject to departmental approval of a written proposal:
- Keyboard skills
- Service-learning project in music
- Senior recital
- Special project in music


## Honors Major

Summary: The music major in honors is identical to the music major in course in its prerequisites, required coursework, and requirements for keyboard skills, score reading, and Department Ensemble membership. The honors major differs in that there is no senior comprehensive exam. Instead, honors majors do three honors preparations in music.

## Three Honors Preparations

- Music theory. A 2-credit honors preparation in music theory is normally based on MUSI 015 in combination with one lower-level harmony and counterpoint course.
- Music history. A 2-credit honors preparation in music history may be based on any music seminar numbered 100 or higher or on any other music history course when augmented by concurrent or subsequent additional research, directed reading, or tutorial, with faculty approval.
- Elective (may be based on any of the following):
- At least two semesters of MUSI 019 (Composition)
- An additional preparation in another area of music history
- A senior honors recital

A 2-credit senior honors recital preparation is available to only students who have distinguished themselves as performers. It is, therefore, limited to those who have won full scholarships through MUSI 048. Students who wish to pursue this option must follow all of the steps listed in the departmental guidelines for senior recitals (see department website) and obtain approval of their program from the music faculty during the semester preceding the proposed recital. They should register for MUSI 099: Senior Honors Recital. This full credit, together with at least another full credit of relevant coursework in music, will constitute the 2 -credit honors preparation. One faculty member will act as head adviser on all aspects of the honors recital. As part of the honors recital, the student will write incisive program notes on all of the works to be performed. This work will be based on substantive researchincluding analytical as well as historical workand will be overseen by one or more members of the music faculty.
Students are encouraged to propose honors preparations in any areas that are of particular interest, whether or not formal seminars are offered in those areas. The music faculty will assist in planning the most appropriate format for these interests.

## Thesis / Culminating Exercise

Oral examinations are given for all honors preparations in music. Written examinations, in
addition to oral examinations, are given only for those preparations based on courses or seminars.

## Honors Minor

Required. Four courses in harmony and counterpoint plus musicianship sections (MUSI 040):

- MUSI 011 and 040A
- MUSI 012 and 040B
- MUSI 013 and 040C
- MUSI 014 and 040D

Required. Two courses in music history and literature:

- MUSI 020 (Medieval and Renaissance)
- MUSI 021 (Baroque and Classical)
- MUSI 022 (19th-Century Europe)
- MUSI 023 (20th Century)
- Another history course numbered above 023

One honors preparation

- Music theory, music history, or elective

The possibilities for preparations are the same as those listed above for major in the Honors Program.
Additional Requirements, same as for course minors.

- Departmental ensemble for at least two semesters and at least one of the following, subject to departmental approval:
- Keyboard skills
- Service-learning project in music
- Senior recital
- Special project in music


## Special Major

The department welcomes proposals for special majors involving music and other disciplines. Recent examples include the following:

- Special major in music and education
- Special major in enthnomusicology Other special majors are possible. For more information, contact the department chair.


## Application Process Notes for the Major or the Minor

We do not have a minimum grade-point average (GPA) for admission as a major or minor. In its place is a consensus of music faculty that the student can do good work in the discipline. The situation is perhaps more complex in music than in other fields because we think that a major (or minor) should have basic musical as well as purely intellectual abilities, not all of which can be measured by a GPA. We do consider the likelihood of a student's passing the Comprehensive

Examination. Students applying for admission as majors in the Honors Program should have done exceptionally high-quality work in the department and should have shown strong selfmotivation.
Prerequisites for acceptance into the program: MUSI 011/040A and one Music History course numbered 020 or above.
These courses are strongly recommended for first-year students and should be completed before the junior year. If a student has not completed all of these prerequisites at the time of an application for a major/minor, but has done good work in one or more courses in the department, he or she may be accepted on a provisional basis.

## Off Campus Study/Language Study

Students are encouraged to seek possibilities for off campus study, in accordance with their particular interests, in consultation with the music faculty and the off-campus study adviser.
Students are advised that many graduate programs in music require a reading knowledge of French and German.

## Additional Resources

A unique resource of the department is its ensemble in residence, Orchestra 2001, directed by Professor Emeritus James Freeman. This nationally renowned ensemble offers an annual concert series at the College, focusing on contemporary music. The series features distinguished soloists and often includes advanced Swarthmore students in its concerts.
Special scholarships and awards in music include the following (see Distinctions, Awards, and Fellowships):

The Renee Gaddie Award
Music 048 Special Awards
The Boyd Barnard Prize
The Peter Gram Swing Prize
The Melvin B. Troy Prize in Music and Dance

## Credit for Performance

Note: All performance courses are for halfcourse credit per semester. No retroactive credit is given for performance courses.

## Individual Instruction (MUSI 048)

Academic credit and subsidies for private instruction in music are available to students at intermediate and advanced levels. Subsidies for students at the beginning level, without academic credit, are also available. For further details, consult the MUSI 048 guidelines on the Music Program website.

## Orchestra, Chorus, Wind Ensemble, Gamelan, Chamber Music, Jazz <br> Ensemble

Students may take Performance Chorus (MUSI 043), Performance Orchestra (MUSI 044), Performance Jazz Ensemble (MUSI 041), Performance Wind Ensemble (MUSI 046), Performance Chamber Music (MUSI 047), or Performance Gamelan (MUSI 049A) for credit with the permission of the department member who has the responsibility for that performance group. The amount of credit received will be a half-course in any one semester. Students applying for credit will fulfill requirements established for each activity (i.e., regular attendance at rehearsals and performances and participation in any supplementary rehearsals held in connection with the activity). Students are graded on a credit/no credit basis.
Students wishing to take Chamber Music (MUSI 047) for credit must submit to the chamber music coordinator at the beginning of the semester a proposal detailing the repertory of works to be rehearsed, coached, and performed during the semester. It should include the names of all student performers and the proposed performance dates, if different from the Elizabeth Pollard Fetter Chamber Music Program performance dates. One semester in a Department Ensemble is a prerequisite or co-requisite for each semester of MUSI 047. This applies to all students in each Fetter Chamber group. It is expected that Fetter students in Department Ensembles will play the same instrument/voice in both activities. A student taking MUSI 047 for credit will rehearse with his or her group or groups at least 2 hours every week and will meet with a coach (provided by the department) at least every other week. All members of the group should be capable of working well both independently and under the guidance of a coach. It is not necessary for every person in the group to be taking MUSI 047 for credit, but the department expects that those taking the course for credit will adopt a leadership role in organizing rehearsals and performances. Note: MUSI 047 ensembles do not fulfill the ensemble requirement for lessons under MUSI 048.

## Courses and Seminars

## Introductory Courses without Prerequisite

## MUSI 001. Introduction to Music

This course is designed to teach intelligent listening to music by a conceptual rather than historical approach. Although it draws on examples from popular music and various nonWestern repertories, the course focuses primarily on the art music of Europe and the United States. Prior musical training is not
required. It is assumed that MUSI 001 students will not know how to read music. This course is taught with little or no use of musical notation. 1 credit.
Fall 2011. Marissen.

## MUSI 002B. How to Read Music

An introduction to the elements of music notation, theory (clefs, pitch, and rhythmic notation, scales, keys, and chords), sight singing, and general musicianship.
Recommended for students who need additional preparation for MUSI 011 or to join the College chorus.
1 credit.
Fall 2011. Whitman.

## MUSI 003. Jazz History

This course traces the development of jazz from its roots in West Africa to the free styles of the 1960s. The delineation of the various styles and detailed analysis of seminal figures are included. Emphasis is on developing the student's ability to identify both style and significant musicians.
1 credit.
Spring 2012. Shanefield.

## MUSI 003A. Jazz Today: USA, Europe \& the African Heritage

An overview of current streams of Jazz from 1980 until today. The course will include listening to, discussing and experiencing the music "live" through Hans Lüdemann and special guests. Jazz has evolved from its AfroAmerican origins into a universal art form, practiced by musicians around the globe. How Jazz has managed to continually develop by incorporating elements from all cultures is one of the secrets to explore; another is the art of improvisation. We will look at a wide and colorful range of music from Hiphop to Free Jazz-including relating back to Africa. 1 credit.
Not offered 2011-2012.

## MUSI 004A. Opera

Combine great singing with the vivid colors of an orchestra, with acting and theater, with poetry, dance, painting, spectacle, magic, love, death, history, mythology, and social commentary, and you have opera: an art of endless fascination. This course will survey the history of opera (from Monteverdi through Mozart, Wagner, and Verdi to Gershwin and Stravinsky), with special emphasis on and study of scenes from selected works.
1 credit.
Not offered 2011-2012.

## MUSI 004B. The Symphony

This course will examine the history of the symphony from its beginnings in music of the late Baroque period to the end of the 20th century. We will examine a number of important symphonic works by such composers as Haydn, Mozart, Beethoven, Berlioz, Brahms, Chaikovsky, Mahler, Shostakovich, and Gorecki in order to discuss issues of genre, form, and performance forces in the context of shifting historical and social trends.
1 credit.
Not offered 2011-2012.

## MUSI 005A. Introduction to the Study of World Music

This course will introduce students to the study of "world music" (which has most recently come to mean "any and all music" through the lens of ethnomusicology. The course will survey the history and methods of ethnomusicology, and will introduce students to important musical traditions from Africa, Asia, the Middle East, the Americas and elsewhere. Course work will include lectures; discussions; reading, listening, and writing assignments; inclass, hands-on lecture-demonstrations given by the instructor and various guest artists. Readings will draw from textbooks, ethnographies, and journals, touching on both older and more recent work in the field.
Through consultation with the instructor, music majors may count this course toward their music history requirement.
1 credit.
Fall 2011. Sayre.

## MUSI 006. The Arts as Social Change

(Cross-listed as DANC 004)
This course aims to bring together students with an interest in investigating and investing in social change work through the arts. Our seminar community will engage in discussion of readings and video viewings, will host and visit local leaders from the arts and social change movement, and will engage in fieldwork opportunities as required parts of the course. Papers, journals, and hands-on projects will all be included.
This course fulfills a prerequisite requirement for dance major and minors.
Eligible for PEAC credit.
1 credit.
Spring 2012. Friedler.

## MUSI 006B. Music of the Holocaust and World War II Era

This course will explore the various contexts and motivations for music making during the Holocaust and World War II era. In the
universe of the Nazi ghettos and concentration camps, music was a vehicle for transmitting political rumors, controversies, stories, and everyday events as well as a form of spiritual resistance. In the broader context of war, it was used for political and nationalist agendas. This course will draw on a wide range of music, from folk songs and popular hit tunes to art music intended for the concert stage.
1 credit.
Not offered 2011-2012.

## MUSI 007A. W.A. Mozart

Study of Mozart's compositions in various genres and of interpretive problems in Mozart biography. Prior musical training is not required. It is assumed that MUSI 007A students will not know how to read music. This course is taught with little or no use of musical notation. Students with a musical background may nonetheless find the class interesting.
1 credit.
Spring 2012. Marissen.

## MUSI 007B. Beethoven and the Romantic Spirit

An introduction to Beethoven's compositions in various genres. We will consider the artistic, political, and social context in which he lived and examine his legacy among composers later in the 19th century (Berlioz, Chopin, the Schumanns, Brahms, Wagner, and Mahler). Writing course.
1 credit.
Not offered 2011-2012.
MUSI 008B. Anatomy for Performers: Bones, Muscles, Movement (See DANC 008)
0.5 credit.

Not offered 2011-2012.

## MUSI 009A. Music and Mathematics

This course will explore the basic elements of musical language from a scientific and mathematical perspective. We will work collaboratively to uncover relationships and features that are fundamental to the way that music is constructed. Although intended for science, mathematics, engineering, and other mathematically minded students, the course will introduce all necessary mathematics; no specific background is required. Some knowledge of musical notation is helpful but not required. This course provides the necessary background to enable students to enroll in MUSI 011.
1 credit.
Spring 2012. Kochavi.

MUSI 077. Rhythm, Drumming, Cultures (See DANC 077)
1 credit.
Not offered 2011-2012.

## Theory and Composition

Students who anticipate taking further courses in the department or majoring in music are urged to take MUSI 011 and 012 as early as possible. Advanced placement is assigned on a case-by-case basis, after consultation with the theory and musicianship faculty. Majors will normally take MUSI 011 to 015 .

## MUSI 011.01. Harmony, Counterpoint, and Form 1

This course will provide an introduction to tonal harmony and counterpoint, largely as practiced in 18th- and 19th-century Europe. Topics include simple counterpoint in 2 parts, harmonization of soprano and bass lines in four-part textures, systematic study of common diatonic harmonies, features of melody and phrase, and the Blues.
Prerequisites: Knowledge of traditional notation and major and minor scales; ability to play or sing at sight simple lines in treble and bass clef.
All MUSI 011 students must register for an appropriate level of MUSI 040A for 0 or 0.5 credit.
Keyboard skills lessons may also be required for some students.
1 credit.
Fall 2011. Kochavi.

## MUSI 011.02. First-Year Seminar:

 Harmony, Counterpoint, and Form 1This seminar will provide an introduction to tonal harmony and counterpoint, largely as practiced in 18th- and 19th-century Europe. Topics include simple counterpoint in 2 parts, harmonization of soprano and bass lines in four-part textures, systematic study of common diatonic harmonies, features of melody and phrase, the Blues, and classical theme and variation techniques. Certain examples for analysis will be drawn from current repertoire of the College Orchestra, Chorus, and Jazz Ensemble.
Prerequisites: Knowledge of traditional notation and major and minor scales; ability to play or sing at sight simple lines in both treble and bass clef.
All MUSI 011 students must register for an appropriate level of MUSI 040A for 0 or 0.5 credit.
Keyboard skills lessons may also be required for some students.
1 credit.
Fall 2011. Whitman.

## MUSI 012. Harmony, Counterpoint, and

## Form 2

This course will provide continued work on tonal harmony and counterpoint, largely as practiced in 18th- and 19th-century Europe. Topics include two-voice counterpoint, harmonization of soprano and bass lines in four-part textures, phrase structure, small and large scale forms, modulation and tonicization, and analysis using prolongational reductions. We will also study minuet form in detail, culminating in a final composition project.
All MUSI 012 students must register for an appropriate level of MUSI 040B for 0 or 0.5 credit.
Keyboard skills lessons are required for all students in MUSI 012.
1 credit.
Spring 2012. Whitman.

## MUSI 013. Harmony, Counterpoint, and

 Form 3Continues and extends the work of Music 12 to encompass an expanded vocabulary of chromatic tonal harmony, based on Western art music of the 18th and 19th centuries. The course includes analysis of smaller and larger works by such composers as Bach, Mozart, Beethoven, Schubert, Chopin, Liszt, Brahms, and Wagner; in-depth study of such large-scale topics as sonata form; and written musical exercises ranging from harmonizations of bass and melody lines to original compositions in chorale style.
All MUSI 013 students must register for an appropriate level of MUSI 040 C for 0 or 0.5 credit.
Keyboard skills lessons may also be required for some students.
1 credit.
Fall 2011. Levinson.

## MUSI 014. Harmony, Counterpoint, and

 Form 4This course provides continued work in chromatic harmony and 18th-century counterpoint, largely as practiced in Europe. It will primarily take the form of a literature survey. For the first half of the semester, our focus will be on short pieces; during the second of the semester we will study keyboard fugues and other larger-scale works. This course includes a service-learning project.
All MUSI 014 students must register for an appropriate level of MUSI 040D for 0 or 0.5 credit.
Keyboard skills lessons may also be required for some students.
1 credit.
Spring 2012. Levinson.

## MUSI 015. Harmony, Counterpoint, and

## Form 5

Exploration of a number of advanced concepts in music theory including: the study and analytical application of post-tonal theory (including set theory and neo-Riemannian theory), the structure of the diatonic system, applications of theoretical models to rhythm and meter, and geometric models of musical progression.
Prerequisite: MUSI 014.
1 credit.
Fall 2011. Kochavi.

## MUSI 017. Jazz Theory

A course designed for the analysis of the harmonic structures of jazz repertoire. This is neither an improvisation nor a performance course.
Prerequisites: MUSI 012 or instructor approval. Basic keyboard skills and fluency on an instrument are required.
1 credit.
Not offered 2011-2012.

## MUSI 018. Conducting and Orchestration

This course approaches the understanding of orchestral scores from a variety of perspectives. We will study techniques of orchestration and instrumentation, both in analysis of selected works, and in practice, through written exercises. The history, and philosophy of conducting will be examined, and we will work to develop practical conducting technique. Score reading, both at the piano and through other methods, will be practiced throughout the semester.
Prerequisite: MUSI 012, or permission of the instructor.
1 credit.
Not offered 2011-2012.

## MUSI 019. Composition

Repeatable Course.
Prerequisite: permission of the instructor. 1 credit.
Fall 2011 and spring 2012. Levinson.

## MUSI 061. Jazz Improvisation

A systematic approach that develops the ability to improvise coherently, emphasizing the Bebop and Hard Bop styles exemplified in the music of Charlie Parker and Clifford Brown. Prerequisite: Ability to read music and fluency on an instrument.
1 credit.
Not offered 2011-2012.

## History of Music

## MUSI 020. Medieval and Renaissance Music

A survey of European art music from the late Middle Ages to the 16th century. Relevant extramusical contexts will be considered.
Prerequisite: MUSI 011 or the equivalent. 1 credit.
Not offered 2011-2012.
MUSI 021. Baroque and Classical Music
This course will survey European art music from the 16th-century Italian madrigal to Haydn's Creation. Relevant extramusical contexts will be considered.
Prerequisite: MUSI 011 or the equivalent. 1 credit.
Not offered 2011-2012.
MUSI 022. 19th-Century European Music
This survey considers European art music against the background of 19th-century Romanticism and nationalism. Composers to be studied include Beethoven, Schubert, Chopin, Berlioz, Robert and Clara Schumann, Wagner, Verdi, Brahms, Dvorak, Musorgsky, and Chaikovsky.
Prerequisite: MUSI 011 or the equivalent. 1 credit.
Not offered 2011-2012.

## MUSI 023. 20th-Century Music

A study of the various stylistic directions in music of the 20th century. Representative works by composers from Debussy, Stravinsky, and Schoenberg through Copland, Messiaen, and postwar composers such as Boulez and Crumb, to the younger generation will be examined in detail.
Prerequisite: MUSI 011 or the equivalent. Writing course.
1 credit.
Not offered 2011-2012.

## MUSI 030. Music of Asia

An introduction to selected musical traditions from the vast diversity of Asian cultures. Principal areas will include classical music of India, Indonesian gamelan from Bali and Java, ritual music of Tibet, ancient Japanese court music, Turkish classical music and others. These music will be studied in terms of their technical and theoretical aspects as well as their cultural/philosophical backgrounds. Western musical notation and terminology, including scale types and intervals, will be used. This course fulfills the World Traditions component of the music major.

Eligible for ASIA credit.
1 credit.
Spring 2012. Levinson.

## MUSI 031. Musics of Central and South America and the Caribbean

This course will introduce students to selected musical genres from Central and South America, and the Caribbean, which will be studied for their sound characteristics, as well as their cultural origins and histories. In some cases, musics of the respective immigrant populations in the U.S. will also be discussed. The class will feature some hands-on demonstrations by guest artists and the instructor. Materials and assignments will include audio recordings, videos, journal articles, book chapters, and other writings, mostly drawn from the field of ethnomusicology.
Prerequisite: Knowledge of traditional music notation and major and minor scales. Recommended, but not required: Knowledge of Spanish.
1 credit.
Not offered 2011-2012.

## MUSI 032. History of the String Quartet

A history of the string quartet from its origins to its development into one of the most prestigious genres of Western classical music. The course will focus on the quartets of Haydn, Mozart, and early Beethoven.
Prerequisite: MUSI 011 or the equivalent. 1 credit.
Not offered 2011-2012.

## MUSI 033. Music of Cuba and Brazil

This course will focus on the collective genius of the folk, traditional, and popular musics of Cuba and Brazil, such as Afro-Cuban and AfroBrazilian religious music, changüí, son, danzón charanga, son montuno, timba, samba enredo, samba reggae, afoxé, bossa nova, capoeira, maracatú, mangue beat, pagode, and many others. Selected musical genres will be studied for their sounds and formal characteristics, as well as their cultural origins and histories, and occasionally, comparisons will be drawn with musical styles from the U.S., and musics of the respective immigrant populations in the U.S. will be discussed. The class will feature some hands-on demonstrations by guest artists and the instructor. Materials and assignments will include audio recordings, videos, journal articles, textbook chapters, and other writings, mostly drawn from the field of ethnomusicology
Prerequisite: Knowledge of traditional music notation and major and minor scales.

Recommended, but not required: Knowledge of Spanish or Portuguese.
This course fulfills the world traditions component requirement for the music major. 1 credit.
Not offered 2011-2012.

## MUSI 034. J.S. Bach

Study of Bach's compositions in various genres. For the instrumental music, this involves close consideration of style and signification. For the vocal music, it also involves study of ways Bach's music interprets, not merely expresses, his texts.
This is a lecture and discussion course; see also MUSI 101 (Bach), whose format and content are quite different.
Prerequisite: MUSI 011 or the equivalent. 1 credit.
Fall 2011. Marissen.

## MUSI 037. Contemporary American Composers

A study of the works and thought of six important American composers. The course will stress intensive listening and will include discussion meetings with each of the composers.
1 credit.
Not offered 2011-2012.

## MUSI 038. Color and Spirit: Music of Debussy, Stravinsky, and Messiaen

A study of 20th-century music focusing on the great renewal of musical expressions, diverging from the Austro-German classic-Romantic tradition, found in the works of these three very individual composers, as well as the
connections among them, and the resonance of their music in the work of their contemporaries and successors.
Prerequisite: MUSI 011 or the equivalent. 1 credit.
Not offered 2011-2012.

## MUSI 075. Special Topics in Music Theater

Available to students participating in the study abroad programs coordinated through
Swarthmore in France, Ghana, India, Japan, or Poland.
Prerequisites: Consent of the dance program director and the faculty adviser for off-campus study.
1 credit.
Fall 2011 and spring 2012. Friedler.

MUSI 091. Introduction to Performing Arts Education: Music
(Cross-listed as DANC 091 and EDUC 071)
How do we learn in the performing arts? This course explores a range of performing arts issues confronting educators in theory and practice. While the focus is music, we will also consider dance and theater with the help of guest lecturers. We will look at primary education in the United States, and we will also touch upon some of the ways music is taught to older students, as well as in other cultures. Students will draw upon their own experiences as teachers and learners. The course will culminate in a collaborative teaching project in which our class as a whole will develop and implement a program of performing arts instruction for children in partnership with an urban public school.
While some prior study of music might be helpful, it is not a prerequisite. This course is open to any student who has taken at least one course in either education or music.
Writing course.
1 credit.
Spring 2012. Whitman.

## MUSI 091C. Special Topics (Music Education) <br> (Cross-listed as EDUC 091C)

With permission of the instructor, qualified students may choose to pursue a topic of special interest in music education through a field project involving classroom or school practice. Open to any student who has taken at least one course in music.
Available as a credit/no credit course only.
0.5 credit.

Not offered 2011-2012.

## MUSI 092. Independent Study

1 credit.

## MUSI 093. Directed Reading

1 credit.

## MUSI 094. Senior Research Topics in

 MusicRequired of all senior majors as preparation for the senior comprehensive in music.
0.5 credit.

Spring semester.

## MUSI 095. Tutorial

Special work in composition, theory, or history. 1 or 2 credits.

## MUSI 096. Senior Thesis

1 or 2 credits.

## MUSI 099. Senior Honors Recital

Honors music majors who wish to present a senior recital as one of their honors preparations must register for MUSI 099, after consultation with the music faculty. See Honors Program guidelines.
1 credit.

## Seminars

MUSI 100. Harmony and Counterpoint 5 (See MUSI 015)
Prerequisite: MUSI 014.
1 credit.
Not offered 2011-2012.
MUSI 101. J.S. Bach
(Compare with MUSI 034, which is a different offering with a different format, content, and prerequisites.)
Study of Bach's compositions in various genres, examining music both as a reflection of and formative contribution to cultural history.
Prerequisites: MUSI 011 and 012. GMST 001B and RELG 004 or 005B are strongly recommended.
1 credit.
Not offered 2011-2012.
MUSI 102. Color and Spirit: Music of Debussy, Stravinsky, and Messiaen (See MUSI 038)
Prerequisite: MUSI 013 (concurrent enrollment possible by permission of the instructor).
1 credit.
Not offered 2011-2012.

## MUSI 103. Mahler and Britten

This course is an intensive study of the music of two seminal 20th-century composers. We will consider song cycles by both composers and their connections to larger genres: Mahler's symphonies and Britten's operatic works as well as the War Requiem.
Prerequisites: MUSI 011 to 014 ; a knowledge of German is recommended.
1 credit.
Not offered 2011-2012.

## MUSI 104. Chopin

This course will provide an in-depth historical study of Chopin's music. We will examine the full generic range of Chopin's compositions, taking into account the various socio-cultural, biographical and historical-political issues that have attached to specific genres. Throughout the semester we will also consider such broader questions as: why did Chopin restrict himself almost entirely to piano composition? How might we locate Chopin's work within the larger category of 19th-century musical
romanticism? What does Chopin's music mean to us today?
Prerequisites: MUSI 011.
1 credit.
Not offered 2011-2012.

## Performance

Note: The following performance courses are for 0.5 -course credit per semester.
MUSI 040. Elements of Musicianship
Sight singing and rhythmic and melodic dictation.
Required for all MUSI 011 to 014 students, with or without 0.5 credit. Also open to other students. The instructor will place students at appropriate levels.
0.5 credit.

Fall 2011 and spring 2012. Hamer.
MUSI 041. Performance (Jazz Ensemble)
0.5 credit.

Fall 2011 and spring 2012. Shanefield.
MUSI 043. Performance (Chorus)
0.5 credit.

Fall 2011 and spring 2012. Alston.
MUSI 044. Performance (Orchestra)
0.5 credit.

Fall 2011 and spring 2012. Hauze.
MUSI 046. Performance (Wind Ensemble)
0.5 credit.

Fall 2011 and spring 2012. Hauze.

## MUSI 047. Performance (Chamber

 Music)(See guidelines for this course earlier.)
0.5 credit.

Fall 2011 and spring 2012. Johns.
MUSI 048. Performance (Individual Instruction)
Please consult the MUSI 048 guidelines on the Music Program website.
0.5 credit.

Each semester.

## MUSI 049A. Performance (Balinese Gamelan)

Performance of traditional and modern compositions for Balinese Gamelan (Indonesian percussion orchestra). Students will learn to play without musical notation. No prior experience in Western or non-Western music is required. The course is open to all students.
Two (2) semesters of this course fulfills the World Traditions Component requirement for the music major.

## 0.5 credit.

Fall 2011 and spring 2012. Whitman.

## MUSI 049B. Performance (African Dance Repertory Music Ensemble)

Performance of traditional and modern compositions as accompaniment for and collaboration with the development of a dance piece for concert performance.
0.5 credit.

Not offered 2011-2012.
MUSI 050. Performance (Chamber Choir)
Students in MUSI 050 must also be in MUSI 043: Performance (Chorus).
0.5 credit.

Not offered 2011-2012.
MUSI 071. Salsa Dance/Drumming (See DANC 071)
0.5 credit.

Not Offered 2011-2012. Arrow.
MUSI 078. Dance/Drum Ensemble (See DANC 078)
0.5 credit.

Fall 2011. Osayande and guest artists.

## Dance

At Swarthmore, dance is a global discourse. Our program focuses on cross-cultural study of Africa/African Diaspora, Asia (both South and East), Europe, North America, and Latin America. The dance and music programs share an integrated approach to composition, history, and theory and believe this is central to the understanding of dance as an artistic and intellectual inquiry within a liberal arts context.

## The Academic Program

The mission of the program is to offer students dance experiences that privilege a merging of embodied practice and history/theory in relation to more than one situated perspective (those listed above). Some courses concentrate on one cultural context only (this is true generally in history, repertory, and technique). Others put a variety of perspectives in conversation (first level composition, some history, some repertory, and all theory). The role of dance as a social change agent is also present in Swarthmore dance offerings. All dance studies courses engage students in an investigation of the relationship of dance to other arts and areas of thought.
Given the program's emphasis on developing an awareness of the global nature of dance, study abroad opportunities are seen as a very useful aspect of a student's undergraduate dance experience. Such study is especially
encouraged for dance major and minors. Study abroad dance programs developed by members of the dance faculty are available in France, Ghana, India, Japan, Poland, and Northern Ireland. Dance components are also available in programs in Spain and Argentina. Social change engagement is available as an aspect of study abroad experiences in Ghana, India, Northern Ireland, and Poland. Additional information regarding study abroad experiences is listed below and can also be found on both the Dance Program and Off-Campus Study websites.

## Course Major

These prerequisites are strongly recommended for first and second year students and must be completed before the junior year. If a student has not completed all of these prerequisites at the time of an application for a major, but has done good work in one or more courses in the program, the student may be accepted on a provisional basis.

1. DANC $001,003,003 \mathrm{~A}$ or 004
2. DANC 011. Dance Lab I: Making Dance
3. One dance technique class (in any style) for academic credit
Prerequisite credits for majors: $\mathbf{2 . 5}$
The program offers three possible areas of focus for majors; composition, history/theory, or an individual focus. Students in each area are required to take Dance 008. Anatomy: Bones, Muscles, and Movement. Additional course requirements for each focus are as follows:
Composition
DANC 012. Dance Lab II: Making Dance
DANC 013. or 014. Dance Composition
Tutorial or Videography
DANC 20-29 - one course
DANC $30-39$ or $70,75,76,77,77 \mathrm{~b}$. or 79 - one course
DANC $049,71,78$, one Western and one nonWestern course
DANC $50,51,53,58,60$, or 61 - one or two courses
*DANC 94 or 95 - one course
Total credits in focus:
6.5-7.5

History/Theory
DANC 20-29 - two courses
DANC $30-39$ or $70,75,76,77,77$ b. or 79 - two courses
DANC technique and repertory courses - one Western and one non-Western course
*DANC 94/95 - one course
Total credits in focus:
Individually created focus
DANC 20-29 - one course

DANC $30-39$ or 70, 75, 76, 77, 77b. or 79 - one course
*DANC 94/95 - one course
Additional courses proposed by the student and approved on an individual basis by the faculty from a combination of composition, history, repertory, technique, and theory courses - three to four credits
Total credits in focus: 6.5-7.5

Total prerequisites and credits required for majors:
9.0-10.0
*The senior project/thesis is required of all majors.
The dance faculty encourages students to pursue a senior project/thesis that incorporates a comparison or integration of dance with some other creative or performing art (creative writing, music, theater, or visual art), with a community-based learning component, or with another academic discipline of the student's interest.

## Requirements

For majors, regular participation in technique classes throughout a student's time at Swarthmore and participation in repertory courses for at least four semesters. Students may choose any style of repertory experience as long as they adhere to the distribution guidelines to participate in both Western and non-Western styles. They are also encouraged to seek out service-learning/ community-based learning experiences that incorporate dance. These may substitute for repertory experiences (especially those with a composition focus). Majors are also strongly encouraged to enroll in THEA 003. Fundamentals of Design for Theater Performance and THEA 004B. Lighting Design.
Colloquia and/or individualized meetings with guest artists and lecturers will also be held during the student's final year. These meetings will address current issues and debates in dance theory and practice as well as individual student interests and one intended to support students' senior project/thesis work.

## Course Minor

The goal of the course minor in dance is to expose a student to the broad scope of the field. The distribution of required courses for the minor provides students with an introduction to composition, history, technique, and theory and allows them to direct their final credit(s) in the minor toward a specific area of interest. It is also possible for students to align required courses within the minor to reflect that specific interest, if any. Minors will participate in the senior colloquia or individualized meetings with guest artist and instructors and will be encouraged, but not required, to develop an
extended paper or a significant dance performance piece as part of their program. Whether they enroll for credit or audit, all dance majors and minors are strongly encouraged to participate in technique and repertory classes each term.
These prerequisites are strongly recommended for first and second year students and must be completed before the junior year. If a student has not completed all of these prerequisites at the time of an application for a minor, but has done good work in one or more courses in the program, the student may be accepted on a provisional basis.

1. DANC $001,003,003 \mathrm{~A}$ or 004
2. One technique or repertory course for academic credit
Prerequisite credits for minor:
Course requirements for minor:
3. DANC 011. Dance Lab I: Making Dance
4. DANC 20-29 - one course
5. DANC $30-39$ or $70,75,76,77,77 \mathrm{~b}$. or 79 one course
6. DANC 008. Anatomy: Bones, Muscles, and Movement
7. Additional courses proposed by the student and approved on an individual basis by the faculty from a combination of composition, history, repertory, technique, and theory courses - 1.5 credits

Total credits in minor:
Total prerequisites and credits required for minor: 6.5

## Requirements

For minors, regular participation in technique classes throughout a student's time at Swarthmore and participation in repertory courses for at least two semesters is required. Students may choose any style of repertory experience. They are also encouraged to seek out service-learning/community-based learning experiences that incorporate dance. These may substitute for repertory experiences.
Colloquia and/or individualized meetings with guest artists and lecturers will also be held during the student's final year. These meetings will address current issues and debates in dance theory and practice as well as individual student interests.

## Honors Major

The minimum requirement for admission to the honors major is at least the following 4 courses (3 credits) in dance; an introductory history/theory course ( $001,003,003 \mathrm{~A}$, or 004), DANC Lab I: Making Dance (DANC 011), one dance technique class (DANC 40-48, 50-58, or $60-61$ ) and DANC 008. Majors in the Honors

Program must also have an overall B grade average before admission. In addition to the guidelines noted later, each honors major will be responsible for the material designated on the reading and video lists for senior honors study available from the department office.
All dance majors in the Honors Program must do three preparations in the department and one outside (in a related or unrelated minor). Two of the departmental preparations will be based on course combinations (one in history or theory and one in composition beyond the introductory-level course DANC 011). The third will take the form of either a senior project (DANC 094) or a senior thesis (DANC 095, 096). The portfolio submitted by each student will include both written materials and a DVD that provides examples of the student's choreographic and/or performance work at Swarthmore (a maximum of 20 minutes in length).
Each student's program will include the following:

1. History and theory. One area of emphasis linking a course from DANC 021 to 025 or 028 with a course from DANC 035 to 039 , or 077B. Each student will demonstrate this integration via a paper written as an attachment. This paper, along with appropriate papers from each history and theory class submitted for preparation, will be sent to the examiner. The written and oral exam for this preparation will consist of a response to three questions set by the examiner.
2. Composition. Each student may submit a combination of Dance Lab I: Making Dance (DANC 011) plus either Dance Lab II: Making Dance (DANC 012), Special Topics in Composition (DANC 014), and Composition Tutorial (DANC 013) or two of DANC 013 or 014. The syllabi (where appropriate), a DVD of the final work, and a paper concerning the choreographic process from each class will be submitted to the examiner.
3. Senior project/thesis. These projects/theses will be individually determined. Each student will be assigned a faculty adviser who will assist the student in the creation of an initial bibliography or videography or both as well as an outline for the project or thesis. It will then be the student's responsibility to proceed with the work independently.

## Requirements

Regular participation in technique classes throughout a student's time at Swarthmore and participation in repertory courses for at least two semesters. Students may choose any style of repertory experience. They are also encouraged to seek out service-learning/community-based learning experiences
that incorporate dance. These may substitute for repertory experiences.
Colloquia and/or individualized meetings with guest artists and lecturers will also be held during the student's final year. These meetings will address current issues and debates in dance theory and practice as well as individual student interests and one intended to support students' senior honors work.

## Honors Minor

Students in the Honors Program who are presenting a major in another discipline and a minor in dance must do one preparation in dance. This preparation will take the form of either composition or history and theory described earlier in the text concerning honors majors in dance. The choice regarding focus for a student's minor will be determined in consultation with an adviser from the dance faculty.
These prerequisites are strongly recommended for first and second year students and must be completed before the junior year. If a student has not completed all of these prerequisites at the time of an application for an Honors minor, but has done good work in one or more courses in the program, the student may be accepted on a provisional basis.

1. DANC $001,003,003 \mathrm{~A}$ or 004
2. One technique or repertory course for academic credit
Minors in the Honors Program must also have an overall B grade average before admission. In addition to the guidelines noted below, each honors minor will be responsible for the material designated on a reading and video list for senior honors study available from the department office.

## Requirements

For minors, regular participation in technique classes throughout a student's time at Swarthmore and participation in repertory courses for at least two semesters is required. Students may choose any style of repertory experience. They are also encouraged to seek out service-learning/community-based learning experiences that incorporate dance. These may substitute for repertory experiences.
Colloquia and/or individualized meetings with guest artists and lecturers will also be held during the student's final year. These meetings will address current issues and debates in dance theory and practice as well as individual student interests.

## Special Major

The program for a special major in dance comprises 12 units of coursework: 6 in dance
and 6 in another discipline. The two disciplines in this major may be philosophically linked or may represent separate areas of the student's interest.
Whether they enroll for credit or audit, special majors are required to participate in technique and repertory classes for at least two semesters.

## Prerequisites for the Special Course Major in Dance and a Second Discipline <br> 1. DANC $001,003,003 \mathrm{~A}$ or 004

2. DANC 011. Dance Lab I: Making Dance
3. One dance technique class (in any style) for academic credit
Prerequisite credits for special majors: $\mathbf{2 . 5}$

## Requirements

The core program (totaling 5.5 credits) includes the following courses:

1. DANC 008. Anatomy: Bones, Muscles, and Movement
2. Two composition/repertory (DANC 012 [1 credit] or 014 [ 0.5 credit] and/or DANC 013 [ 0.5 credit] and DANC 049 [ 0.5 credit]) 3. Two history/theory (one from DANC 021-

025 or 028 [ 1 credit] and one from DANC 035039 or 077B [1 credit])
4. Two or three in dance technique (DANC 050 [ 0.5 credit] and one other technique at the 050 level or above [ 0.5 credit]). One 0.5 credit in a Western technique and one 0.5 credit in a nonWestern technique.
5. One senior project or thesis (DANC 094, 095 , or 096 [ 1 credit])
Total credits in special major:
Total prerequisites and credits in special major:
The student's chosen six courses from the core program will be joined by 6 credits from another discipline or disciplines. Courses for the program must be approved both by the faculty of the other departments and by the dance faculty. The senior project or thesis must also be approved and monitored by those departments involved.
Regular participation in technique classes throughout a student's time at Swarthmore and participation in repertory courses for at least two semesters. Students may choose any style of repertory experience. They are also encouraged to seek out service-
learning/community-based learning experiences that incorporate dance. These may substitute for repertory experiences.
Colloquia and/or individualized meetings with guest artists and lecturers will also be held during the student's final year. These meetings will address current issues and debates in dance theory and practice as well as individual student interests.

## Additional Information Regarding the Dance Program

## Dance Technique Courses

In a typical semester, more than 30 hours of dance technique classes are offered on graded levels presenting a variety of movement styles. Technique courses, numbered 040 through 048, 050 to 058 , and 060 or 061 , may be taken for academic credit or may be taken to fulfill physical education requirements. Advanced dancers are encouraged to consult with instructors regarding placement in level III technique classes. A total of not more than 8 full credits ( 160.5 -credit courses) in performance dance technique classes and in music performance classes may be counted toward the degrees of bachelor of arts and bachelor of science. No retroactive credit is given for performance classes.

## Dance Program Performance Opportunities

All interested students are encouraged to enroll in repertory classes (DANC 049, 071 or 078) and/or to audition for student and faculty works. These auditions occur several times each semester; dates are announced in classes and in postings outside the dance studios. Formal concerts take place toward the end of each semester; informal studio concerts are scheduled throughout the year.
The Dance Program regularly sponsors guest artist teaching and performance residencies. In addition, the program regularly hosts guest choreographers who work with student ensembles in technique and repertory classes.

## Off-Campus Study

## Ghana Program

The Dance Program has an ongoing relationship with the International Centre for African Music and Dance and the School of Performing Arts at the University of Ghana in Legon, a suburb of the capital city, Accra. Students choosing to study in Ghana can anticipate opportunities that include a composite of classroom learning, tutorials, some organized travel, and independent study and travel. Beyond credits in dance, music, theater, African studies, and intensive Twi (an Akan language widely spoken in Ghana), a menu of courses at the University of Ghana is also available. Students participating are able to enroll for the equivalent of a full semester's credit (4 to 5 credits). Community-based learning internships, in dance and other subjects, are also an option. Interested students should contact the director of dance as early as possible for advising purposes and for updated information.

## Poland Program

The program in Dance offers a semester-abroad program based at the Silesian Dance Theatre (Slaski Teatr Tanca) in Bytom in conjunction with other institutions in the vicinity. The program provides participating students with a combination of study abroad and the experience of working in various capacities (dance performance, arts administration, etc.) within the environment of a professional dance theater company for credit. Intensive study of Polish while in the country will be required of all participating students. Students participating are able to enroll for the equivalent of a full semester's credit (4 to 5 credits). Communitybased learning dance internships are also an option. Participation in the Annual International Dance Conference and Performance Festival hosted by Silesian Dance Theatre in late June and early July is highly recommended for certain types of credit. Interested students should contact the director of dance as early as possible for advising purposes and updated information on the status of the program.

## Additional Opportunities

Additional dance study abroad initiatives of a more independent nature are under way in France, India, Japan and Northern Ireland. The program in Northern Ireland can incorporate a strong focus on the arts and social change. Tamagawa University in Machida, near Tokyo, offers course study in classical Japanese and folk dance, taiko drumming, contemporary dance and ballet, and Japanese language. Students are encouraged to discuss these programs with the director of dance.

## Introductory Courses

## DANC 001. Global Approaches to Dance Studies: Continuity and Change

This course is framed as a global journey for analyzing culture, history, identity, and social change through dance and the dancing body. Students will be introduced to different movement systems through studio-based and theory/history classes in order to explore how cultural meanings are embodied, legitimized, contested, and reinvented through dance. All members of the regular dance faculty will participate by teaching various sessions. We will specifically focus on practices from Africa, Asia, Europe, Latin America and North America. This course will also introduce students to various methods in dance research. Students will formulate their own final research topic.
This is a reading and writing intensive course open to all students.
This course fulfills a prerequisite requirement for dance major and minors.

Writing course.
1 credit.
Fall 2011. Friedler.

## DANC 003. First-Year Seminar: "Shall We Dance?" Dance in the Movies

A first-year seminar focused on dance in the movies. We will look at how dance has served as a catalyst and a vehicle for investigating class, gender, race, romance, and technology in films from the early 20th century through the present. Documentaries, feature-length and short films, produced in the United States and abroad by small independent and major motion picture industry companies, will be included. One video viewing/screening session per week in addition to class meetings.
This is a reading and writing intensive course open to all students.
This course fulfills a prerequisite requirement for dance major and minors.
Writing course.
1 credit.
Not offered 2011-2012.
DANC 003A. Hollywood, Bollywood, and Beyond: Dance and Global Cinema Dance serves as a catalyst and a vehicle for investigating art, entertainment, sexuality, nation-building, and commodity production in film, video and electronic media globally. This interdisciplinary seminar course will introduce students to various approaches for examining representations of dance in local, national, and transnational contexts. Students will learn to analyze dance in various genres ranging from ethnographic, commercial and independent films and videos to internet sources. One required screening meeting per week will augment class sessions.
This is a reading and writing intensive course open to all students.
This course fulfills a prerequisite requirement for dance major and minors.
Eligible for FMST or GSST credit.
Writing course.
1 credit.
Not offered 2011-2012.

## DANC 004. The Arts as Social Change

(Cross-listed as MUSI 006)
This course aims to bring together students with an interest in investigating and investing in social change work through the arts. Our seminar community will engage in discussion of readings and video viewings, will host and visit local leaders from the arts and social change movement, and will engage in fieldwork opportunities as required parts of the course.

Papers, journals, and hands-on projects will all be included.
This course is open to all students.
This course fulfills a prerequisite requirement for dance major and minors.
Eligible for PEAC credit.
1 credit.
Spring 2012. Friedler.

## DANC 008. Anatomy: Bones, Muscles, and Movement <br> (Cross-listed as MUSI 008B)

An introduction to the musculoskeletal system through the exploration of the body in stability (topography) and in motion (kinematics), within the range of dance, music, yoga poses, and daily life. Reading and video viewing, in-class presentations, and a final paper required.
This course fulfills a prerequisite requirement for dance major and minors.
0.5 credit.

Spring 2012. Staff.

## Composition, History, and Theory Courses

DANC 011. Dance Lab I: Making Dance
A study of various basic principles of dance composition and choreography. We will explore/invent movement through experimentations with time, space, and energy qualities, often using improvisation and generative movement "games." Explorations will be geared toward honing the student's individual voice through movement, and challenging preconceived ideas of what that voice sounds/looks/feels like. All previous dance/movement experience is welcome; this class is not exclusive to any one genre of movement. Reading, video and live concert viewing, short dance studies, journals, and a final piece for public performance in the Troy dance lab are required.
Prerequisite: Any dance course or permission of the instructor. A course in dance technique must be taken concurrently.
1 credit.
Fall 2011. Poe.

## DANC 011A. Dance Production Practicum

By individual arrangement with the dance faculty for rehearsal and performance work in conjunction with dance program courses; 011, $012,013,014,092$ or 094.
0.5 credit.

Fall 2011. Staff.

DANC 012. Dance Lab: Making Dance II
An elaboration and extension of the material studied in DANC 011. Stylistically varying approaches to making work are explored in compositions for soloists and groups. Coursework emphasizes using various approaches and methods (e.g., theme and variation, motif and development, structured improvisation, and others). Reading, video and live concert viewing, movement studies, journals, and a final piece for public performance that may include a production lab component are required.
Prerequisites: DANC 011 or its equivalent. A course in dance technique must be taken concurrently.
1 credit.
Spring 2012. Poe.
DANC 013. Dance Composition: Tutorial The student enrolling for a tutorial will enter the semester having identified a choreographic project and will be prepared to present material weekly. Projects in any dance style are encouraged. All students proposing tutorials are advised to discuss their ideas with a member of the dance faculty before enrollment. Choreography of a final piece for public performance is required, as are weekly meetings with the instructor and directed readings and video and concert viewings. A journal or research paper may also be required. Prerequisites: DANC 011 or its equivalent. A course in dance technique must be taken concurrently.
0.5 credit.

Fall 2011 and spring 2012. Staff.

## DANC 014. Special Topics in Dance Composition

A course that focuses on intensive study of specific compositional techniques and subjects. Topics may include autobiography, dance and text, partnering, interdisciplinary collaboration, reconstruction, and technology, including videography. Choreography of a final piece for performance is required. Weekly meetings with the instructor, directed readings, video and concert viewing, and a journal will be required.
Prerequisite: DANC 011. A course in dance technique must be taken concurrently. 0.5 credit.

Not offered 2011-2012.

## DANC 021. History of Dance: Africa and Asia

This course will move through an exploration of dance forms from Africa and Asia as well as from African and Asian diasporic cultures. Areas of focus will include styles, underlying aesthetics, resonances in general cultural traits,
and developmental history. Coursework will occasionally focus on one dance style for close examination. Study will be facilitated by guest lecturers, specialists in particular dance forms from these cultures. Two lectures and a 1-hour video viewing session per week.
Prerequisite: DANC 001, 003, 003A or 004.
Eligible for ASIA or BLST credit.
1 credit.
Not offered 2011-2012.

## DANC 023. History of Dance: 20th and 21st Centuries

This course is designed to present an overview of 20th- and 21st-century social and theatrical dance forms in the context of Western societies with an emphasis on North America. Focusing on major stylistic traditions, influential choreographers, dancers, and theorists will be discussed. Through readings, video and concert viewings, research projects, and class discussions, students will develop an understanding of these forms in relation to their own dance practice. Two lectures and 1-hour video viewing per week.
Prerequisite: DANC 001, 003, 003A or 004 strongly recommended.
1 credit.
Fall 2011. Arrow.

## DANC 025A. Dance and Diaspora

 (Cross-listed as SOAN 020J)Dance is as unconventional but powerful device for studying migration and social mobility. This course will explore the interrelated themes of performance, gender, personhood, and migration in the context of diasporic experiences. By focusing on specific dance forms from Asia, Africa and Latin America, we will examine the competing claims of placeness, globalization, and hybridization on cultural identity and difference.
This is a reading and writing intensive course.
Eligible for ASIA or GSST credit.
Writing course.
1 credit.
Not offered 2011-2012.

## DANC 036. Dancing Identities

This course explores ways that age, class, gender, and race have informed dance, particularly performance dance, since 1960 . The impact of various cultural and social contexts will be considered. Lectures, readings, and video and concert viewings will be included. Students will be expected to design and participate in dance and movement studies as well as submit written research papers.
Prerequisite: DANC $001,003,003 A$, or 004 or permission of the instructor.

Eligible for GSST credit.
1 credit.
Not offered 2011-2012.

## DANC 037. Current Trends in Dance Performance

Course Objective: To look at contemporary dance performances as a social construct which embodies change and relationships in production to the other art forms and global discourse. We will seek answers to questions such as: How are issues of human agency, embodiment, and creativity changing with the filmed dance/body image? What are American, European, and Asian dance practices today? What is the relationship between performance and social activism? What are the influences of Globalism on dance production?
1 credit.
Not offered 2011-2012.
DANC 038. Dance and the Sacred
Through readings, discussion, video viewing, and our own sacred dances, we will examine the role of movement in performance, ritual, and contemplative practices. We will explore several sacred dance and movement traditions from the ancient (India) to the contemporary (American modern/concert dance). Students will be expected to design and participate in dance studies, give an in-class presentation, and write a final paper.
Prerequisite: Some dance experience in any technique.
1 credit.
Not offered 2011-2012.

## Dance Technique and Repertory Courses

Note: Technique courses (040-048, 050-058, 060 , and 061 ) and Repertory courses ( 049 [all sections], 071 and 078 ) may be taken for 0.5 academic credit or may be taken for physical education credit. All dance technique courses numbered 040 to 048 are open to all students without prerequisite. Courses numbered 050 to 058 and 060 to 061 have a prerequisite of either successful completion of the introductory course in that style or permission of the instructor.

DANC 040. Dance Technique: Modern I An introduction to basic principles of dance movement: body alignment, coordination, strength and flexibility, movement vocabulary, dance sequences, and musicality. Improvisation exercises and short composition studies will be included. Especially recommended for theaterinterested students. If taken for academic credit, concert attendance and two short papers are required.
0.5 credit.

Fall 2011 and spring 2012. Poe.

## DANC 041. Dance Technique: Ballet I

An introduction to the fundamentals of classical ballet vocabulary: correct body placement; positions of the feet, head, and arms; and basic locomotion in the form. If taken for academic credit, concert attendance and two short papers are required.
0.5 credit.

Fall 2011 and spring 2012. Sherman.
DANC 043. Dance Technique: African I
African Dance I introduces students to Umfundalai. In a contemporary context, the Umfundalai dance tradition surveys dance styles of African people who reside on the continent of Africa and in the Diaspora. Upon completion of the course, students will gain a beginning understanding of how to approach African dance and the aesthetic principles implicit in African-oriented movement. Students enrolled in DANC 043 for academic credit are required to keep a weekly journal and write two short papers.
Eligible for BLST credit.
0.5 credit.

Fall 2011 and spring 2012. Nance.
DANC 044. Dance Technique: Tap
This course is available to all tappers, from beginning to advanced. Such forms as softshoe, waltz-clog, stage tap, and "hoofin" will be explored. If taken for academic credit, concert attendance and two short papers are required. 0.5 credit or P.E. credit. Spring 2012. Davis.

## DANC 045. Dance Technique: Yoga

The course will explain and practice the 8 Limbs of Ashtanga Yoga with an emphasis on a variety of asanas (physical postures) and conscious deep breathing techniques (pranayama). It will differentiate hatha yoga from western exercise. Its aim is to provide the student with a basis for an ongoing personal practice. If taken for academic credit, reading, weekly journal writing, and two short papers are required.
0.5 credit or P.E. credit.

Fall 2011 and spring 2012. Shiva Das (McCabe).

DANC 046. Dance Technique: Kathak
The class introduces the hot rhythms (/talas/) and the cool emotions (/rasa/s) of the Indian classical dance art: Kathak. The dancing involves high energy, rapid turns, and fast footwork as well as movement of eyes, hands, neck, and fingers. This syncretic dance style from north India draws on Hindu and Muslim
cultural traditions (Bhakti and Sufi) and forms the raw material for the global-pop Bollywood dance. Students who are enrolled for academic credit will be required to write papers and/or create performance texts or choreographies.
Eligible for ISLM credit.
0.5 credit or P.E. credit.

Not offered 2011-2012.
DANC 047. Dance Technique: Flamenco
This course will introduce the basic principles of performance technique in the Spanish dance form, flamenco. Focus will be on studying both footwork (zapateado) and armwork (braceo). A variety of rhythmic groupings and styles within flamenco will be explored. Students who are enrolled for academic credit will be required to write papers and/or create performance texts or choreographies. Some Saturday meetings are required.
0.5 credit or P.E. credit.

Fall 2011. Luis-Gmitter.

## DANC 048. Dance Technique: Special

 Topics in TechniqueIntensive study of special topics falling outside the regular dance technique offerings. Topics may include Alexander technique, contact improvisation, jazz, Pilates, and musical theater dance. If taken for academic credit, concert attendance and one or two short papers are required.

## Section 1: Contact Improvisation

This improvisational dance practice is based on moving in contact with others through touching, leaning on, lifting, balancing, and supporting. The resulting duets and ensembles are propelled by the momentum of the dancers' weight. Students who enroll for academic credit will be required to write papers and/or create performance texts or choreographies.
0.5 credit or P.E. credit.

Fall 2011. Stein.

## DANC 049. Performance Dance:

 RepertoryThe various sections of this course offer opportunities for study of repertory and performance practice. Students are required to perform in at least one scheduled dance concert during the semester. Three hours per week.
Prerequisite: Placement for all sections is by audition or permission of the instructor unless otherwise stated. A course in dance technique should be taken concurrently.

## Fall Sections

Section 1: Tap
Open to students with some tap experience, this class draws on the tradition of rhythm tap known as "hoofin'." A new dance is made each semester, working with the varying levels of
skill present in the student ensemble. Students will be expected to attend additional ensemble rehearsals.
0.5 credit or P.E. credit.

Fall 2011. Davis.
Section 4: Taiko
The class will offer experience in traditional or traditionally based Japanese drumming repertory. The relationship between the drumming and its concomitant movement will be emphasized. Open to the general student with performances in December.
Two (2) semesters of this course fulfills the World Traditions Component requirement for the Music Major.
0.5 credit or P.E. credit.

Fall 2011. Arrow.

## Spring Sections

## Section 1: Modern

This repertory class will explore the physicality and psychology of performing movement. Movement sources will range form modern dance to hip-hop to contact improvisation. You need not specialize in any one type of dance to take this course, though it is recommended for intermediate/advances dancers. Students will be expected to attend additional ensemble rehearsals.
A technique class should be taken concurrently, and Modern III is highly recommended.
0.5 credit or P.E. credit.

Spring 2012. Staff.

## Section 3: African

Auditions for admission to this course will be held at the first class meeting. Additional information regarding the course is available from the instructor. Resulting choreography will be performed in the spring student concert. Students will be expected to attend additional ensemble rehearsals.
Prerequisite: DANC 043, 078, or permission of the instructor.
Eligible for BLST credit.
0.5 credit or P.E. credit.

Spring 2012. Nance.

## Section 7: Flamenco

The class will offer experience in a variety of traditional flamenco techniques. Resulting choreography will be performed in the spring student concert. Students will be expected to attend additional ensemble rehearsals.
0.5 credit or P.E. credit.

Spring 2012. Luis-Gmitter.
Section 6: Movement Theater Workshop
(See THEA 008)

Prerequisites: THEA 001 or 002 , any dance course 040 to 044 , or consent of the instructor. 1 credit.
Spring 2012. Bauriedel.
DANC 050. Dance Technique: Modern II An elaboration and extension of the principles addressed in DANC 040. If taken for academic credit, concert attendance and two short papers are required.
Prerequisite: DANC 040 or its equivalent. 0.5 credit or P.E. credit.

Fall 2011 and spring 2012. Tantoco.
DANC 051. Dance Technique: Ballet II
An elaboration and extension of the principles addressed in DANC 041. If taken for academic credit, concert attendance and two short papers are required.
Prerequisite: DANC 041 or its equivalent. 0.5 credit or P.E. credit.

Fall 2011 and spring 2012. Sherman.
DANC 053. Dance Technique: African II African dance for experienced learners aims to strengthen students’ African dance technique. The course will use the Umfundalai technique allied with neo-traditional West African Dance vocabularies to enhance students' visceral and intellectual understanding of African dance. Students who take African Dance II for academic credit should be prepared to explore and access their own choreographic voice through movement studies.
Prerequisite: DANC 043.
Eligible for BLST credit.
0.5 credit or P.E. credit.

Fall 2011 and spring 2012. Nance.
DANC 060. Dance Technique: Modern III Continued practice in technical movement skills in the modern idiom, including approaches to various styles. If taken for academic credit, concert attendance and two short papers are required.
0.5 credit or P.E. credit.

Fall 2011 and spring 2012. Poe.
DANC 061. Dance Technique: Ballet III
Continued practice in technical movement skills in the ballet idiom with an emphasis on advanced vocabulary and musicality. If taken for academic credit, concert attendance and two short papers are required.
0.5 credit or P.E. credit.

Fall 2011 and spring 2012. Sherman.

## Upper-Level Cross-Listed Courses

DANC 071. Salsa Dance/Drumming
(Cross-listed as MUSI 071)
This course provides an opportunity to learn both the dance and basis for drumming of Cuban salsa, Dominican merengue and Brazilian samba with an emphasis on salsa. Students will gain an understanding and practice of pulse, meter and the polyrhythmic structure underlying Afro/Caribbean music generally; hand techniques for conga; and improvisation and composition for both the dance and drumming. We will use a form of "street" notation in order to write/read/remember the various rhythms. No prerequisite required and no experience in dance or music necessary.
0.5 credit or P.E. credit.

Not offered 2011-2012.

## DANC 073. Arts Administration for Performance

This course is available to students participating in various dance study abroad programs.
By arrangement with the director of dance. 1 credit.
Not offered 2011-2012.

## DANC 074. Scenography for Dance Theater Performance

Available to students participating in the study abroad programs coordinated by Swarthmore in Ghana, India, Japan, or Poland. In Poland, enrollment in this course will require students to extend their stay through early July.
Prerequisites: THEA 004B and THEA 014. 1 credit.
Not offered 2011-2012.

## DANC 075. Special Topics in Dance Theater

Available to students participating in the study abroad programs coordinated through Swarthmore in France, Ghana, India, Japan, or Poland.
By arrangement with the Director of Dance. Prerequisites: DANC 001, 003, 003A, 004, 011, or consent of the Dance Program director. 1 credit.
Fall 2011 and spring 2012. Friedler.
DANC 076. Movement and Cognition
English, Scottish, and Italian folk dance are analyzed, using group theory, graph theory, morphological theory, and syntactic theory, in an effort to understand the temporal and spatial symmetries of the dances. One focus will be a
comparison of the insights offered by the mathematical and linguistic approaches.
Prerequisites: One course in linguistics and a willingness to move your body and learn some basic math.
1 credit.
Not offered 2011-2012.

## DANC 077. Rhythm, Drumming, Cultures

(Cross-listed as MUSI 077)
Although it is not always emphasized in Western art music education, rhythm is an essential and complex element in many world musics. Using approaches based in the field of ethnomusicology, this course will introduce students to a variety of world drumming styles. Musics from West Africa, North India, Bali, Japan, Cuba, and others will be considered for their sounds and formal musical structures as well as their histories and cultural meanings. Students will also spend a portion of each class learning basic drum technique in Afro-Cuban percussion as a practical introduction to themes discussed in the course.
1 credit.
Not offered 2011-2012.

## DANC 077B. The Visual Anthropology of Performance

(Cross-listed as SOAN 077B)
This course will introduce various approaches to the study of visual anthropology as it relates to movement, body, culture, and power. It will examine theoretical approaches ranging from semiotics of the body, communication theory, and phenomenology to the more recent approaches drawing on performance, postcolonial, post-structural, and feminist theories. It will also examine how anthropological issues in dance or performance are closely tied to issues of modernity, regional and national identity, gender, and politics. Various ethnographies and literature from dance studies, media and film studies, and feminist studies will be included in the course material. It will also require students to view videos to engage in visual analysis.
1 credit.
Not offered 2011-2012. Chakravorty.
DANC 078. Dance/Drum Ensemble (Cross-listed as MUSI 078)
A repertory class in which students will learn, rehearse and perform traditional Ghanaian dances and drumming, and a contemporary movement/rhythm piece consisting of both 'found' percussion ‘discovered' movement. Participants will be encouraged to both play the rhythms and learn the dance/movement. Students will be expected to attend additional ensemble rehearsals.

Performance: LPAC main stage, first week of December as part of the fall student dance concert.
Jeannine Osayande (dance) and Wesley Rast and Alex Shaw (drumming) are guest artists. Eligible for BLST credit.
0.5 academic credit or P.E. credit.

Fall 2011. Osayande and guest artists.

## DANC 079. Dancing Desire in Bollywood Films

This course will explore the shifts in sexuality and gender constructions of Indian women from national to transnational symbols through the dance sequences in Bollywood. We will examine the place of erotic in reconstructing gender and sexuality from past notions of romantic love to desires for commodity. The primary focus will be centered on approaches to the body from anthropology and sociology to performance, dance, and film and media studies.
Eligible for ASIA or GSST credit. 1 credit.
Not offered 2011-2012.

## DANC 091. Introduction to Performing Arts Education: Music

(Cross-listed as EDUC 071 and MUSI 091)
This course explores a range of performing arts issues confronting educators in theory and practice. While the focus is music, we will also consider dance and theater with the help of guest lecturers. We will look at primary education in the U.S., and we will also touch upon some of the ways music is taught to older students, as well as in other cultures. Students will draw upon their own experiences as teachers and learners. The course will culminate in a collaborative teaching project in which our class as a whole will develop and implement a program of performing arts instruction for children in partnership with an urban public school.
While some prior study of music might be helpful, it is not a prerequisite. This course is open to any student who has taken at least one course in either education or music.
Advanced Independent Work.
Writing course.
1 credit.
Spring 2012. Whitman.

## DANC 092. Independent Study

Available on an individual or group basis, this course offers students an opportunity to do special work with performance or compositional emphasis in areas not covered by the regular curriculum. Students will present performances and/or written reports to the faculty supervisor, as appropriate. Permission
must be obtained from the program director and from the supervising faculty.
1 credit.
Each semester. Staff.
DANC 093. Directed Reading
Available on an individual or group basis, this course offers students an opportunity to do special work with theoretical or historical emphasis in areas not covered by the regular curriculum. Students will present written reports to the faculty supervisor. Permission must be obtained from the program director and from the supervising faculty.
1 credit.
Each semester. Staff.

## DANC 094. Senior Project

Intended for seniors pursuing the special major or the major in course or honors, this project is designed by the student in consultation with a dance faculty adviser. The major part of the semester is spent conducting independent rehearsals in conjunction with weekly meetings under an adviser's supervision. The project culminates in a public presentation and the student's written documentation of the process and the result. An oral response to the performance and to the documentation follows in which the student, the adviser, and several other members of the faculty participate. In the case of honors majors, this also involves external examiners. Proposals for such projects must be submitted to the dance faculty for approval during the semester preceding enrollment.
Prerequisite: Previous or concurrent enrollment in an advanced-level technique course or demonstration of advanced-level technique. 1 credit.
Each semester. Friedler.

## DANC 095, 096. Senior Thesis

Intended for senior majors, the thesis is designed by the student in consultation with a dance faculty adviser. The major part of the semester is spent conducting independent research in conjunction with weekly tutorial meetings under an adviser's supervision. The final paper is read by a committee of faculty members or, in the case of honors majors, by external examiners who then meet with the student for evaluation of its contents. Proposals for a thesis must be submitted to the dance faculty for approval during the semester preceding enrollment.
1 or 2 credits.
Each semester. Friedler.

Coordinator: LEE A. SMITHEY (Sociology and Anthropology/Peace and Conflict Studies) ${ }^{2}$ JENNIFER MAGEE (Peace and Conflict Studies) ${ }^{6}$<br>Anna Everetts (Administrative Assistant)<br>Committee: Wendy E. Chmielewski (Peace Collection)<br>Etsuko Hoshino-Browne (Psychology) ${ }^{3}$<br>Shane Minkin (History)<br>Matthew Murphy (Political Science)<br>Ellen Ross (Religion) ${ }^{2}$<br>Dominic Tierney (Political Science)<br>Andrew Ward (Psychology)

${ }^{2}$ Absent on leave, spring 2012.
${ }^{3}$ Absent on leave, 2011-2012.
${ }^{6}$ Spring 2012.

The Peace and Conflict Studies Program at Swarthmore College provides students with the opportunity to examine conflict in various forms and at levels stretching from the interpersonal to the global. The multidisciplinary curriculum explores the causes, practice, and consequences of collective violence as well as peaceful or nonviolent methods of conducting or dealing with conflict. Students who minor in peace and conflict studies at Swarthmore will:

1. understand factors shaping human conflict, including psychological, social, cultural, political, economic, biological, religious, and historical ones;
2. analyze specific cases of conflict, including interpersonal, inter-group, inter-state, and international disputes;
3. examine theories and models of peacebuilding and reconciliation and evaluate attempts to manage, resolve, or transform conflict nonviolently;
4. investigate forms of oppression and injustice, and their relationship to conflict, locally and globally; and
5. explore opportunities to study topics relevant to peace and conflict through fieldwork, internships, or other experiences outside the classroom.

## The Academic Program

Students with any major, whether in Course or in the Honors Program, may add a course minor in peace and conflict studies. Students in the Honors Program may choose to complete an honors minor in peace and conflict studies.

## Course Minor

A minor in peace and conflict studies consists of six credits, of which no more than two may be taken in the student's major department. Introduction to peace and conflict studies (PEAC 015) is required and should be taken
before the junior year, if possible. It is preferable (but not always possible) for students to have taken two courses in the minor, including Introduction to peace and conflict studies, when applying to join the program.

## Honors Minor

Students in the Honors Program who choose an honors minor in peace and conflict studies must complete one preparation for external examination. A standard two-credit preparation can consist of a seminar, a combination of two courses in different departments, a two-credit thesis, or a combination of a thesis and a course. According to the Honors handbook: "When the preparation for the interdisciplinary minor is an interdisciplinary thesis, the rule is that at least half of the work of the thesis should be in a subject outside the student's major". Each student should propose a standard preparation unless he or she has obtained the approval of a sponsoring faculty member to undertake an honors attachment or thesis. The proposed preparation must be approved by the Peace and Conflict Studies Committee.
Students whose honors minor in peace and conflict studies can be incorporated into the final requirements for Senior Honors Study in the major should do so. The Peace and Conflict Studies Committee will work out the guidelines for the integration exercise with the student and the major department.

## Applying for the Minor

Students who intend to minor in peace and conflict studies should submit a copy of their sophomore paper to the coordinator of the program during the spring of the sophomore year, after consultation with program faculty members. The paper should present a plan of study that satisfies the requirements stated below, specify the courses to count toward the minor, share the student's interest in peace and conflict studies, and identify how the program complements the student's academic goals.

Honors students' sophomore papers should describe and justify their proposed honors preparation in terms of its suitability for examination and its contribution to the student's interests in peace and conflict studies. Students should obtain advance approval from faculty members who teach the courses that are to be included in an honors preparation. A form for this purpose is available from the Programs Office or may be downloaded from the peace and conflict studies website at www.swarthmore.edu/peacestudies. The form should be submitted to the Programs Office, preferably with the sophomore paper. If the preparation involves a thesis, the student should specify a thesis topic and a thesis adviser. All applications must be approved by the Peace and Conflict Studies Committee.

## Special Major

Applications for special majors are considered on a case-by-case basis. Students who wish to propose a special major should consult with the program coordinator (normally in the sophomore year) and should identify a sponsoring faculty member in the early stages of developing the major. Special majors consist of at least 10 credits and normally no more than 12 credits.

## Off-Campus Study

Off-campus study is encouraged for both special majors and minors of peace and conflict studies. In particular, the Northern Ireland Semester, based in Derry/Londonderry and Belfast, focuses on ongoing efforts to understand the legacy of the Troubles and build peace. A unique feature of the semester involves placements in local community groups, which contribute in a variety of ways to the development of a shared and sustainable democratic future in Northern Ireland.
Swarthmore students attend this program under the College's Semester/Year Abroad Program for one semester. One credit is awarded for community placement, one credit for a required course on peace and conflict in Northern Ireland, and two credits for peace and conflict studies courses taken in Belfast at the Irish School of Ecumenics (Trinity College).
Normally, no more than three courses taken outside of Swarthmore College may be counted toward the major or minor, subject to the approval of the peace and conflict studies coordinator. In the case of the Northern Ireland semester, all four courses may be applied, subject to the approval of the peace and conflict studies coordinator.
Possibilities exist for summer research and/or service work in Northern Ireland arising from participation in the program.

## Research and Service Learning

## Internships

Student programs can include an internship or fieldwork component, and an internship is highly recommended. Fieldwork and internships normally do not receive credit. However, students can earn up to one credit for special projects that are developed with an instructor and approved in advance by the Peace and Conflict Studies Committee.

## Summer Opportunities

Peace and conflict studies minors and honors minors are encouraged to apply for funding from the Julia and Frank Lyman Student Summer Research Fellowship, the Joanna Rudge Long ' 56 Award in Conflict Resolution, the Simon Preisler Student Research and Internship award and/or the Howard G. Kurtz, Jr. and Harriet B. Kurtz Memorial Fund. Applications are due in February, and information can be obtained from the program's website.
Additional information on funding, internships, training, and career opportunities are also available on the Peace and Conflict Studies Program website at
www.swarthmore.edu/peacestudies.

## Life After Swarthmore

Peace and conflict studies alumni often develop or work in organizations that promote peace and justice locally and globally. Many pursue graduate work in fields directly or closely related to peace and conflict studies. You may find a growing digest of student and alumni activities on the program's website at www.swarthmore.edu/x20654.xml

## Courses

The following courses may be applied toward a minor in peace and conflict studies. Each of the courses designated as PEAC is open to all students unless otherwise specified. In the event of an oversubscribed course, preference in enrollment will be given to declared peace and conflict studies minors. Courses that are eligible to count toward a concentration or minor in Peace, Justice, and Human Rights at Haverford College or Peace, Conflict, and Social Justice at Bryn Mawr College may also be applied toward a course minor in peace and conflict studies at Swarthmore. Student programs may, subject to prior approval by the committee, also include independent study; special attachments to courses that are not listed here; courses offered at the University of Pennsylvania; and courses taken abroad.
Courses noted with an asterisk * are eligible for a peace and conflict studies minor by obtaining written approval of the instructor and the
program coordinator before the drop/add period ends. Course materials may be requested for confirmation after course completion. Course approval forms may be downloaded from the Peace and Conflict Studies Program website.

## PEAC 015. Introduction to Peace and Conflict Studies

Introduction to peace and conflict studies addresses not only the proliferation of coercive and violent means of conducting conflict but especially the growth of nonviolent alternatives, both institutional and grassroots, global and local. These include nonviolent collective action, diplomacy, mediation, peacekeeping, community relations work, and aid and development work. Several theoretical and philosophical lenses will be used to explore human dispositions, conflict in human societies, and conceptualizations of peace. The course will take an interdisciplinary approach with significant contributions from the social sciences.
1 credit.
Fall 2011. Magee.

## PEAC 025. Peace and Conflict Journalism

This course will address the dynamic relationship between journalism and conflict and the theory and practice of peace journalism as an alternative to the conventions and biases of traditional war reporting. Students will examine the state of the media ecosystem and independent media practices. Practical instruction will introduce the principles of journalism, reporting and distribution techniques, content analysis, and multimedia production techniques.
Students will produce stories for War News Radio with in-depth reporting, historical perspective, and direct coverage of people living in conflict zones.
1 credit.
Fall 2011. MacMillan.
PEAC 070. Research Internship/Fieldwork
Credit hours to be arranged with the coordinator.
PEAC 071B. Research Seminar: Strategy and Nonviolent Struggle
(Cross-listed as SOAN 071B)
The focus of this research seminar will be the development of a web-based database that will contain crucial information on campaigns for human rights, democracy, environmental sustainability, economic justice, national and ethnic identity, and peace. The Global Nonviolent Action Database will serve activists and scholars worldwide. The seminar will
include research/writing methods and theories of the field. Of interest will be strategic implications for today drawn both from theory as well as what the group learns from documented cases of wins and losses experienced by people's struggles.
Writing course.
1 credit.
Fall 2011. Lakey.

## PEAC 077. Peace Studies and Action

Peace Studies and Action is designed to provide students an opportunity to examine in greater depth a form of peace action that has captured their intellectual interest and imagination (perhaps mediation, nonviolent direct action, persuasion through the arts, diplomacy, etc.). This course aims to bridge the gaps between peace research, theory, and implementation by encouraging students to move between each. Assigned readings on topics such as power, organizational structures, mobilization strategies, and the intellectual origins of peace research will guide discussions. Peer input and feedback will be emphasized. Students will also engage with organizations promoting nonviolent ways of conducting conflict to understand better the real-world challenges of developing and sustaining peace work.
1 credit.
Spring 2012. Lakey.

## PEAC 090. Thesis

Credit hours to be arranged with the coordinator.
Each semester. Staff.

## PEAC 093. Directed Reading

1 credit.
Each semester. Staff.
PEAC 180. Senior Honors Thesis
2 credits.
Each semester. Staff.

## Dance

DANC 004. The Arts as Social Change
Economics
ECON 012. Game Theory and Strategic Behaviors
ECON 051. The International Economy*
ECON 081. Economic Development*
ECON 082. Political Economy of Africa
ECON 151. International Economics: Seminar*

## History

HIST 001F. First-Year Seminar: "Foreigners" in the Middle East*
HIST 020. History of Current Events in the Middle East

## Peace and Conflict Studies

HIST 025. Colonialism and Nationalism in the Modern Middle East
HIST 028. Nations and Nationalism in Eastern Europe: 1848-1998
HIST 034. Antisemetism Through the Ages HIST 037. History and Memory: Perspectives on the Holocaust
HIST 049. Race and Foreign Affairs
HIST 055. Social Movements in the 20th Century*
HIST 134. U.S. Political and Diplomatic History

## Linguistics

LING 005. Linguistic Underpinnings of Racism and Bias

## Literatures

LITR 070S. Persistent Power of Central
American Literature
LITR 083J. War and Postwar in Japanese
Culture
Political Science
POLS 004. International Politics
POLS 019. Democratic Theory and Practice
POLS 059. Contemporary European Politics
POLS 061. American Foreign Policy
POLS 066. Transitional Justice
POLS 067. Great Power Rivalry in the 21 st Century
POLS 069. Globalization: Politics, Economics, Culture, and the Environment
POLS 075. The Causes of War
POLS 079. Comparative Politics: Special
Topics Democracy and Ethnic Conflict
POLS 110. Comparative Politics: Identity and Conflict*
POLS 112. Democratic Theory and Civic
Engagement in America
POLS 113. International Politics: War, Peace, and Security

## Psychology

PSYC 035. Social Psychology*
PSYC 057. Psychology of Prejudice, Stereotyping, and Intergroup Relations

## Religion

RELG 005. World Religions*
RELG 023. Living in the Light: Quakers Past/Present*
RELG 100. Holy War, Martyrdom, and Suicide in Christianity, Judaism, and Islam

Sociology and Anthropology
SOAN 010J. War, Sport, and the Construction of Masculine Identity
SOAN 025B. Transforming Intractable Conflict

SOAN 035B. Nonviolent Social Movements
SOAN 035C. Social Movements and Strategic Action
SOAN 071B. Research Seminar: Strategy and Nonviolent Struggle (W)

Please consult the program's course listings at www.swarthmore.edu/peacestudies for updates, descriptions, and scheduling.

PETER BAUMANN, Professor and Chair<br>RICHARD ELDRIDGE, Professor<br>TAMSIN LORRAINE, Professor<br>HANS F. OBERDIEK, Professor ${ }^{3}$<br>CHARLES RAFF, Professor<br>ALAN R. BAKER, Associate Professor ${ }^{3}$<br>GRACE M. LEDBETTER, Associate Professor<br>KRISTA THOMASON, Visiting Assistant Professor<br>DONNA MUCHA, Administrative Assistant

${ }^{3}$ Absent on leave, 2011-2012.

Philosophy analyzes and comments critically on concepts that are presupposed and used in other disciplines and in daily life: the natures of knowledge, meaning, reasoning, morality, the character of the world, God, freedom, human nature, justice and history. Philosophy is thus significant for everyone who wishes to live and act in a reflective and critical manner.

## The Academic Program

The Philosophy Department offers several kinds of courses, all designed to engage students in philosophical practices.
A. There are courses and seminars to introduce students to the major systematic works of the history of Western philosophy: works by Plato and Aristotle (Ancient Philosophy); Descartes, Hume and Kant (Modern Philosophy); Hegel and Marx (19th-Century Philosophy); Kierkegaard, Nietzsche, Sartre, Heidegger, de Beauvoir (Existentialism); Russell and Wittgenstein (Contemporary Philosophy).
B. There are courses and seminars that consider arguments and conclusions in specific areas of Philosophy: Theory of Knowledge, Logic, Moral Philosophy, Metaphysics, Aesthetics, and Social and Political Philosophy.
C. There are courses and seminars concerned with the conceptual foundations of various other disciplines: Philosophy of Science, Philosophy of Language, Philosophy of Law, Philosophy of the Social Sciences, Philosophy of Psychology, and Philosophy of Religion.
D. There are courses and seminars on meaning, freedom, and value in various domains of contemporary life: Values and Ethics in Science and Technology, Feminist Theory, and PostModernism.
Members of the Philosophy Department emphasize the engagement of philosophy with other disciplines and recognize that philosophical inquiry is naturally related to concerns in other areas of study. They attempt to make these relations explicit, and so course and seminars are designed to be accessible to a broad range of students, not just those who intend to major in philosophy. Various courses and seminars in philosophy appear in
concentrations in gender and sexuality studies, German studies, medieval studies, interpretation theory, and environmental studies.

## Prerequisites

Satisfactory completion of either any section of PHIL 001 Introduction to Philosophy, or PHIL 012 Logic, or any First-Year Seminar (FYS numbered $002-010$ ) is a prerequisite for taking any further course in philosophy. Sections of Introduction to Philosophy and First-Year Seminars are intended to present introductions to philosophical problems and techniques of analysis. There are no prerequisites for these entry-level courses. Students may not take more than one introductory level course (FYS or Introduction to Philosophy), with one exception: students may take Logic either before or after taking any other introductory course.
Juniors and seniors may enter intermediate courses in philosophy without having taken an introductory level course in philosophy.

## Course Major

One can major in philosophy in either the Course Program or the Honors Program. Internal distribution requirements are the same for both programs. Only students who will have satisfactorily completed two philosophy courses by the end of their sophomore year will be considered for acceptance as majors. Normally, applications to complete a major in philosophy will not be accepted after the end of classes in the fall term of a student's senior year. Philosophy students changing their program from course to honors (or honors to course) must do so by the end of the add/drop period of the fall term of senior year.

## Acceptance Criteria

In addition to having completed two courses, majors must meet the general requirements for remaining in good standing at the College and have the ability to satisfy the department's comprehensive requirements. They must further normally have at least a B- average in all philosophy courses taken at Swarthmore. For double majors, the standard is somewhat higher,
and the philosophy faculty determines whether the student has the ability to complete the comprehensive requirements of two departments satisfactorily.

## Requirements

Students majoring in philosophy must earn a total of eight credits, exclusive of senior work and complete at least
A. One course or seminar in logic and
B. Two credits in history: of these 2 credits, at least 1 must be in either ancient or modern (17th and 18th century) philosophy and C. Two credits in at least one course covering one of the following areas: Advanced Logic, Philosophy of Science, Epistemology, Metaphysics, Philosophy of Language, Philosophy of Mind and
D. Two credits in at least one course covering one of the following areas: Moral Philosophy, Social and Political Philosophy, Philosophy of Law, Feminism, Aesthetics.
In addition, students majoring in philosophy are urged to take courses and seminars in diverse fields of philosophy. Prospective majors should complete the logic requirements as early as possible. Course majors are encouraged to enroll in seminars. Mastery of at least one foreign language is recommended.

## Senior Course Study work

A student will complete a course major in philosophy by registering for a single credit of Senior Course Study in the spring term of the senior year. Senior Course Study does not count toward fulfilling the eight credit requirement for the major. Under this heading, the student will produce two independent essays, each of no more than 4,000 words, based on problems or texts considered in seminars or courses that they have already completed, and in response to questions set by the department faculty. These two independent essays must fall in two different areas of philosophy from the following list:
A. History of Philosophy: Ancient Philosophy; Modern Philosophy; 19th-Century Philosophy; Existentialism and Phenomenology; and Contemporary Philosophy;
B. Value Theory: Moral Philosophy; Social and Political Philosophy; Aesthetics; Feminist Theory; Philosophy of Law
C. Logic, Metaphysics, and Epistemology: Logic, Theory of Knowledge, Philosophy of Science, Philosophy of Psychology, Philosophy of Language
Students should inform the chair about the general areas in which they wish to write their essays by the 10 th week of the fall term. The faculty of the Philosophy Department will then
set questions and specify additional readings (13 articles or book chapters) for each area. These questions will be available to students by the end of the fall term.
It is expected that these essays will demonstrate initiative in engaging with problems and texts and that they will develop lines of argumentation beyond what is normally expected of course or seminar papers. Conversation among students who are preparing these essays is encouraged, but each student must produce an independent, original essay. After completing these essays, each course major will be examined orally on both essays by two members of the department.

## Course Minor

Students may complete a minor in philosophy by earning any 5 credits in philosophy courses. There is no distribution requirement for the minor.

## Honors Major

## Acceptance Criteria

Students undertaking to pursue honors in philosophy should have B+ grades in philosophy courses and a B+ average overall. The opinions of the philosophy faculty concerning the philosophical ability of students weigh heavily in borderline cases.
Only students who have already completed two philosophy courses will be considered for admission to the Honors Program.

## Preparations

Students will normally prepare for external examination in a given field in philosophy by completing a double-credit seminar at Swarthmore. With the approval of the department, it is possible to combine one-credit courses or attachments, taken either at Swarthmore or elsewhere, to form a preparation. With the approval of the department, a double-credit thesis may be counted as one preparation and submitted to an examiner.

## Requirements

Honors majors will register for one-credit of Seniors Honors Study in philosophy during the spring term of their senior year. Senior honors study does not count toward fulfilling the eight credit requirement for the major. External examiners will set questions and specify additional readings (3-4 articles or book chapters) for each preparation that is to be examined. These questions will be available to students by the end of the fall term. Honors majors will choose one question for each preparation.

## Senior Honors Study

Honors majors will then produce for each preparation an independent essay of no more than 4,000 words in response to the question they have chosen.
It is expected that these essays will demonstrate initiative in engaging with problems and texts and that they will develop lines of argumentation beyond what is normally expected of papers produced for seminar discussion. The preparation of the essays will not be supervised by members of the faculty. Conversation among students who are preparing these essays is encouraged, but each student must produce an independent, original essay. The essays must be submitted to the department to be sent to the external examiners by the beginning of the written examination period. There will be no further written examination of preparations beyond these independent essays. An examiner will conduct a 60 minute oral examination for each preparation on both the independent essay and the materials considered in the preparation (typically all the materials listed on the syllabus for the related seminar).

## Honors Minor

## Requirements

Honors minors must complete six credits of work in philosophy. In special cases, with approval of the department, one or two of these credits may be closely related topics taught outside the philosophy department that are wellintegrated with their work in philosophy. Minors in philosophy will register for 0.5 credit of Senior Honor Study in the spring term of their senior year. Senior Honors Study does not count toward satisfying the six credit requirement for the minor.

## Senior Honors Study

Students will prepare one independent, original essay of no more than 4,000 words in response to a question set by an external examiner (as above with majors). An external examiner will conduct a 60 minute oral examination on both the independent essay and the materials considered in the preparation (typically all the materials listed on the syllabus for the related seminar).

## Application Process Notes for the Major or the Minor

Follow the process described by the Dean's Office and the Registrar's Office for how to apply for a major. Submit application, with transcript, plan of study, and if applicable, honors application.
If you are deferred, you may apply again after addressing the reason(s) for being deferred.

## Off-Campus Study

With prior approval from the Chair, a student may take philosophy courses abroad for a semester or year and have them count both toward a major and as part of an Honors Program. Courses abroad do not, however, always fit neatly into a philosophy major and are not always suitable for full course credit. Full consultation with the Chair about study abroad is essential for constructing a viable program.

## Courses

## PHIL 001. Introduction to Philosophy

Philosophy addresses fundamental questions that arise in various practices and inquiries. Each section addresses a few of these questions to introduce a range of sharply contrasting positions. Readings are typically drawn from the works of both traditional and contemporary thinkers with distinctive, carefully argued, and influential views regarding knowledge, morality, mind, and meaning. Close attention is paid to formulating questions precisely and to the technique of analyzing arguments through careful consideration of texts.
1 credit.
Each semester. Staff.

## Section 1: Knowledge and Agency

What shall I do? What are the demands of morality? What is their basis (if there is one)? What is freedom of the will and do we enjoy it? Why is death bad? What is the meaning of life? (does it have a meaning?) What can we know? What is knowledge? Are we just material beings or do we possess an immaterial (and, perhaps immortal) soul? These are and have always been fundamental philosophical questions. We will deal with them by reading and discussing classical as well as contemporary philosophical texts.
Writing course.
1 credit.
Fall 2011. Baumann.

## Section 2: Philosophy, Criticism, and Culture

This course will consider philosophy as a form of argumentative reflection on and criticism of some central cultural practices: political organization, natural science, and morality. In addition, philosophy as itself a cultural practice will be compared and contrasted with art and literature, history, and natural and social science. We will study Plato, Descartes, Marx, and Marcuse as well as a few films and poems. Writing course.
1 credit.
Spring 2012. Eldridge.

## Section 3: Truth and Desire

This course is designed to develop your natural ability to think philosophically by heightening your sense of wonder and honing your critical skills. We will take a historical approach, starting with Plato and then reading Descartes and Nietzsche before turning to two more contemporary theorists, Frantz Fanon and Sandra Bartky. Throughout the course, we will pursue questions about truth (What is it? How does it relate to knowledge? When do we know that we know?) as well as questions about desire (What do we want? How does that relate to what we should want, our ideas of the good life, and the kind of life we should lead?) and the relationship between the two.
Writing course.
1 credit.
Fall 2011. Lorraine.

## Section 4: Knowledge and the World

"Men fear thought as they fear nothing else on earth-more than ruin, more than even death." Bertrand Russell believed that education's primary goal should be to instill in students not only the ability to seek knowledge, but also the desire for it, the joy of it, and the appreciation of its power. For Russell, this was also an essential component of philosophy. In this course, we will investigate the quest for knowledge itself: what are we looking for and how should we be looking for it? We will read some of the canonical answers to these questions as well as some answers that are not so canonical. We will ask what knowledge is, what kinds of knowledge we can have, and what it is exactly that we can know.
Writing course.
1 credit.
Fall 2011 and spring 2012. Thomason.

## PHIL 003. First-Year Seminar: The Meaning of Life

What is the meaning of life? Isn't this question too big for us? Do we even understand the question? This course will engage critically with several philosophical attempts to make sense of this fundamental question; we will discuss different answers to it. More specifically, we will deal with questions like the following: Can life have a meaning only if there is a God? Isn't life just absurd? Is there anything that really matters? Is death a problem for the attempt to lead a meaningful life? (and wouldn't immortality be a good alternative?) What is the role of purpose, purposes and plans in our lives? Is a meaningful life a happy life? What role do values and goals play in a meaningful life? And, finally: What is a good life?

Writing course.
1 credit.
Spring 2012. Baumann.

## PHIL 006. First-Year Seminar: Life, Mind,

 and ConsciousnessClassical problems of the nature and extent of life, the modern problems of mind and body, and contemporary issues that center on consciousness and thought serve as a chronological introduction to central philosophical issues. Individual writing conferences supplement plenary discussion sessions.
Writing course.
1 credit.
Spring 2012. Raff.

## PHIL 007. Paradox and Rationality

People claim to know lots of things-that the Earth is round, that $2+2=4$, that God exists. But what distinguishes genuine knowledge from mere belief? This course will examine the ways in which the use of a systematic method can help in the generation of knowledge. Using the work of Descartes as our starting point, we shall focus, in particular, on the interaction between philosophical and scientific methods. 1 credit.
Not offered 2011-2012.

## PHIL 007B. First-Year Seminar: Plato and Socrates

This seminar will provide an in depth introduction to the thought of Socrates and Plato through close readings and analysis of selected Platonic dialogues considered as philosophical works of art. We will also examine the cultural context in which these dialogues emerged, their philosophical and literary precedents (e.g. Presocratics, Greek Tragedy), and the influence that they have had on subsequent philosophers (e.g. Nietzsche, Rorty).
1 credit.
Not offered 2011-2012.

## PHIL 010. First-Year Seminar: Questions of Inquiry

Classical and contemporary readings on questions of the nature and rationale for inquiry in philosophy, science, and morality. 1 credit.
Fall 2011. Raff.

## PHIL 011. Moral Philosophy

The course will examine leading contemporary views about morality and how they might be applied to a variety of contemporary moral issues, including killing in various circumstances (e.g. euthanasia, capital punishment), just distribution of scarce
resources, world hunger, limits on freedom of expression, ethical treatment of animals, and ethics and the environment.
1 credit.
Fall 2011. Thomason.

## PHIL 012. Logic

An introduction to the principles of deductive logic with equal emphasis on the syntactic and semantic aspects of logical systems. The place of logic in philosophy will also be examined.
No prerequisite. Required of all philosophy majors.
1 credit.
Fall 2011. Eldridge.

## PHIL 013. Modern Philosophy

Seventeenth- and 18th-century theories of knowledge, morals, and metaphysics studied in works by Descartes, Spinoza, Leibniz, Locke, Berkeley, Hume, and Kant.
1 credit.
Fall 2011. Raff.

## PHIL 016. Philosophy of Religion

(See RELG 015B)
For PHIL credit see prerequisite information. 1 credit.
Fall 2011. Staff.

## PHIL 017. Aesthetics

On the nature of art and its roles in human life, considering problems of interpretation and evaluation and some specific medium of art: Who should care about art? Why? How?
1 credit.
Not offered 2011-2012.
PHIL 018. Philosophy of Science (See PHIL 119)
1 credit.
Not offered 2011-2012.

## PHIL 019. Philosophy and Literature and Film

This course will focus on two interrelated issues 1) the nature of literature and its value for human life, and 2) how philosophy and literature have historically defined themselves by marking their similarities with and differences from each other. Among the central texts will be Aristotle's Poetics, Hegel's Aesthetics, and Lukacs The Theory of the Novel.
1 credit.
Spring 2012. Eldridge.

## PHIL 020. Plato and His Modern Readers

 (Cross-listed as CLAS 020)Modern thinkers have ascribed to Plato some of the fundamental good and ills of modern
thought. It has been claimed, for example, that Socrates and Plato distorted the entire course of Western philosophy, that Plato was the greatest political idealist, that Plato was the first totalitarian, that Plato was a feminist, and that Plato betrayed his teacher, Socrates. In this course, we will view Plato through the lens of various modern and postmodern interpretations (e.g., Nietzsche, Heidegger, Foucault, Irigaray, Rorty, Murdoch, Nussbaum, Vlastos) alongside a close analysis of ethical, metaphysical, and epistemological issues as they arise in the dialogues themselves.
Writing course.
1 credit.
Spring 2012. Ledbetter.

## PHIL 021. Social and Political Philosophy

This course will serve as an introduction to social and political philosophy, though some attention will be paid to historical figures such as Mill, Hobbes, and Locke, the focus will be on contemporary debates regarding justice, freedom, equality, and community. The principal theories in political philosophyutilitarianism, liberal egalitarianism, libertarianism, Marxism, and communitarianism-will be considered as well as some of the challenges raised by feminism and multiculturalism.
1 credit.
Not offered 2011-2012.

## PHIL 023. Metaphysics

Traditional issues of reality and appearance, and traditional topics of God, Freedom, and Immortality are background for contemporary questions of being.
1 credit.
Not offered 2011-2012.

## PHIL 024. Theory of Knowledge

To raise questions of whether we have knowledge of morality and religion, this course considers classical and contemporary treatments of knowledge, its nature and limits.
1 credit.
Not offered 2011-2012.

## PHIL 025. Philosophy of Mathematics

Topics will include the nature of mathematical objects and mathematical knowledge, proof and truth, mathematics as discovery or creation, the character of applied mathematics, and the geometry of physical space. A considerable range of 20th-century views on these topics will be investigated including logicism (Frege and Russell), formalism (Hilbet), intuitionism (Brouwer and Dummett), platonism (Gödel), and empiricism (Kitcher). Important mathematical results pertaining to these topics,
their proofs, and their philosophical implications will be studied in depth (e.g., the paradoxes of set theory, Gödel's incompleteness theorems, and relative consistency proofs for non-Euclidean geometries).
Prerequisites: Logic, acceptance as a major in mathematics, or approval of instructor. 1 credit.
Not offered 2011-2012.
PHIL 026. Language and Meaning (Cross-listed as LING 026)
Language is an excellent tool for expressing and communicating thoughts. You can let your friend know that there will probably be fewer than 25 trains from Elwyn to Gladstone next Wednesday-but could you do this without using language? (have you tried?) Even more interesting is the question how you can do this using language. How can the sounds I produce or the marks that I leave on this sheet of paper be about the dog outside chasing the squirrel? How can words refer to things and how can sentences be true or false? Where does meaning come from? Philosophy has dealt with such questions for a long time but it was only a bit more than 100 years ago that these questions have taken center stage in philosophy. We will read and discuss such more recent authors, starting with Frege, Russell and Wittgenstein and leading up to authors like Austin, Quine, Kripke and Putnam.
1 credit.
Not offered 2011-2012.

## PHIL 029. Philosophy of Modern Music

This course will survey the rise and evolution of so-called absolute music as a significant form of cultural expression from 1750 to the present. 1 credit.
Not offered 2011-2012.

## PHIL 031. Advanced Logic

A survey of various technical and philosophical issues arising from the study of deductive logical systems. Topics are likely to include extensions of classical logic (e.g., the logic of necessity and possibility [modal logic], the logic of time [tense logic], etc.); alternatives to classical logic (e.g., intuitionistic logic, paraconsistent logic); metatheory (e.g., soundness, compactness, Gödel's incompleteness theorem); philosophical questions (e.g., What distinguishes logic from non-logic? Could logical principles ever be revised in the light of empirical evidence?).
Prerequisite: PHIL 012.
1 credit.
Not offered 2011-2012.

## PHIL 035. Environmental Ethics

Environmental ethics is normative moral and political philosophy as it pertains to environmental questions, concerns and issues. Here are some of the questions we'll examine: Who counts in environmental ethics: animals, plants, ecosystems? E.g., culling deer in the Crum woods is bad for the deer killed but good for the flora and other fauna of the Crum; Does nature possess intrinsic value or only instrumental value?; Are values merely subjective e.g., expressions of personal preference or taste, or can they be, in some sense, objective?; Is there one sound environmental ethic or several?; Should we accept the claims of so-called "deep ecology" or is a more pragmatic approach better?; Should we be more concerned with sustaining, restoring, or preserving the environment e.g., with respect to wilderness?; How do we resolve a conflict between feeding people and saving nature?; Can we integrate human rights with environmentalism? Democratic decision making? This course is open to all, though it would be desirable if students had at least one philosophy course.
Eligible for ENVS credit.
1 credit.
Not offered 2011-2012.

## PHIL 039. Existentialism

In this course, we will examine existentialist thinkers such as Nietzsche, Kierkegaard, Heidegger, Sartre, Beauvoir, and Camus to explore themes of contemporary European philosophy, including the self, responsibility and authenticity, and the relationships between body and mind, fantasy and reality, and literature and philosophy.
1 credit.
Spring 2012. Lorraine.

## PHIL 040. Semantics

(See LING 040)
For PHIL credit see prerequisite information.
Note: This is not a writing course for PHIL. 1 credit.
Fall 2011 and spring 2012. Fernald.

## PHIL 045. Futures in Feminism

In this course, we will investigate the future directions feminist theory in the 21st century could or should take by looking at recent feminist theory and asking where we can go from here. Areas we will investigate include transnational theory, poststructuralist feminist theory, cultural theory, third-wave theory, critical race theory, and queer theory as well as theories that may not easily fit into any prevailing category of feminist thought.

Eligible for GSST credit. 1 credit.
Not offered 2011-2012.

## PHIL 047. Philosophical Topics Guided Research Seminar

This course will be taught as a working group seminar, with students making use of online bibliographies to find contemporary philosophical work (generally less than five years old) on specific topics. Following an initial week of general introduction to each topic, with assigned survey reading, they will then present structured analyses of these recent works to each other in discussion. The goal is to develop research skills to engage productively with contemporary, problem-oriented literature. 1 credit.
Not offered 2011-2012.

## PHIL 048. German Romanticism

This colloquium will focus on theories of subjectivity, aesthetic experience, and ethical life developed in the immediate post-Kantian context. The principal figures considered will be Schiller, Hõlderlin, and Schlegel.
1 credit.
Not offered 2011-2012.
PHIL 049. Marx, Nietzsche, and Freud
This course will examine the work of three 19th-century "philosophers of suspicion" who challenged the self-presence of consciousness by considering consciousness as an effect of other forces. Their investigations into one's understanding of truth as the effect of will-topower (Nietzsche), one's understanding of reality as the effect of class position (Marx), and consciousness as the effect of unconscious forces (Freud) provide an important background to contemporary questions about the nature of reality, human identity, and social power. 1 credit.
Not offered 2011-2012.

## PHIL 055. Philosophy of Law

An inquiry into major theories of law, with emphasis on implications for the relation between law and morality, principles of criminal and tort law, civil disobedience, punishment and excuses, and freedom of expression.
1 credit.
Not offered 2011-2012.
PHIL 059. Humans, Animals, and Robots The philosophical tradition of phenomenology takes lived experience as its starting point and insists upon the embodied nature of human minds. Once we take our embodiment seriously, how different are we from other animals? And what would it take for computer circuits to
replicate something like human sentience? What can phenomenological descriptions of lived experience add to our understanding of who we are? This course will take a phenomenological perspective on what it is to be human and explore questions about embodiment, consciousness, rationality, affect, and identity, as well as the boundaries between the human and other forms of sentience.
1 credit.
Not offered 2011-2012.

## PHIL 069. Phenomenology-Then \& Now

In this course we will take a phenomenological perspective on lived experience in order to investigate questions about subjectivity, perception, temporality, and the roots of knowledge in being-in-the-world. How does abstract thought emerge from pre-reflective immersion in the world and what kind of light might a closer look at lived experience shed on questions about who we are, what we know, and how we ought to live? In addition to close readings of classic figures in phenomenology like Edmund Husserl, Martin Heidegger, and Maurice Merleau-Ponty, we will read work that manifests phenomenology's continued relevance to questions we face in the 21st century about what it means to be human, embodied cognition, and environmental change. 1 credit.
Fall 2011. Lorraine.

## PHIL 079. Poststructuralism

This course will examine poststructuralist thinkers such as Foucault, Derrida, Kristeva, and Deleuze in light of contemporary questions about identity, embodiment, the relationship between self and other, and ethics.
1 credit.
Not offered 2011-2012.

## PHIL 086. Philosophy of Mind

(See PHIL 118)
1 credit.
Not offered 2011-2012.

## PHIL 088. Wittgenstein

Wittgenstein's analyses of thought and language are central to contemporary philosophical debates. We will read his two major works, Tractatus-Logico Philosophicus and Philosophical Investigations in connection with the development of 20th- and 21st-century analytical philosophy of mind, language, consciousness, and value.
1 credit.
Not offered 2011-2012.
PHIL 093. Directed Reading
Each semester. Staff.

PHIL 096. Senior Course Thesis
Each semester. Staff.
PHIL 099. Senior Course Study
Spring semester. Staff.

## Seminars

## PHIL 101. Moral Philosophy

An examination of the principal theories of value, virtue, and moral obligation-and their justification. The focus will be primarily on contemporary treatments of moral philosophy. A central question of seminar will be the possibility and desirability of moral theory. 2 credits.
Spring 2012. Thomason.

## PHIL 102. Ancient Philosophy

Ancient Greek philosophy transforms traditional Greek religion through rational critique; yet, in contrast to contemporary philosophy, it continues to share many of the most prominent features of religion. This seminar will study how theology develops through the Presocratics, Socrates, Plato, Aristotle, the Epicureans, and Stoics and how theology relates to the philosophers' views on morality and the good life.
2 credits.
Fall 2011. Ledbetter.

## PHIL 103. Selected Modern Philosophers

One or more 17th- or 18th-century philosophers selected for systematic or comparative study. 2 credits.
Spring 2012. Raff.

## PHIL 104. Topics in Metaphysics

One or more central topics in contemporary metaphysics selected for sustained study: freedom, causation, universals, categories, necessity, identity of things and people, fiction, God, among others.
2 credits.
Not offered 2011-2012.

## PHIL 106. Aesthetics and Theory of Criticism

On the nature of art and its roles in human life, considering problems of interpretation and evaluation and some specific medium of art. 2 credits.
Not offered 2011-2012.

## PHIL 113. Topics in Epistemology

What is knowledge? Can we have it? If not, why not? If yes, how? What does it mean to have evidence, justification or reasons for ones beliefs? How rational or irrational are we? Can we have a priori, "armchair" knowledge? Is
cognition essentially social? We will discuss classic and contemporary answers to such questions.
2 credits.
Not offered 2011-2012.
PHIL 114. 19th-Century Philosophy
The historical treatment of such topics as knowledge, morality, God's existence, and freedom in Kant, Fichte, Hegel, Feuerbach, Marx, and Nietzsche.
2 credits.
Not offered 2011-2012.

## PHIL 116. Language and Meaning

 (Cross-listed as LING 116)Behaviorist theories of meaning, cognitivist theories of meaning, and conceptions of language as a social practice will be surveyed and criticized.
2 credits.
Fall 2011. Eldridge.

## PHIL 118. Philosophy of Mind

The course is divided into three principal sections, focusing on philosophy of mind, artificial intelligence, and cognitive science. Section 1 covers four core positions in the philosophy of mind "dualism, behaviorism, materialism, and functionalism," and it serves as an overview of traditional philosophy of mind. Section 2 explores how the philosophical ideas developed above connect to ongoing research in artificial intelligence. Section 3 concerns the philosophy of cognitive science, a field that investigates the biological and neurophysiological underpinnings of human mentality. Part of the aim is to clarify the goals and methods of cognitive science and to investigate ways in which advances in cognitive science may yield philosophical insights into the nature of mind.
2 credits.
Spring 2012. Baumann.
PHIL 119. Philosophy of Science
A study of philosophical problems arising out of the presuppositions, methods, and results of the natural sciences, focusing particularly on the effectiveness of science as a means for obtaining knowledge. Topics include the difference between science and pseudoscience; the idea that we can "prove" or "confirm" scientific theories; explanation and prediction; the status of scientific methodology as rational, objective, and value free; and the notion that science aims to give us (and succeeds in giving us) knowledge of the underlying unobservable structure of the world.
2 credits.
Not offered 2011-2012.

## PHIL 121. Social and Political

Philosophy
This seminar will concentrate on late 20thcentury liberalism (Rawls, Dworkin, Raz) and its critics-especially communitarians (Sandel, Taylor) civic republicans (Petit, Skinner, Honohan) and "strong" perfectionists (Sher). We will finish by reading Estlund's "Democratic Authority."
2 credits.
Fall 2011. Baumann.

## PHIL 125. Philosophy of Mathematics

 Mathematics is a discipline whose elegance, rigor, and stunning usefulness across a huge variety of applications has made it a central part of every school and college curriculum. But what exactly is mathematics about? At one level, the answer seems obvious: Mathematics is about numbers, functions, sets, geometrical figures, and so on. But what are these things? Do they exist? If so, where? And how do we come to know anything about them? If they do not exist, what makes mathematics true? This seminar will tackle these issues and look at what some of the great philosophers such as Plato, Descartes, Kant, and Wittgenstein have had to say about mathematics.2 credits.
Not offered 2011-2012.

## PHIL 139. Phenomenology,

Existentialism, and Poststructuralism
In this course, we will examine the themes of reality, truth, alienation, authenticity, death, desire, and human subjectivity as they emerge in contemporary European philosophy. We will consider thinkers such as Nietzsche, Husserl, Heidegger, Derrida, and Irigaray to place contemporary themes of poststructuralist thought in the context of the phenomenological, existential, and structuralist thought out of which they emerge.
2 credits.
Spring 2012. Lorraine.
PHIL 180. Senior Honors Thesis
A thesis may be submitted by majors in the department in place of one honors paper, on application by the student and at the discretion of the department.
PHIL 199. Senior Honors Study
Spring semester.

ADAM HERTZ, Director of Physical Education and Athletics CHRISTYN ABARAY, Associate Director of Athletics, Senior Woman Administrator<br>KAREN BORBEE, Professor<br>SUSAN P. DAVIS, Professor<br>MICHAEL L. MULLAN, Professor ${ }^{2}$<br>LEE WIMBERLY, Professor<br>TODD ANCKAITIS, Head Coach/Instructor<br>PETER CARROLL, Head Coach/Instructor<br>HARLEIGH CHWASTYK, Head Coach/Instructor<br>RENEE CLARKE, Head Coach/Instructor<br>RENEE L. DEVARNEY, Head Coach/Instructor<br>STAN EXETER, Head Coach/Instructor<br>LAUREN FUCHS, Head Coach/Instructor<br>PAT GRESS, Head Coach/Instructor<br>JEREMY LOOMIS, Head Coach/Instructor<br>ERIC WAGNER, Head Coach/Instructor<br>JIM HELLER, Head Coach (part time)<br>BHAVIN PARIKH, Head Coach (part time)<br>MARIAN FAHY, Administrative Assistant<br>SHARON GREEN, Administrative Assistant

${ }^{1}$ Absent on leave, spring 2012.

The aim of the department is to contribute to the total education of all students through the medium of physical activity. We believe this contribution can best be achieved through encouraging participation in a broad program of individual and team sports, aquatics, physical fitness, and wellness. The program provides an opportunity for instruction and experience in a variety of activities on all levels. It is our hope that participation in this program will foster an understanding of movement and the pleasure of exercise and will enhance, by practice, qualities of good sportsmanship, leadership, and cooperation in team play. Students are also encouraged to develop skill and interest in a variety of activities that can be enjoyed after graduation.
The Intercollegiate Athletics Program is comprehensive, including varsity with teams in 22 different sports: 10 for men and 12 for women.
Ample opportunities exist for large numbers of students to engage in intercollegiate competition, and those who qualify may be encouraged to participate in regional and national championship contests. Several club teams in various sports are also organized, and a program of intramural activities is sponsored.

## Requirements and Recommendations

Students are encouraged to enjoy the instructional and recreational opportunities offered by the department throughout their college careers. As a requirement for graduation, all nonveteran students, not excused
for medical reasons, are required to complete 4 units of physical education by the end of their sophomore year. In addition, all students must pass a survival swim test or complete onequarter of aquatics instruction.
Students who enter Swarthmore as transfer students can either apply transfer PE units toward the 4-unit physical education requirement or opt for a reduction in the PE requirement based on the student's transfer status, but transfer students cannot both transfer PE units and receive a reduction in the requirement. The optional reduction in PE units depends on the transfer class of the student. Transfer students who enter Swarthmore as sophomores can opt to complete 3 units of physical education and pass a survival swim test (a reduction of 1 PE unit). Transfer students who enter Swarthmore as juniors can opt to complete 2 units of physical education and pass a survival swim test (a reduction of 2 PE units). Courses offered by the department are listed subsequently. Credit toward completion of the physical education requirement will also be given for participation in intercollegiate athletics, as well as PE Dance Courses, which are semester-long courses. Credit will also be given for participation in approved club sports and club activities programs. Those approved club sports and activities clubs are as follows: capoeira, fencing, folk dance, men's badminton, men's volleyball, squash, swing/tango dance, Ultimate Frisbee, and rugby.
Independent study for physical education is not permitted.

## Physical Education

## Courses

## Fall

Aerobics
Aquatics for Fitness
Badminton
Basketball
Beginning Aquatics
Bowling
Core Ball Training
Fencing
Fitness Training
Golf
Gym Class Hero
Orienteering
Pilates
Squash
Table Tennis
Tennis
Volleyball
Walk, Jog, Run

## Spring

Aerobics
Aquatics II/III
Badminton
Basketball
Beginning Aquatics
Core Ball Training
Fencing
Fitness Training
Gym Class Hero
Pilates
Racketlon
Squash
Table Tennis
Tennis
Walk, Jog, Run

## PE Dance Courses

These courses are offered through the Dance Department. See the Music and Dance section of the course catalog and the Swarthmore College Schedule of Courses and Seminars for fall and spring PE dance course offerings.

Intercollegiate Athletics
Fall
Men's Cross Country
Women's Cross Country
Field Hockey
Men's Soccer
Women's Soccer
Women's Volleyball

## Winter

Badminton
Men's Basketball
Women's Basketball
Men's Swimming
Women's Swimming
Men's Indoor Track
Women's Indoor Track
Spring
Baseball
Golf
Men's Lacrosse
Women's Lacrosse
Softball
Men's Tennis
Women's Tennis
Men's Outdoor Track
Women's Outdoor Track

JOHN R. BOCCIO, Professor of Physics
MICHAEL R. BROWN, Professor of Physics
AMY L.R. BUG, Professor of Physics ${ }^{3}$
PETER J. COLLINGS, Professor of Physics
FRANK A. MOSCATELLI, Professor of Physics
DAVID H. COHEN, Associate Professor of Astronomy ${ }^{3}$
CATHERINE H. CROUCH, Associate Professor of Physics
CARL H. GROSSMAN, Associate Professor of Physics
ERIC L.N. JENSEN, Associate Professor of Astronomy and Chair
ANA MATKOVIĆ, Visiting Assistant Professor of Astronomy
MATTHEW MEWES, Visiting Assistant Professor of Physics
TIMOTHY GRAY, Post-Doctoral Research Scientist
MARY ANN KLASSEN, Lecturer
ADAM NEAT, Lecturer
JAMES HALDEMAN, Instrumentation/Computer Technician
STEVEN PALMER, Machine Shop Supervisor
CAROLYN R. WARFEL, Administrative Assistant
${ }^{3}$ Absent on leave, 2011-2012.

The Physics and Astronomy Department teaches the concepts and methods that lead to an understanding of the fundamental laws governing the physical universe.
Emphasis is placed on quantitative, analytical reasoning, as distinct from the mere acquisition of facts. Particular importance is also attached to laboratory work because physics and astronomy are primarily experimental and observational sciences.
With the awareness that involvement in research is a major component in the education of scientists, the department offers a number of opportunities for students to participate in original research projects, conducted by members of the faculty, on campus.
Several research laboratories are maintained by the department to support faculty interests in the areas of laser physics, high-resolution atomic spectroscopy, plasma physics, nano physics, computer simulation, liquid crystals, quantum mechanics foundations, and observational and theoretical astrophysics.
The department operates the Peter van de Kamp Observatory for student and faculty research, plus several small telescopes for instructional use. The observatory is equipped with a $61-\mathrm{cm}$ reflecting telescope, a high-resolution spectograph, and a CCD camera for imaging and photometry. A monthly visitors' night at the observatory is announced on the department website. Swarthmore College is also home to the historic Sproul $61-\mathrm{cm}$ refracting telescope.
Two calculus-based introductory sequences are offered. PHYS 003 and 004 cover both classical and modern physics and is an appropriate introductory physics sequence for those students majoring in engineering, chemistry, and biology. PHYS 007 and 008, on the other hand, which are normally preceded by PHYS

005/ASTR 005 (these are cross-listed), are at a higher level. They are aimed toward students planning to do further work in physics or astronomy and are also appropriate for engineering and chemistry majors. The fourcourse sequence $005,007,008$, and 014 is designed to provide a comprehensive introduction to all major areas of physics.
Additional information is available at the department website at
www.swarthmore.edu/physics.

## The Academic Program

In order to receive a degree from Swarthmore as a physics, astrophysics, or astronomy major, a student must have taken and satisfactorily passed one of the programs described below. In the Physics and Astronomy Department, the seminar is the standard format for most junior and senior level work. All prospective majors and minors in the department should realize this when planning programs. The seminars are open to all students, both honors and course majors.

## Core Programs

In the spirit of a liberal arts education, we note that one need not be considering a career in physical science to find a physics, astrophysics, or astronomy major beneficial and stimulating. The physics core curriculum and the astronomy core curriculum listed below both provide excellent training in quantitative reasoning and independent problem solving, skills that are applicable in a wide variety of arenas (finance, law, medicine, science journalism, public policy). Since all of the fundamental areas are covered, the physics core curriculum is also excellent preparation for a career in a scientific field related to physics, such as engineering or teaching physics in high school. The astronomy
curriculum is excellent preparation for teaching astronomy in high school, or working as a telescope operator or data analyst. These curricula are ideal for double majors. While the physics core curriculum is adequate preparation for graduate study in physics, students considering graduate school are encouraged to take additional seminars, especially those listed below under "Enhanced Programs." Most graduate programs in astronomy expect somewhat more physics preparation than the minimum listed in the astronomy curriculum. Those considering graduate school in astronomy are encouraged to take as much additional physics as scheduling permits, and ideally, to choose the astrophysics major listed below under "Enhanced Programs."

* Note: The Mathematics and Statistics Department offers many sets of courses covering similar material at different levels of sophistication. In each case noted, the most elementary version from each set has been listed. Students should always take the most advanced version for which they qualify, e.g. MATH 034 or 035 rather than MATH 033, if possible.
Physics Core Curriculum
PHYS/ASTR 005
PHYS 007, 008, 014, 050
PHYS 111, 112, 113, 114
PHYS 63, $81,82^{\dagger}$
MATH* 015, 025, 027, 033
Astronomy Core Curriculum
PHYS/ASTR 005
PHYS 007, 008, 014, ASTR 016, ASTR 061
4 Astronomy seminars (can include upper-level astronomy courses at Haverford)
MATH* 015, 025, 027, 033
Under some circumstances, PHYS 003, 004 can be substituted for PHYS 007, 008.
${ }^{\dagger}$ 'Students who have taken ENGR 072 may substitute PHYS 083 instead of PHYS 081, 082.


## Enhanced Programs

These programs provide strong preparation for graduate study in physics, astrophysics, or astronomy.

## Physics Enhanced Curriculum

In addition to the physics core requirements listed above, any two advanced seminars

## Astrophysics Curriculum

PHYS/ASTR 005
PHYS 007, 008, 014, 050, ASTR 016
2 Astronomy Seminars
PHYS 111, 112, 113, 114
MATH* 015, 025, 027, 033

## Other Requirements

Seniors not in the Honors Program must complete a comprehensive exercise, which is intended both to encourage review and synthesis and to allow students to demonstrate mastery of fundamentals studied during all four years. In addition, all students must satisfy the College distribution requirements and the 20course rule (except for special majors such as astrophysics or chemical physics, for whom the 20 -course rule is waived).

## Course Major

A student applying to become either a physics major in the core program or an astronomy major should have completed or be completing PHYS 004 or PHYS 007. Otherwise it will be impossible to fulfill all program requirements. To be accepted as a major, the applicant must have completed PHYS/ASTR 005 with a grade of C+ or better. Work in PHYS 004 or PHYS 007 should be at the same or better level.
A student applying to become a physics major in either the enhanced program in course or the Honors Program should have completed or be completing courses through PHYS 008, PHYS 014, and PHYS 050. In addition, to be accepted into the course major, these courses must be completed with an average grade of $\mathrm{C}+$ or better. To be accepted into the Honors Program with a physics major, the average grade should be a B or better. Grades in math courses should be at a similar level.
A student applying to become an astrophysics major in course or in honors should have completed or be completing PHYS 008, PHYS 014, PHYS 050, and ASTR 016. To be accepted into the Honors Program with an astronomy major, the applicant should have completed or be completing ASTR 016. In addition, applicants for the Honors Program in either astrophysics or astronomy must normally have an average grade in physics and astronomy courses of $B$ or better.
Since almost all advanced work in physics and astronomy at Swarthmore is taught in seminars where the student participants share the pedagogical responsibility, an additional consideration in accepting (retaining) majors is the presumed (demonstrated) ability of the students not only to benefit from this mode of instruction but also to contribute positively to the seminars. Grades in prior courses are the best criteria in admitting majors, since they tend to indicate reliably whether or not the student can handle advanced work at Swarthmore levels without being overwhelmed. However, constructive participation in classes and laboratories is also considered.

## Program for the Last Two Years

The following one-credit physics seminars are offered on a regular basis (regardless of faculty leaves):
Prerequisites: PHYS 005, 007, 008, 014, 050
PHYS 111. Classical Mechanics
PHYS 112. Electrodynamics
PHYS 113. Quantum Theory
PHYS 114. Statistical Physics
Additional prerequisite: ASTR 016
ASTR 121. Research Techniques in Observational Astronomy (offered in alternate years)
ASTR 123.Stars and Stellar Structure (offered in alternate years)
ASTR 126. The Interstellar Medium (offered in alternate years)
In addition, one or two one-credit advanced physics seminars are offered each year. Typical topics are:
PHYS 130. General Relativity
PHYS 131. Particle Physics
PHYS 132. Non-Linear Dynamics and Chaos
PHYS 133. Atomic Physics and Spectroscopy
PHYS 134. Advanced Quantum Physics
PHYS 135. Solid State Physics
PHYS 136. Quantum Optics and Lasers
PHYS 137. Computational Physics
PHYS 138. Plasma Physics
PHYS 139. Biophysics

## Course Minor

The Physics and Astronomy Department offers two types of course minor, one in physics and one in astronomy.

## Physics Minor Curriculum

PHYS/ASTR 005
PHYS 007
PHYS 008
PHYS 014
PHYS 050
PHYS 111 and $113^{\dagger}$
MATH* 015, 025, 033
Under some circumstances, PHYS 003 and/or PHYS 004 may be substituted for PHYS 007 and/or PHYS 008.
${ }^{\dagger}$ We prefer that minors have two advanced seminars, one in "classical" and one in "quantum" physics. PHYS 111 is a prerequisite for future seminars and fulfills the "classical" requirement. While we recommend PHYS 113 as the second advanced seminar, a different seminar may be substituted upon consultation with the Chair.

## Astronomy Minor Curriculum

PHYS/ASTR 005
PHYS 007 or PHYS 003
PHYS 008 or PHYS 004
ASTR 016
One Astronomy seminar numbered 100 or above
One semester of ASTR 061 ( 0.5 credits)
MATH* 015, 025, 033

* Note: The Mathematics and Statistics Department offers many sets of courses covering similar material at different levels of sophistication. In each case noted, the most elementary version from each set has been listed. Students should always take the most advanced version for which they qualify.


## Honors Major

Honors majors must meet the requirements for the major as described on the first page, and select three of the following preparations, plus their prerequisites.

## Honors Major Programs

Physics: Electrodynamics (PHYS 112), Quantum Theory (PHYS 113), Statistical Physics (PHYS 114), Honors Thesis (PHYS/ASTR 180)
Astrophysics: Any of the seminars from the astronomy program, plus: Electrodynamics (PHYS 112), Quantum Theory (PHYS 113), Statistical Physics (PHYS 114), Honors Thesis (PHYS/ASTR 180)
Note: must include at least one seminar each from the astronomy and physics side of the program.
Astronomy: Research Techniques in
Observational Astronomy (ASTR 121), Stars and Stellar Structure (ASTR 123), The Interstellar Medium (ASTR 126), Honors Thesis (ASTR 180)
Note: External examination for honors major programs includes two or three 3-hour written examinations on the chosen preparations, plus two or three 30-45 minute oral examinations on the chosen preparations, plus one 45-60 minute oral examination on the honors thesis (for thesis writers).

## Honors Minor

Physics: One of the following seminars PHYS 112, PHYS 113, PHYS 114
Astrophysics: One of the following seminars PHYS 112, PHYS 113, PHYS 114, ASTR 121, ASTR 123, ASTR 126
Astronomy: One of the following seminars (ASTR 121, ASTR 123, ASTR 126)
Note: External examination for honors minor programs includes one three-hour written
examination on the chosen preparations, plus one $30-45$ minute oral examination on the chosen preparations.

## Research Opportunities

## Advanced Laboratory Program

In the junior and senior years, all physics majors must take PHYS 081 and PHYS 082. Students enrolled in PHYS 081 and PHYS 082 must arrange their programs so that they can schedule an afternoon for the laboratory each week free of conflicts with other classes. Enrollment in each of these laboratories will appear on the student's transcript with a letter grade for 0.5 credit for each semester. PHYS 081, 082 together count as a "writing course" for collegiate graduation requirements. Students with credit for ENGR 072 may replace PHYS 081, 082 with PHYS 083, which is an advanced lab experience without an electronics component.

## Independent Work

Physics, astrophysics, and astronomy majors are encouraged to undertake independent research projects, especially in the senior year, either in conjunction with one of the senior seminars, or as a special project for separate credit (PHYS/ASTR 094). Members of the physics or astronomy faculty are willing to suggest possible projects and to supervise one of these if the student chooses to pursue it. Students completing work under PHYS/ASTR 094 are required to submit final written and oral reports of their work to the department. In preparation for independent experimental work, prospective physics majors are strongly urged to take the required 0.5 credit course PHYS 063, Procedures in Experimental Physics, during their fall semester of their sophomore year, which will qualify them to work in the departmental shops. There are usually many opportunities for students to receive financial support to work with faculty members on research projects during the summer.

## Thesis

Students may do a theoretical or experimental research thesis representing the results of independent work done under the supervision of a faculty member. This thesis will usually cover work begun in the summer after the junior year and completed during the senior year. A thesis is recommended of all students in the Honors Program.

## Off-Campus Study

With proper planning, study away from Swarthmore for one or two semesters is possible while majoring in physics, astronomy, or astrophysics. However, the many prerequisites in the Physics and Astronomy

Department make careful planning for study abroad a necessity. Spring of junior year is often the easiest time to make this work. The important point is to begin planning at an early stage. This allows students (1) to make sure courses not available abroad are taken at Swarthmore, and (2) to find out well in advance what physics and astronomy courses are available in the various study abroad programs. While it is completely feasible to complete a physics major without taking physics abroad (e.g. if one is studying in a non-Englishspeaking country), students should note when planning their programs that PHYS 111 must be taken before PHYS 113 or PHYS 114.

## Teacher Certification

We offer teacher certification in physics through a program approved by the state of Pennsylvania. For further information about the relevant set of requirements, contact the Educational Studies Department chair, the Physics Department chair, or visit the Educational Studies Department website at www.swarthmore.edu/educationalstudies.xml.

## Physics Courses

## PHYS 002B. First-Year Seminar:

 Quantum Theory in Search of RealityThis seminar will attempt to answer the question "What is reality?" The search for a picture of "the way the world really is" is an enterprise that transcends the narrow interests of theoretical physics. Students will be introduced to culture of theoretical physics and its language, namely, mathematics. Students will explore how contemporary quantum physics views the world we live in, and why physicists believe the view is correct.
Prerequisites: High school algebra and geometry.
1 credit.
Spring 2012. Boccio.

## PHYS 002E. First-Year Seminar: Energy

This seminar will cover both the physics and policy of energy in all its forms. Topics include the physical basis for energy; thermodynamics and engines; energy sources (fossil fuels, solar, photovoltaics, nuclear); transportation; the electric grid; and climate change.
Prerequisite: High school algebra.
1 credit.
Fall 2011. Brown.

## PHYS 003. General Physics I

Topics include vectors, kinematics, Newton's laws and dynamics, conservation laws, work and energy, oscillatory motion, systems of particles, and rigid body rotation. Possible
additional topics are special relativity and thermodynamics. Includes one laboratory weekly.
Natural sciences and engineering practicum.
Prerequisite: MATH 015 (can be taken concurrently).
1 credit.
Fall 2011. Grossman.

## PHYS 004. General Physics II

Topics include wave phenomena, geometrical and physical optics, electricity and magnetism, and direct and alternating current circuits. Possible additional topics may be added. Includes one laboratory weekly.
Natural sciences and engineering practicum.
Prerequisites: PHYS 003 or the permission of the instructor, MATH 025 (can be taken concurrently).
1 credit.
Spring 2012. Collings.

## PHYS 004L. General Physics II: Electricity, Magnetism, and Optics with Biological and Medical Applications

 Phys 004 L will cover the same topics as Phys 004 but will emphasize biological, biochemical, and medical applications of those topics. The course will meet medical school requirements (in conjunction with Phys 003) and will include a weekly laboratory. Phys 004 L can be taken either before or after Phys 003 students who wish to take Phys 004 L before Phys 003 should have some high school physics background and obtain permission from the instructor.Natural sciences and engineering practicum.
Prerequisites: Math 015 or a more advanced calculus course as a prerequisite.
1 credit.
Spring 2012. Crouch.

## PHYS 005. Spacetime, Quanta, and Cosmology

(Cross-listed as ASTR 005)
This introductory course emphasizes three major areas of modern physics and astrophysics: special relativity, cosmology, and quantum theory. Students will explore the counterintuitive consequences of special relativity for our notions of absolute time; the birth, expansion, and fate of the universe; and the nature of the subatomic quantum world, where our notions of absolutes such as position or speed of a particle are replaced by probabilities, so that a particle can exist in many states at once. The course focuses on how scientists ask and answer questions about such topics, including the development of the mathematical tools necessary to understand the physical world in depth. This course is suitable for non-majors and also serves as the entry
point to majoring or minoring in astronomy, astrophysics, or physics. Includes six afternoon labs and some evening telescope observing.
Natural sciences and engineering practicum. 1 credit.
Fall 2011. Jensen, Crouch.

## PHYS 007. Introductory Mechanics

An introduction to classical mechanics. This course is suitable for potential majors, as well as students in other sciences or engineering who would like a course with more mathematical rigor and depth than PHYS 003. Includes the study of kinematics and dynamics of point particles; conservation principles involving energy, momentum and angular momentum; rotational motion of rigid bodies, and oscillatory motion. Includes one laboratory weekly: used for hands-on experimentation and occasionally for workshops that expand on lecture material.
Natural sciences and engineering practicum.
Prerequisites: MATH 025 (can be taken concurrently), PHYS 005/ASTR 005 or permission of the instructor.
1 credit.
Spring 2011. Moscatelli.

## PHYS 008. Electricity, Magnetism, and Waves

A sophisticated introductory treatment of wave and electric and magnetic phenomena, such as oscillatory motion, forced vibrations, coupled oscillators, Fourier analysis of progressive waves, boundary effects and interference, the electrostatic field and potential, electrical work and energy, D.C. and A.C. circuits, the relativistic basis of magnetism, Maxwell's equations, and geometrical optics. Includes one laboratory weekly.
Natural sciences and engineering practicum.
Prerequisites: PHYS 007 (or permission of instructor); MATH 033 (can be taken concurrently).
1 credit.
Fall 2011. Moscatelli.

## PHYS 014. Introductory Quantum

 PhysicsThis course provides an introduction to thermal, statistical, and quantum physics. Topics include the statistical basis for thermal physical properties, one-dimensional quantum systems, quantized angular momentum, and spin-angular momentum. One laboratory session weekly. Natural sciences and engineering practicum. Natural sciences and engineering practicum. Prerequisites: PHYS 003 and 004 , or PHYS 007 and 008; MATH 027 AND 033.

1 credit.
Spring 2012. Grossman.

## PHYS 020. Principles of the Earth

## Sciences

An analysis of the forces shaping our physical environment, drawing on the fields of geology, geophysics, meteorology, and oceanography. Includes some laboratory and fieldwork.
Natural sciences and engineering practicum.
1 credit.
Not offered 2011-2012.

## PHYS 021. Light and Color

The fundamentals of light from the classical and quantum physical viewpoint. Extensive use of examples from art, nature, and technology will be made. Two or three lectures per week plus a special project/laboratory.
1 credit.
Not offered 2011-2012.
PHYS 022. Physics of Musical Sounds
An introduction to the science and technology of musical sounds and the instruments that make them. Particular attention is paid to electronic music and instruments. Topics include complex wave forms, scales and temperament, basic electronic sound devices, and digital sound technology. The course has a weekly laboratory requirement.
1 credit.
Not offered 2011-2012.

## PHYS 023. Relativity

A nonmathematical introduction to the special and general theories of relativity as developed by Einstein and others during the 20th century. 1 credit.
Not offered 2011-2012.

## PHYS 024. The Earth's Climate and Global Warming

A study of the complex interplay of factors influencing conditions on the surface of the Earth. Basic concepts from geology, oceanography, and atmospheric science lead to an examination of how the Earth's climate has varied in the past, what changes are occurring now, and what the future may hold. Besides environmental effects, the economic, political, and ethical implications of global warming are explored, including possible ways to reduce climate change. Includes one laboratory every other week.
Natural sciences and engineering practicum. 1 credit.
Fall 2011. Collings.

## PHYS 025. In Search of Reality

By investigating the assumptions, theories, and experiments associated with the study of reality in quantum physics, we will attempt to decide whether the question of the existence of an intelligible external reality has any meaning. 1 credit.
Next offered spring 2013. Boccio.
PHYS 026. Chaos, Fractals, Complexity, Self-Organization, and Emergence A study of chaos, fractals, scaling and selfsimilarity, percolation, cellular automata, iterated function systems, pattern formation, self-organized networks, complex adaptive systems, self-organized criticality, and emergence with applications in the natural sciences, social sciences, and humanities.
1 credit.
Spring 2012. Boccio.

## PHYS 029. Seminar on Gender and (Physical) Science

This seminar will take a multifaceted approach to the question: "What are the connections between a person's gender, race, or class and their practice of science?" The history of science, the education of women and feminist pedagogy, and philosophy of science will be addressed. Physical science will be the principal focus. Includes some laboratory work.
1 credit.
Not offered 2011-2012.

## PHYS 050. Mathematical Methods of Physics

A survey of analytical and numerical techniques useful in physics, including multivariable calculus, optimization, ordinary differential equations, partial differential equations and Sturm-Liouville systems, orthogonal functions, Fourier series, Fourier and Laplace transforms, and numerical methods, ray-optics, Jones calculus, and Fourier optics. Includes one laboratory weekly.
Prerequisites: MATH 027 and 033.
1 credit.
Spring 2012. Mewes.

## PHYS 093. Directed Reading

This course provides an opportunity for an individual student to do special study, with either theoretical or experimental emphasis, in fields not covered by the regular courses and seminars. The student will present oral and written reports to the instructor.
$0.5,1$, or 2 credits.
Each semester. Staff.

## PHYS 094. Research Project

Initiative for a research project may come from the student, or the work may involve
collaboration with ongoing faculty research. The student will present a written and an oral report to the department.
$0.5,1$, or 2 credits.
Each semester. Staff.

## Physics Advanced Seminars

## PHYS 111. Analytical Dynamics

Intermediate classical mechanics. Motion of a particle in one, two, and three dimensions; Kepler's laws and planetary motion; phase space; oscillatory motion; Lagrange equations and variational principles; systems of particles; collisions and cross sections; motion of a rigid body; Euler's equations; rotating frames of reference; small oscillations; normal modes; and wave phenomena.
Prerequisites: PHYS 014 and 050; MATH 033. 1 credit.
Fall 2011. Mewes.

## PHYS 112. Electrodynamics

Electricity and magnetism using vector calculus, electric and magnetic fields, dielectric and magnetic materials, electromagnetic induction, Maxwell's field equations in differential form, displacement current, Poynting theorem and electromagnetic waves, boundary-value problems, radiation and fourvector formulation of relativistic electrodynamics.
Prerequisites: PHYS 014 and 050; MATH 033. 1 credit.
Fall 2011. Crouch.

## PHYS 113. Quantum Theory

Postulates of quantum mechanics, operators, eigenfunctions, and eigenvalues, function spaces and hermitian operators; bra-ket notation, superposition and observables, fermions and bosons, time development, conservation theorems, and parity; angular momentum, three-dimensional systems, matrix mechanics and spin, coupled angular momenta, time-independent and time-dependent perturbation theory.
Prerequisites: PHYS 111 and MATH 027. 1 credit.
Spring 2012. Boccio.

## PHYS 114. Statistical Physics

The statistical behavior of classical and quantum systems; temperature and entropy; equations of state; engines and refrigerators; statistical basis of thermodynamics; microcanonical, canonical, and grand canonical distributions; phase transitions; statistics of bosons and fermions; black body radiation; electronic and thermal properties of quantum liquids and solids.

Prerequisites: PHYS 111 and MATH 033. 1 credit.
Spring 2012. Brown.

## PHYS 115. Modern and Quantum Optics

A modern treatment of matrix optics, interference, polarization, diffraction, Fourier optics, coherence, Gaussian beams, resonant cavities, optical instruments. The quantization of the electromagnectic field, single mode coherent and quadrature squeezed states. The interaction of light with atoms using second quantization and dressed states. Spontaneous emission.
Prerequisites: PHYS 111,112 (or concurrently with instructor's permission), and 113. 1 credit.
Not offered 2011-2012.

## PHYS 130. General Relativity

Newton's gravitational theory, special relativity, linear field theory, gravitational waves, measurement of space-time, Riemannian geometry, geometrodynamics and Einstein's equations, the Schwarzschild solution, black holes and gravitational collapse, and cosmology.
Prerequisites: PHYS 111 and 112.
1 credit.
Not offered 2011-2012.

## PHYS 131. Particle Physics

A study of the ultimate constituents of matter and the nature of the interactions between them. Topics include relativistic wave equations, symmetries and group theory, Feynman calculus, quantum electrodynamics, quarks, gluons, and quantum chromodynamics, weak interactions, gauge theories, the Higgs particle, and some of the ideas behind lattice gauge calculations.
Prerequisites: PHYS 113 (may be taken concurrently).
1 credit.
Spring 2012. Mewes.

## PHYS 132. Nonlinear Dynamics and

 ChaosNonlinear mappings, stability, bifurcations and catastrophe, conservative and dissipative systems, fractals, and self-similarity in chaos theory.
Prerequisite: PHYS 111.
1 credit.
Not offered 2011-2012.

## PHYS 133. Atomic Physics and Spectroscopy

Review of quantum theory, hydrogen atom, multielectron atoms, atoms in external fields, optical transitions and selection rules, hyperfine
structure, lasers, atomic spectroscopic techniques: atomic beams methods, Dopplerfree spectroscopy, time-resolved spectroscopy, and level crossing spectroscopy.
Prerequisite: PHYS 113.
1 credit.
Not offered 2011-2012.

## PHYS 134. Quantum Mechanics:

 Mathematical and Physical FoundationsWhat is measurement? Repeatable, maximal and consecutive tests, Bayesian probability, infinite dimensions, projection operators, Spectral Theory for self-adjoint operators, logical structure of classical physics, rules of Quantum Theory, mixed states and density matrices, time development, uncertainty relations, quantum correlations, Schmidt Decomposition, meaning of probability, reduction of State Vector, quantum entanglement, measurement problem, KochenSpecker Theorem, logic of Quantum propositions, nonlocality, EPR and Bell Inequalities, nonlocality versus Contextuality, Gleason's Theorem, and logical aspects of inseparability are explored.
Prerequisite: PHYS 113.
1 credit.
Not offered 2011-2012.

## PHYS 135. Solid-State Physics

Crystal structure and diffraction, the reciprocal lattice and Brillouin zones, lattice vibrations and normal modes, phonon dispersion, Einstein and Debye models for specific heat, free electrons and the Fermi surface, electrons in periodic structures, the Bloch Theorem, band structure, semiclassical electron dynamics, semiconductors, magnetic and optical properties of solids, and superconductivity.
Prerequisites: PHYS 113 and PHYS 114. 1 credit.
Not offered 2011-2012.

## PHYS 136. Quantum Optics and Lasers

Atom-field interactions, stimulated emission, cavities, transverse and longitudinal mode structure, gain and gain saturation, nonlinear effects, coherent transients and squeezed states, pulsed lasers, and super-radiance.
Prerequisite: PHYS 113.
1 credit.
Not offered 2011-2012.

## PHYS 137. Computational Physics

Along with theory and experiment, computation is a third way to understand physics and do research. We will study concepts of scientific computing and apply these within techniques like Monte Carlo, Molecular Dynamics, FiniteDifference, and Fourier Transform methods.

We will explore object-oriented strategies for scientific problem solving. Simulations relevant to classical mechanics, electromagnetism, quantum mechanics, and statistical physics will be written. Students will do an independent project of their choice.
Prerequisites: PHYS 050 and 111 and, taken previously or concurrently, PHYS 113 and 114, or special permission of the instructor.
1 credit.
Not offered 2011-2012.

## PHYS 138. Plasma Physics

An introduction to the principles of plasma physics. Treatment will include the kinetic approach (orbits of charged particles in electric and magnetic fields, statistical mechanics of charged particles) and the fluid approach (single fluid magnetohydrodynamics, two fluid theory). Topics may include transport processes in plasmas (conductivity and diffusion), waves and oscillations, controlled nuclear fusion, and plasma astrophysics.
Prerequisite: PHYS 112.
1 credit.
Not offered 2011-2012.

## PHYS 180. Honors Thesis

Theoretical or experiment work culminating in a written honors thesis. Also includes an oral presentation to the department. This course must be completed by the end of, and is normally taken in, the fall semester of the student's final year.
1 or 2 credits.
Each semester. Staff.

## Physics Laboratory Program

## PHYS 063. Procedures in Experimental Physics

Techniques, materials, and the design of experimental apparatus; shop practice; printed circuit design and construction. This is a $0.5-$ credit course open only to majors in physics, astrophysics, or astronomy.
0.5 credit.

Fall 2011. Technical staff.

## PHYS 081. Advanced Laboratory I

This is the first of a two-semester sequence designed to fulfill the physics major advanced laboratory requirement. Students will perform projects in digital electronics. They will also perform experiments chosen from among the areas of thermal and statistical physics, solid state, atomic, plasma, nuclear, biophysics, condensed matter physics, and advanced optics. Writing course.
0.5 credit.

Each semester. Staff

## PHYS 082. Advanced Laboratory II

This is the second of a two-semester sequence designed to fulfill the physics major advanced laboratory requirement. Students will perform projects in digital electronics. They will also perform experiments chosen from among the areas of thermal and statistical physics, solid state, atomic, plasma, nuclear, biophysics, condensed matter physics, and advanced optics. When both PHYS 081 and 082 are taken, students will receive credit for having completed a writing (W) course.
Writing course.
0.5 credit.

Each semester. Staff.
PHYS 083. Advanced Laboratory I and II This course is designed to fulfill the physics major advanced laboratory requirement for students who have already had sufficient experience with digital electronics (ENGR 072 or the equivalent). Students will perform experiments chosen from among the areas of thermal and statistical physics, solid state, atomic, plasma, nuclear, biophysics, condensed matter physics, and advanced optics.
Writing course.
0.5 credit.

Each semester. Staff.

## Astronomy Courses

ASTR 001. Introductory Astronomy
The scientific investigation of the universe by observation and theory, including the basic notions of physics as needed in astronomical applications. Topics may include the appearance and motions of the sky; history of astronomy; astronomical instruments and radiation; the sun and planets; properties, structure, and evolution of stars; the galaxy and extragalactic systems; the origin and evolution of the universe; and prospects for life beyond Earth. Includes six evening labs.
Natural sciences and engineering practicum. 1 credit.
Fall 2011, spring 2012. Jensen, Matković.

## ASTR 005. Spacetime, Quanta, and Cosmology <br> (Cross-listed as PHYS 005)

This introductory course emphasizes three major areas of modern physics and astrophysics: special relativity, cosmology, and quantum theory. Students will explore the counterintuitive consequences of special relativity for our notions of absolute time; the birth, expansion, and fate of the universe; and the nature of the subatomic quantum world, where our notions of absolutes such as position or speed of a particle are replaced by
probabilities, so that a particle can exist in many states at once. The course focuses on how scientists ask and answer questions about such topics, including the development of the mathematical tools necessary to understand the physical world in depth. This course is suitable for non-majors, and also serves as the entry point to majoring or minoring in astronomy, astrophysics, or physics. Includes six afternoon labs and some evening telescope observing.
Natural sciences and engineering practicum.
1 credit.
Fall 2011. Jensen, Crouch.

## ASTR 016. Modern Astrophysics

This is a one-semester calculus- and physicsbased introduction to astrophysics as applied to stars, the interstellar medium, galaxies, and the large-scale structure of the universe. The course includes four evening laboratories and observing sessions.
Prerequisites: MATH 015 and 025; PHYS 007. (or PHYS 003 with consent of instructor) 1 credit.
Fall 2011. Matković.

## ASTR 061. Current Problems in Astronomy and Astrophysics

 Reading and discussion of selected research papers from the astronomical literature.Techniques of journal reading, use of abstract services, and other aids for the efficient maintenance of awareness in a technical field. May be repeated for credit. Credit/No Credit only.
Prerequisite: ASTR 016.
0.5 credit.

Spring 2012. Jensen.

## ASTR 093. Directed Reading <br> (See PHYS 093)

## ASTR 094. Research Project

(See PHYS 094)

## Astronomy Seminars

## ASTR 121. Research Techniques in Observational Astronomy

This course covers many of the research tools used by astronomers. These include instruments used to observe at wavelengths across the electromagnetic spectrum; techniques for photometry, spectroscopy, and interferometry; and various methods by which images are processed and data are analyzed; and use of online resources including data archives and bibliographic databases. Students will perform observational and data analysis projects during the semester, culminating in a group research paper using new data to address an open scientific question.

Prerequisite: ASTR 016.
1 credit.
Spring 2012. Jensen.

## ASTR 123. Stellar Astrophysics

An overview of physics of the stars, both atmospheres and interiors. Topics may include hydrostatic and thermal equilibrium, radiative and convective transfer nuclear energy generation, degenerate matter, calculation of stellar models, interpretation of spectra, stellar evolution, white dwarfs and neutron stars, nucleosynthesis, supernovae, and star formation.
Prerequisites: ASTR 016 (PHYS 050 recommended).
1 credit.
Next offered spring 2013. Cohen.

## ASTR 126. The Interstellar Medium

Study of the material between the stars and radiative processes in space, including both observational and theoretical perspectives on heating and cooling mechanisms, physics of interstellar dust, chemistry of interstellar molecules, magnetic fields, emission nebulae, hydrodynamics and shock waves, supernova remnants, star-forming regions, the multiphase picture of the interstellar medium.
Prerequisites: ASTR 016 (PHYS 050 recommended).
1 credit.
Fall 2012. Cohen.

## ASTR 180. Honors Thesis

(See PHYS 180)
1 or 2 credits.
Each semester. Staff.

JAMES R. KURTH, Professor Emeritus
CAROL NACKENOFF, Professor ${ }^{3}$
KENNETH E. SHARPE, Professor ${ }^{2}$
RICHARD VALELLY, Professor
TYRENE WHITE, Professor
BENJAMIN BERGER, Associate Professor ${ }^{3}$
CYNTHIA HALPERN, Associate Professor and Chair
KEITH REEVES, Associate Professor
DOMINIC TIERNEY, Associate Professor
AYSE KAYA, Assistant Professor ${ }^{3}$
MATTHEW MURPHY, Visiting Assistant Professor
IAN ZUCKERMAN, Visiting Assistant Professor
GINA INGIOSI, Administrative Assistant
DEBORAH SLOMAN, Administrative Assistant

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## The Academic Program

To graduate with the major in political science, a student must complete the equivalent of at least eight courses in the department, plus 0.5 credits requirement for completing the senior comprehensive exercise. The department expects that at least five of these eight courses be taken at Swarthmore, including the political theory requirement, and that two must be taken at the introductory level (POLS 001, 002, 003, $004,010)$. No more than one course may be an Advanced Placement credit.

## Distribution of courses within the department

Political science majors are required to take one course or seminar in each of the three subfield areas: 1) American politics; 2) comparative or international politics; and 3) political theory. Courses in American politics include: Environmental Politics, Constitutional Law, Political Parties and Elections, Congress and the American Political System, Polling, Public Opinion and Public Policy, Urban Underclass, and others.
Courses in comparative and international politics include: Latin American Politics, China and the World, Defense Policy, American Foreign Policy, The Causes of War, Globalization, International Political Economy, and others.
Courses in political theory include: Practical Wisdom, Ancient Political Theory, Modern Political Theory, Democratic Theory and Practice, Ethics and Public Policy, and others.

## Political theory requirement

At least one course in ancient or modern political theory is required of all majors. This requirement can be met by enrollment in either one course or one honors seminar, listed below. It is strongly recommended that all majors
complete this requirement no later than their junior year.
Eligible courses are:
POLS 011. Ancient Political Theory
POLS 012. Modern Political Theory
POLS 100. Ancient Political Theory
POLS 101. Modern Political Theory
There are many other political theory courses taught in the department. However, only ancient or modern political theory, either the course or the seminar, actually count as fulfilling the political theory requirement. Courses taken abroad or outside of Swarthmore are not considered the equivalent of these courses. This requirement must be met at Swarthmore, in the Political Science Department.

## Lotteries

Sometimes courses have to be lotteried. If a student is lotteried for a course one semester, their name will go on a list and they will not be lotteried for that same course the next semester. That is to say, no one will be lotteried more than once.

## Course Major

1. Course prerequisites. Students must have completed two introductory courses (POLS $001,002,003,004,010$ ) by the end of their first semester of sophomore year. This is the prerequisite for further work in the department and acceptance into the major.
2. Grade requirements. We consider student applications to join the department individually, taking into account each student's background and college performance to date. Normally, the following expectations apply:
a. For acceptance as a course major, the department expects performance at the C level in all college courses and at the C + level in courses in political science
(including courses graded Credit/No Credit).
b. For acceptance as a double major, the department expects performance at the $B$ level in all college courses and at the B+ level in courses in political science (including courses graded Credit/No Credit).
3. Prerequisites for individual courses.

Students should note that certain courses and seminars have specific prerequisites.
4. The senior comprehensive requirement. To graduate from Swarthmore, all majors in the Course Program need to fulfill the senior comprehensive requirement in the Political Science Department. This can be done in one of two ways. The preferred option is POLS 092: the Senior Comprehensive Exam, which is a 0.5 credit exercise. Working with a faculty adviser, students will produce a short paper in the spring semester of their senior year, which connects work they have done in two different sub-fields of political science (political theory, American politics, comparative politics, and international relations). Students will then present their work at a department conference. Option two, POLS 095 is a one-credit written thesis, which may be chosen by students who meet the eligibility requirements and get the approval of a faculty adviser and the chair.
5. Recommended courses in other departments. Supporting courses strongly recommended for all majors are Statistical Thinking or Statistical Methods (STAT 001 or 011) and Introduction to Economics (ECON 001).

## Honors Major

1. Political science honors majors must meet all current distributional requirements for majors, including the political theory requirement, preferably with the honors versions of ancient or modern political theory.
2. They must have a minimum of ten credits inside the Political Science Department.
3. Six of these credits will be met with three (3) two-unit honors preparations which will help prepare honors majors for outside examinations, both written and oral. These two-unit preparations will normally be either a twocredit honors seminar or a "course-plus" option.
Of these three (3) two-unit preparations, no more than two may be in a single field in the department, and no more than one may be a course-plus option.
The "course-plus" option will normally consist of two one-unit courses that have been designated to count as an honors preparation, or in some cases a one-unit course and a one-unit seminar that have been so designated. It is up to the student to arrange a course-plus option with
a specific faculty member and to have this approved by the chair.
4. To fulfill the senior honors study requirement, students will revise a paper written for one of their department seminars. This paper will be submitted to the appropriate external examiner as part of the honors evaluation process. Students will sign up for the 0.5 credit in the fall of their senior year.
5. To be accepted into the Honors Program students should normally have at least an average of 3.5 inside and 3.0 (B) outside the department, and should have given evidence to the departmental faculty of their ability to work independently and constructively in a seminar setting. Seminars will normally be limited to eight students and admission priority will go to honors majors, first seniors and then juniors, including special majors.

## Admission to Seminars

Placement in honors seminars is normally limited to honors students. Occasionally, there is room in a seminar for non-honors students, but this is rare and at the discretion of the teacher. Honors seminars in the Political Science Department are normally full. Students should request placement in scheduled honors seminars by including the seminar in the sophomore plan or by including it in the application for participation in the Honors Program. All honors students in the department must get the approval of the Chair of the department for their Honors Program by meeting with the chair. The department maintains priority lists for enrollment in every seminar we anticipate offering in the next two academic years. We add the names of qualified students to these lists in the order their requests for seminar placement are received, with honors majors always receiving priority over nonhonors majors. Seniors, including special majors, are given priority over juniors and nonhonors majors. If a seminar is full, the names of students who wish to be placed in that seminar are added to a waiting list.
To be fair to everyone, we ask each student not to request placement in more than two seminars in any one semester. In addition, there is an overall limit of three seminars for majors and one seminar for others.
We make every effort to offer the seminars we announce. But inclusion on a priority list is not a guarantee that the seminar will be offered, or that you will get in. Sometimes seminars are lotteried. It is best to discuss your participation in a seminar with the faculty member who is teaching it.

## Honors Minor

1. Honors minors in political science will be required to have at least five credits in political science. Among these credits there must be one introductory course, one course in political theory, and a course in one other subfield. The political theory requirement can be met by enrolling in one of the following: Introduction to Political Theory (POLS 001), Ancient Political Theory (POLS 011), Modern Political Theory (POLS 012), Ancient Political Theory (POLS 100), Modern Political Theory (POLS 101). Only honors minors are allowed to count POLS 001, Introduction to Political Theory, for fulfillment of their theory requirement. This also means that honors minors can satisfy both the introductory course requirement and the theory requirement by taking POLS 001.
2. Minors must also take one (1) of the two-unit honors preparations offered by the department.

## Honors Exams

The honors exams will normally consist of a three hour written exam in each of the student's seminars, and an oral exam in each seminar, conducted by an external honors examiner.

## Special Major

Special majors are welcome to take seminars (as well as courses) in the Political Science Department. Special majors in political science and education are common and encouraged. All other special majors require a designated faculty adviser and special consultation with the chair.
For special majors, the title of the thesis has to be approved by all the departments involved, the approved course list must include $10-12$ credits and the express approval of any department with 2 or more credits on that list, there must be a faculty adviser from the anchor department with 5-6 courses in the major, and the Senior Comprehensive exercise has to be constructed, usually in relation to the Senior Comprehensive of the anchor department.

## Application for the Major

All applicants to the major are required to have completed two introductory courses before applying to the major or their application will be deferred.

## Advanced <br> Placement/International Baccalaureate Credit

No more than one Advanced Placement credit will be accepted for course credit.

## Transfer Credit

Transfer credit is offered on the same basis as study abroad credit. Students taking classes elsewhere should consult the chair in advance on the amount of credit likely to be available. As with study abroad, students should retain all written assignments and present copies to the chair for assessment.

## Off-Campus Study

The department supports student interest in study abroad. Students are reminded that no more than three of their eight credits (ten credits if in the Honors Program) may be taken outside the Swarthmore department. Expectations about off-campus study should be incorporated in the sophomore paper. Students planning to study abroad should consult the chair and obtain approval prior to making final course selection. Any change in course selection must ultimately be approved as well. Upon return from a study abroad program, political science syllabi, papers, and other course materials should be submitted to the chair, or faculty member designated by the chair, for credit evaluation. Pre-estimated credits do not guarantee any particular transfer of credit. The actual transfer of credit depends on the assessment of work done abroad by the department.

## Public Policy Program

Students have the option of pursuing interdisciplinary work as an adjunct to a major in political science in the Public Policy Program. The external examination requirements (for candidates for honors) can be adjusted to allow students to demonstrate their accomplishments in the program.

## Democracy Project

The purpose of this project is to deepen students' understanding of and commitment to democratic citizenship in a multicultural society through participation in community action. A central feature of the Democracy Project is community-based learning, through public service internships as part of the course work. By integrating reflection and experience, the project will enable students to study the relationships between democratic theory and practice, the ways in which multicultural communities define and seek to empower themselves in the United States, and connections between individual activism and political change at the grassroots level.

## Courses

## POLS 001. Political Theory

This course provides an introduction to political philosophy as a tradition of inquiry and an ongoing debate about the basic questions of public life. We will explore the formation of this tradition and some of its main lines of development from antiquity to the present. We will pay particular to attention to different accounts within this tradition of the goal or purpose of political philosophy: does it provide a justification for political authority; an interpretation of the meaning or significance of political practices; a critique of the existing political order, or some combination of these? Other themes we will consider include political obligation and resistance, justice and legitimacy, conflict and stability, and the relationship between philosophical knowledge and political practice. Authors include Sophocles, Plato, Aristotle, Niccolò Machiavelli, Thomas Hobbes, John Locke, Karl Marx, Hannah Arendt, Michel Foucault, John Rawls and Charles Taylor.
1 credit.
Fall 2011. Zuckerman.

## POLS 002. American Politics

How do American institutions and political processes work? To what extent do they produce democratic, egalitarian, or rational outcomes? The course examines the exercise and distribution of political power. Topics include presidential leadership and elections; legislative politics; the role of the Supreme Court; federalism; parties, interest groups, and movements; public policy; the politics of class, race, and gender; voting; mass media; and public discontent with government.
1 credit.
Fall 2011. Reeves and Valelly.

## POLS 003. Comparative Politics

An introduction to the major themes and methods of comparative political analysis through a study of the history and character of contemporary politics in various states and regions. Contrasting comparative approaches include the role of institutions, socioeconomic transformation, and political culture in political change. Course sections focus on such questions as, why are some countries democratic and some not, how do variations among democratic systems affect performance and stability, when and why does violent political or social conflict happen, why do some economies grow faster and work better than others, and what's the best way to design political institutions?

Writing course.
1 credit.
Fall 2011. Murphy.

## POLS 004. International Politics

This course aims to introduce the student to the main concepts, debates, and issues in international politics. The course will examine international politics not only in terms of relations between states but also between nonstate actors and states. It shall also introduce the student to the primary analytical tools and theories for understanding international relations, focusing not only on theoretical questions but also on crucial events in contemporary international politics.
1 credit.
Fall 2011. Tierney. Spring 2012. Murphy.

## POLS 010. First-Year Seminar: Reason, Power, and Happiness

This seminar will look at what classical theorists-particularly Plato, Aristotle, and Hobbes-can teach us about the relationship between reason, power, and happiness. Among the questions we will explore are the following: What, if anything, is the difference between happiness and pleasure? Do we need to be powerful in order to be happy, and, if so, what kind of power do we need? What do we mean by reason? Is it a neutral capacity-silent about ends or values? Is it simply a tool to help us find the best means to our ends, to break down complex problems into understandable parts? Or is reason always the servant of powerful interests (our own or those of others) and thus inevitably a tool of the powerful to manipulate the weak? In this sense, are policy analysts, skilled at using reason to do cost-benefit calculations, simply hired guns, serving the interest of the powerful? Or is reason actually an integral part of the daily moral choices we make, as Aristotle argued when he wrote about practical wisdom (phronesis)?
1 credit.
Not offered 2011-2012.

## POLS 010C. First-Year Seminar: Mass

 Media, Politics, and Public Policy This seminar will explore important conceptual, empirical, normative, and public policy questions surrounding media institutions as they wrestle with new and increasingly controversial challenges created by the Internet's new technologies such as Web-based communities of like-minded individuals. Moreover, we will critically examine the important and intricate role of public opinion, such that we might gain a finer appreciation of media influences on the workings of contemporary American government. Finally, we conclude with an examination of the economic, demographic,political, and technological forces that are propelling the present transformations surrounding mass media institutions-and ascertain their implications for American electoral politics and governance. 1 credit.
Fall 2011. Reeves.

## POLS 010D. First-Year Seminar: More Money, More Problems

This seminar investigates how money is related to power, freedom, and social order. What was the world like before money, and what economic, political, and psychological changes have been brought about by the "money economy"? To address these questions, we'll examine the nature of money on three levels: First is a broad theoretical level. What does money represent, and what is its relation to value, exchange, and truth? Second is a micro, individual level. How must people understand themselves, social roles, and economic incentives for money to function? Third is a macro, social, or global level. How does money affect the relationship of the state and the economy? What is its impact on the division of labor, the nature of property, power, and international finance? Course readings will span a broad range from classical to contemporary and from political philosophy to nuts-and-bolts economics to pop music.
Writing course.
1 credit.
Spring 2012. Murphy.

## POLS 010F. First-Year Seminar: When Disaster Strikes

When a natural or man-made disaster strikes, what are the political repercussions? Using a variety of cases from a different historical periods, different regions of the world, different levels of politics (national, regional, and local), this course will examine both the causes and consequences of disaster. How does the trauma of disaster influence political processes, institutions, and leaders? Is the impact fleeting or enduring? A different case will be examined each week. In the final weeks of the semester, the class will choose several cases of interest to them that we will then investigate together. 1 credit.
Spring 2012. White.

## POLS 010G. First-Year Seminar: The U.S. Presidency

What's it like being President of the United States? How different is the experience today from other periods in American history? It's very hard to know the answers to these questions since the experience of being President has been restricted to 44 men over the course of American history. The rest of us can
hardly know. But political science has always focused on power, leadership, and their institutional context. So there is a rich body of rigorous analysis to consider-the bottom line of which is that skill at being president is at best a minor factor in presidential success. Particular topics include the presidency past, present, and future, macroeconomic management, the national security presidency, the impact of midterm elections, and the extent of presidential leadership of public opinion.
1 credit.
Fall 2012. Valelly.

## POLS 010H. First-Year Seminar: Disaster

This seminar will use a combination of reading materials and video footage to explore the links between politics and major disasters around the world. Looking at a series of major disasters in different parts of the world, and at different historical moments, we will examine both the origins and outcomes of these events, and the role of political forces, actors, or institutions in the causes or the aftermath of these events. We will also consider the extent to which any political lessons were learned from the events, and whether they were the right lessons. Both natural and man-made disasters will be examined.
1 credit.
Not offered 2011-2012.

## POLS 011. Ancient Political Theory: Pagans, Jews, and Christians

This course covers the two great traditions that feed into the Modern Age. We begin with the Greeks, with tragedy and philosophy. We read Nietzsche's The Birth of Tragedy, Sohocles, Plato, and Aristotle. We contrast Greek philosophy with the biblical traditions that gave us history and salvation. We read from the Hebrew Bible, Genesis, Exodus, and the great prophets of the exile, the New Testament, and the Gnostic Gospels and culminate in the grand transformation of both traditions into one foundation with Augustine's City of God. 1 credit.
Fall 2011. Halpern.

## POLS 012. Introduction to Modern Political Thought

This course introduces some of the major concepts and themes of modern political thought through a close reading of texts from the 16th to the early 20th century. The starting point of the course is Machiavelli's novel "science" of statecraft, which identified the state as the focal point of political activity, and announced that a good politician must be prepared to act immorally, or even love his city more than his soul. In other words, we begin
with the thought of politics as a distinct sphere of activity, centered around the state, and separable from other spheres such as morality and religion. The problem of the modern state and the relationship of the political to other domains of life will guide our exploration of the fundamental concepts and debates of modern political thought. Other themes we will discuss include secularism and toleration, absolutist and popular sovereignty, constitutionalism and individual rights, theories of war and colonialism, and the relationship between social and political forms of domination. Authors include Niccolò Machiavelli, Thomas Hobbes, John Locke, Jean-Jacques Rousseau, Immanuel Kant, Alexis de Tocqueville, John Stuart Mill, Mary Wollstonecraft, Karl Marx, Max Weber and W.E.B. Dubois.
1 credit.
Spring 2012. Zuckerman.

## POLS 013. Political Psychology and Moral Engagement

This course combines readings from the fields of political psychology, social psychology and political theory for the purposes of understanding ourselves as citizens and moral agents. Students will canvas theories as well as empirical studies that describe the processes of political and moral decision-making. We will also ask whether the same processes that usually lead to normal political and moral decision-making might occasionally produce disastrous consequences, and we will investigate means of avoiding the worst outcomes.
1 credit.
Not offered 2011-2012.

## POLS 015. Ethics and Public Policy

This course will examine the nature and validity of ethical arguments about moral and political issues in public policy. Specific topics and cases will include ethics and politics, violence and war, public deception, privacy, discrimination and affirmative action, environmental risk, health care, education, abortion, surrogate motherhood, world hunger, and the responsibilities of public officials. Eligible for PPOL credit.
1 credit.
Spring 2012. Halpern.

## POLS 019. Democratic Theory and Practice

What is democracy, and what does it require? Widespread political participation? Social connectedness? Economic equality? Civic virtue? Excellent education? How well does the contemporary U.S. meet those ideal standards? POLS 019 students read classic and recent texts in normative political theory and empirical
political science-addressing what democracy should do and how well the U.S. is doing it augmented by a participatory component that requires several hours per week outside of class. Students engage with civic leaders and activists in the strikingly different communities of Swarthmore and Chester, and participate in a variety of community projects. The goal is to understand better the ways in which social, economic, educational and political resources can affect how citizens experience democracy. 1 credit.
Not offered 2011-2012.

## POLS 021. American Political Parties and Elections

Considers how national parties organize presidential and congressional elections. Topics may include parties in democratic theory, presidential candidacies, presidential partybuilding, presidential campaigns during the general presidential election, presidential mandates, why parties remain persistently competitive, party polarization and income inequality, the development of partisan bases, and issue evolution and coalition maintenance in party politics. Prior course work in American politics not required but is helpful for comprehension.
1 credit.
Not offered 2011-2012.

## POLS 022. American Elections: Ritual, Myth, and Substance

An examination of the role of policy issues, candidates images, campaign advertisements, media, polling, marketing, and political parties in the American electoral process. We will consider the role of race, gender, class, and other variables in voting behavior and look for evidence concerning the increasing polarization of American politics. We will examine the impact of recent laws and practices that seek to encourage or depress voting in the aftermath of the 2000 election, and will explore the impact of felony disenfranchisement. What are some of the most important recent changes affecting American electoral politics? Historical trends will provide the basis for analyzing upcoming elections. Do elections matter, and, if so, how? 1 credit.
Not offered 2011-2012.
POLS 024. American Constitutional Law The Supreme Court in American political life, with emphasis on civil rights, civil liberties, and constitutional development. The class examines the court's role in political agenda-setting in arenas including economic policy, property rights, separation of powers, federalism, presidential powers and war powers, and interpreting the equal protection and due
process clauses as they bear on race and gender equality. Judicial review, judicial activism and restraint, and theories of constitutional interpretation will be explored.
1 credit.
Not offered 2011-2012.

## POLS 029. Polling, Public Opinion, and Public Policy

Public opinion polling has become an essential tool in election campaigning, public policy decision making, and media reporting of poll results. As such, this course focuses on helping students interested in these areas learn the fundamental skills required to design, empirically analyze, use, and critically interpret surveys measuring public opinion. Because the course emphasizes the application of polling data about public policy issues and the political process, we will examine the following topics: abortion, affirmative action, September 11th, the 2008 and 2012 presidential elections and presidential leadership.
Prerequisite: POLS 002 or permission of the instructor.
Eligible for PPOL credit.
1 credit.
Not offered 2011-2012.

## POLS 031. Difference, Dominance, and the Struggle for Equality

This course examines how unequal power relations are maintained and legitimated and explores different strategies and routes for achieving equality. Struggles involving gender, race, ethnicity, religion, class, and colonial and postcolonial relationships are compared. 1 credit.
Not offered 2011-2012.

## POLS 032. Gender, Politics, and Policy in America

Gender issues in contemporary American politics, policy, and law. Policy issues include the feminization of poverty, employment discrimination, pornography, surrogate parentage, privacy rights and sexual practices, workplace hazards, and fetal protection. 1 credit.
Not offered 2011-2012.

## POLS 038. Public Service, Community Organizing, and Social Change

Through community-based learning, this seminar explores democratic citizenship in a multicultural society. Semester-long public service and community organizing internships, dialogue with local activists, and popular education pedagogy allow students to integrate reflection and experience.

1 credit.
Not offered 2011-2012.

## POLS 042. Congress in the American Political System

Institutional evolution, the congressional career, the participation in congressional politics by members of Congress themselves, parties in Congress, and House-Senate differences are the primary topics. Other issues may include the committee system, how congressional elections shape the institution, lobbying and interest groups in congressional process and politics, ethics and earmarks, congressional influence on the bureaucracy, presidential influence on the legislative process, congressional interaction with the federal judiciary, the relative difficulty of conceptualizing and measuring representation, and deficit politics. Prior course work in or detailed knowledge of American politics is essential.
1 credit.
Fall 2011. Valelly.

## POLS 043. Environmental Policy and Politics

Topics in environmental politics, policy, and law. In the United States, we will focus on environmental movements and environmental justice; regulation and its alternatives; the role of science in democratic policy making; the courts and the impact of federalism, commerce clause, and rights on regulation. The course also considers the role of national and supranational organizations and institutions in managing environmental problems, with attention to developed/developing world environmental controversies.
Eligible for ENVS credit.
1 credit.
Not offered 2011-2012.

## POLS 046. Lesbians and Gays in American Politics

Considers the struggle for gay rights historically with an emphasis on both the political and social construction of homophobic stigma over the course of the 20th century and the expansion of gay rights activism during and after the civil rights and feminist surge of the 1950s, 1960s and 1970s to challenge homophobia explicitly. The ensuing linkage between gay rights struggle and major party competition in turn illuminates the complex mix of success and anti-gay backlash of the 1990s and of the past decade-and the expansion of the original civil rights coalition to include sexual minorities generally. Besides considering the role of state courts and the Supreme Court, the course treats major national legislative outcomes (the Defense of Marriage Act and Don't Ask, Don't Tell and its repeal)
and thus brings the Presidency and Congress into the discussion. Public opinion and federalism are central elements of the story as well. Finally, the course considers the debate over whether LGBT success has required assimilation and straight acting, and whether that's a problem or not.
1 credit.
Spring 2012. Valelly.

## POLS 048. The Politics of Population

The role of population and demographic trends in local, national, and global politics will be examined. Topics include the relationship between population and development, causes of fertility decline, the impact and ethics of global and national family planning programs, and contemporary issues such as population aging and the AIDS pandemic.
Eligible for ENVS or PPOL credit.
1 credit.
Spring 2012. White.

## POLS 049. The U.S. Presidency

The presidency is widely considered an enormously powerful office, but political scientists have instead been struck by how difficult and relatively impotent the office actually is. The course explores this contradiction and clarifies exactly how, why, and when presidents have been influential. Other topics may include whether and how presidents control the presidency and the executive branch, veto bargaining with and influence on Congress, presidential influence on the macroeconomy, presidential influence on the Supreme Court and the federal judiciary, the politics of executive orders, presidential acquisition of the war power, and the development of the national security state and its implications for political democracy.
1 credit.
Not offered 2011-2012.

## POLS 055. China and the World

Examines the rise of China in the late 20th and early 21 st centuries. Topics include China's reform and development strategy, the social and political consequences of reform, the prospects for regime liberalization and democratization, and patterns of governance. The course will also examine patterns of political resistance and China's changing role in regional and global affairs.
Eligible for ASIA or PPOL credit.
1 credit.
Not offered 2011-2012.

## POLS 056. Patterns of Asian Development

Patterns of political, social, and economic development in Asia will be traced, with special
focus on China, Japan, North and South Korea, Taiwan, Vietnam, and India. Topics include the role of authoritarianism and democracy in the development processes, the legacies of colonialism and revolution and their influences on contemporary politics, sources of state strength or weakness, nationalism and ethnic conflict, gender and politics, and patterns of political resistance.
Eligible for ASIA or PPOL credit.
1 credit.
Spring 2012. White.

## POLS 057. Latin American Politics

A comparative study of the political economy of Mexico, Chile, Guatemala, Nicaragua, Colombia, and Cuba. Topics include the tensions between representative democracy, popular democracy, and market economies; the conditions for democracy and authoritarianism; the sources and impact of revolution; the political impact of neo-liberal economic policies and the economic impact of state intervention; and the role of the United States in the region.
1 credit.
Fall 2011. Sharpe.

## POLS 058. Contemporary Chinese Politics

Just how strong is China? Is it on the path to great power status? This course considers those questions by examining the rise of China in recent decades, along with the political, economic and social backdrop to this historic development. Topics will include China's political and economic development, urban and rural unrest, regionalism and nationalism, music and the arts as forms of political expression, environmental politics, law, justice, and human rights, and the role of the military in Chinese politics. Literature, music, online media and video chat with experts will supplement traditional written materials.
1 credit.
Fall 2011. White.

## POLS 061. American Foreign Policy

This course analyzes the formation and conduct of foreign policy in the United States. The course combines three elements: a study of the history of American foreign relations since 1865; an analysis of the causes of American foreign policy such as the international system, public opinion, and the media; and a discussion of the major policy issues in contemporary U.S. foreign policy, including terrorism, civil wars, and economic policy.
Prerequisite: POLS 004 or the equivalent. 1 credit.
Not offered 2011-2012.

## POLS 064. American-East Asian

## Relations

This course examines international relations across the Pacific and regional affairs within East Asia (including China, Japan, North and South Korea, Taiwan, Vietnam and the United States). Topics include the impact of Sept. 11 and its aftermath on regional and cross-Pacific relationships, the significance of growing Chinese power, tensions on the Korean peninsula and between China and Taiwan, and the impact of globalization on cross-Pacific interactions.
Eligible for AISA credit.
1 credit.
Not offered 2011-2012.

## POLS 066. Transitional Justice

This course is about struggles over justice that occur in the context of a transition from one regime to another. The focus is on questions of what can be done about past injustice, what should be done, and what the impact of this decision involves. The course is organized topically around important cases between World War II and the present, including postwar Germany, France, and Holland; postdictatorship Greece, Spain, and Argentina; postcommunist Eastern Europe; post-Apartheid South Africa; and occupied Iraq. It examines different kinds of justice, including legal, criminal, retributive, distributive, restorative, and political, and investigates several tools of transitional justice, including international and domestic criminal trials, re-education, purges, screening, truth commissions, historical investigation, rehabilitation, compensation, and apology.
1 credit.
Not offered 2011-2012.

## POLS 067. Great Power Rivalry in the 21st Century

Since the end of the great rivalry that marked the bipolar Cold War, commentators have debated whether we live in a unipolar or multipolar world. Celebrations, condemnations, as well as obituaries of U.S. hegemony have repeatedly been written. At the same time, nuclear weapons and the economic interdependence have radically reduced the prospects for war between great powers. Does the U.S.A. stand as the sole great power? Is the European Union simply an enormous market with a soft spot for multilateralism, or does the worldviews it puts forward and the international relations it fosters rival the U.S. way? To what extent does the Chinese agenda at multilateral institutions conflict with that of the U.S.A.'s and the E.U.'s? In answering these questions and others, some of the issues that the course addresses are: changing meanings of "great
power" and "rivalry"; historical overview of rivalry; trade disputes between the U.S.A., E.U., and China at the World Trade Organization; relations between these three powers at other international institutions, particularly the United Nations and the International Monetary Fund; foreign aid policies of the U.S.A., the E.U., and China; the implications of the rise of Brazil, Russia, and India for world politics.
Prerequisite: POLS 004.
1 credit.
Not offered 2011-2012.

## POLS 069. Globalization: Politics, Economics, Culture and the Environment

This course examines globalization along its diverse but inter-related dimensions, including economic, cultural, and political globalization. Topics include: historical overview of globalization; economic globalization and its governance with a focus on the major international organizations involved in the governance of international trade and financial flows, the World Trade Organization, the World Bank, and the International Monetary Fund; global inequality and poverty; cultural globalization; political globalization and the state; environmental globalization; regional organizations, particularly the EU; and prospects for global democracy. The course will also examine topical issues, such as the recent financial crisis.
1 credit.
Not offered 2011-2012.

## POLS 070. Political Psychology

Examines the psychological dimensions of politics. Topics include: the role of perception and cognition in different political contexts, from crisis management to routine political decision-making; the dynamic relationship between leaders and their followers, including the impact of charismatic leaders and the psychology of group dynamics; the impact of political beliefs and values on political behavior, and the role of ideology in the mobilization of revolutionary movements; the formation of group identity, and the forces that provoke the breakdown of cooperation and the eruption of violence between groups. Examples used to illustrate these issues will be drawn from a wide range of locations around the world and a variety of historical eras.
1 credit.
Not offered 2011-2012.

## POLS 070B. Politics of Punishment

The question of why the United States has become a vastly more punitive society-some
2.3 million Americans are held in jails and
prisons throughout this country, at last countis the subject of this upper-level division seminar. The aim of the seminar is to provide both a critical and in-depth exploration of the interplay among American electoral politics, public concerns regarding crime, and criminal justice policy. Among the central questions we will examine are: How is it that so many Americans are either locked up behind bars or under the supervision of the criminal justice system? And where did the idea of using "jails" and "prisons" as instruments of social and crime control come from? What explains the racial and class differences in criminal behavior and incarceration rates? What does it mean to be poor, a person of color-and in "jail" or "prison?" How and why does criminal justice policy in this country have its roots in both the media culture and political campaigns? And how might "politics" underpin what is known as "felon disenfranchisement" or "prison-based gerrymandering?" What are the implications of such political practices for broader questions of racial, economic, and social justice? And importantly, what are the prospects for reform of America's incarceration complex?
Eligible for BLST or PPOL credit.
1 credit. Enrollment only by permission of the instructor.
Fall 2011. Reeves.

## POLS 072. Constitutional Law: Special Topics

Students will explore in depth several recent issues and controversies, most likely drawn from First-, Fourth-, Fifth-, Sixth-, and/or 14thAmendment jurisprudence. Attention will also be given to theories of interpretation. Designed for students who want to deepen their work in constitutional law.
Prerequisites: POLS 024 and permission of the instructor.
1 credit.
Not offered 2011-2012.

## POLS 073. Comparative Politics: Special Topics: Comparative Capitalism

A large proportion of all political conflict concerns the relationship between states and economies through regulation, management, and provision of social services. This course explores comparative political economy, or the study of different ways these questions have been resolved across the world, with varying degrees of success and stability. It complements courses such as International Political Economy, regional Comparative Politics courses, American Politics, and Public Policy. It covers topics such as the development and crisis of welfare states, the organization of business-government relations, the impact of globalization on domestic politics and
economic management, and the multiple successive models of capitalism within advanced industrial societies.
1 credit.
Not offered 2011-2012.

## POLS 075. International Politics: Special Topics: The Causes of War

The causes of war is arguably one of the most important issues in the field of international politics. In each week of the course, a candidate theory will be examined, and a specific war will be analyzed in depth to test the validity of the theory. Topics will include revolution and war, capitalism and war, misperception and war, and resource scarcity and war. The course will conclude with a discussion of the future of war, particularly the likelihood of conflict among the great powers.
Prerequisite: POLS 004 or equivalent.
1 credit.
Spring 2012. Tierney.

## POLS 077. Practical Wisdom

What is practical wisdom (what Aristotle called "phronesis")? Is it necessary to enable people to flourish in their friendships, loving relations, education, work, community activities, and political life? What is the relevance of this Aristotelian concept for the choices people make in everyday life, and how does it contrast with contemporary Kantian, utilitarian, and emotivist theories of moral judgment and decision making? What does psychology tell us about the experience and character development necessary for practical wisdom and moral reasoning? And how do contemporary economic and political factors influence the development of practical wisdom?
Prerequisites: Some background in philosophy or political theory.
Enrollment is limited and by permission of the instructor. (Applications available from department office.)
1 credit.
Not offered 2011-2012.

## POLS 079. Comparative Politics Special

 Topics: Democracy and Ethnic Conflict An investigation of the relationship between democracy and one of the most important political problems in the contemporary worldethnic conflict. What are ethnic groups, what is ethnic conflict, and what causes it to become violent? What impact does ethnic conflict have on the emergency, survival, and quality of democracy? And what effect do democratic political systems have on the likelihood and severity of ethnic conflict? Does democracy exacerbate the problem, or can it be a "solution" to ethnic conflict? If so, how? Thecourse will use examples from a wide range of countries around the world.
1 credit.
Fall 2011. Murphy.

## POLS 090. Directed Readings in Political Science

Available on an individual or group basis, subject to the approval of the instructor. 1 credit.
Staff.
POLS 092. Senior Comprehensives
Open only to senior majors completing the comprehensive requirement.
0.5 credit.

Tierney.

## POLS 095. Thesis

A 1-credit thesis, normally written in the fall of the senior year. Students need the permission of the department chair and a supervising instructor.
1 credit.

## Seminars

The following seminars prepare for examination for a degree with honors:

## POLS 100. Ancient Political Theory: Plato to Hobbes

This course will consider the development of political thought in the ancient and medieval periods and the emergence of a distinctively modern political outlook. Special attention will be paid to the differences between the way the ancients and the moderns thought about ethics, reason, wisdom, politics, democracy, law, power, justice, the individual, and the community. Key philosophers include Plato, Aristotle, Augustine, and Hobbes.
2 credits.
Fall 2011. Sharpe.

## POLS 101. Modern Political Theory

In this seminar, we will study the construction of the modern liberal state and capitalism through the works of Hobbes, Locke, and Rousseau, and then, in more detail, we will examine the greatest critics of the modern age-Marx, Nietzsche, Jung, and Foucault. Marx demands that we take history and class conflict seriously in political theory. Nietzsche connects the evolution of human instinct to the politics of good and evil for the sake of political transformation. Jung establishes psychology and mythology as foundations for politics, and Foucault uses all three of these critics to question the modern subject and the disciplines of power and knowledge that construct selves and politics in a postmodern age.

2 credits.
Spring 2012. Halpern.

## POLS 102. Comparative Politics: China

 Examines contemporary Chinese politics against the backdrop of its revolutionary past. Topics include pathways of political and economic development, the legacy of the Maoist era, the origins and evolution of the modernization and reform program implemented over the last several decades, and the dynamics of political, economic and social change. Also examine issues of political unrest and instability, demographic change and migration, religion and nationalism, institutions and governance, law and human rights, and civil-military relations.2 credits.
Fall 2011. White.

## POLS 104. American Political System

An intensive survey of the best political science literature on national institutions, democratic processes, citizens' attitudes and their attention to and knowledge of politics, the behavior of voters and politicians, federalism, income inequality's political origins, and the questions that political scientists have asked and currently ask about these topics. Previous background in American politics and history is essential. The seminar mixes the latest research with enduring contributions in order to capture the vitality and excitement of studying American politics and its constituent elements.
Prerequisite: POLS 002 or an intermediate American politics course.
2 credits.
Spring 2012. Valelly.

## POLS 105. Constitutional Law in the American Polity

This seminar examines the Supreme Court in American political life, with emphasis on civil rights, civil liberties, and constitutional development. The seminar explores the court's role in political agenda setting in arenas including economic policy, property rights, separation of powers, federalism, presidential powers and war powers, and interpreting the equal protection and due-process clauses as they bear on race and gender equality. Judicial review, judicial activism and restraint, and theories of constitutional interpretation will be included.
2 credits.
Not offered 2011-2012.

## POLS 106. The Urban Underclass and Public Policy

This seminar is a critical examination of some of the most pressing (and contentious) issues surrounding the nation's inner cities today and
the urban underclass: the nature, origins, and persistence of ghetto poverty; racial residential segregation and affordable public housing; social organization, civic life, and political participation; crime and incarceration rates; family structure; adolescent street culture and its impact on urban schooling and social mobility; and labor force participation and dislocation. We conclude by examining how these issues impact distressed urban communities, such as the neighboring city of Chester.
Eligible for BLST or PPOL credit. 2 credits.

Spring 2012. Reeves.

## POLS 107. Identity, Order, and Conflict in Modern Europe

This seminar will investigate fundamental concepts in comparative politics: collective identities, political and economic regime types, radical and extremist movements, and violent conflict. What demands and problems are generated by nationalist, class, and ethnic conflict? How have multinational and multicultural solutions to these problems succeeded and failed, and how are immigration and cultural conflict challenging these solutions? What explains dictatorship and democracy in the 20th century, and are nationalism and authoritarianism experiencing a resurgence in the 21 st? What varieties of capitalism and social welfare remain viable after the collapse of communism and the growth of globalization? How do current radical right wing and terrorist movements compare to those in the past, and what impacts do such movements have on political \& economic organization? Why can some conflicts be contained within political procedures, yet others spill over into violence? The focus will be on comparisons across Europe, between European and outside cases, and within the European Union.
2 credits.
Not offered 2011-2012.

## POLS 108. Comparative Politics: East Asia

This course examines the politics of China, Japan, the two Koreas, Vietnam and Taiwan. It compares pathways to development, the role of authoritarianism and democracy in the development process, the conditions that promote or impede transitions to democracy, and the impact of regional and global forces on domestic politics and regime legitimacy. It also explores the ideas and cultural patterns that influence society and politics, and the role of social change and protest in regime transformation.
Eligible for ASIA or PPOL credit.

2 credits.
Not offered 2011-2012.

## POLS 109. Comparative Politics: Latin

 AmericaA comparative study of the political economy of Mexico, Chile, Guatemala, Nicaragua, Colombia, El Salvador, and Cuba. Topics include the tensions between representative democracy, popular democracy, and market economies; the conditions for democracy and authoritarianism; the sources and impact of revolution; the political impact of neo-liberal economic policies and the economic impact of state intervention; and the role of the United States in the region.
2 credits.
Fall 2011. Sharpe.

## POLS 110. Comparative Politics: Identity and Conflict

An exploration of the role of identities in political conflict. Does diversity in its many forms (national, ethnic, cultural, religious, gender, etc.) cause violent conflict such as riots, ethnic cleansing, or genocide? What about nonviolent conflict such as discrimination, party/electoral competition, and political protest? How do categories of identity differ from one another, and which ones are the most important? Using cases from around the world we will investigate the origins, evolution, and representation of politicized identities, their effects on violence, peace, and stability in democratic and authoritarian regimes, and the reciprocal impact of political systems on identities and identity conflict. We will evaluate strategies intended to moderate identity conflict, such as multiculturalism and separation, powersharing and repression, preferential treatment and assimilation. Finally we will consider changes brought about by immigration, demographic shifts, new patterns of identification, and new political models. 2 credits.
Fall 2011. Murphy.

## POLS 112. Democratic Theory and Civic Engagement in America

This course begins with the questions: What is democracy, and what does it require? Widespread political participation? Economic equality? Good education? Civic virtue? If any of these conditions or characteristics are necessary, how might they be promoted? In addition to theoretical questions, we will investigate one of the hottest debates in contemporary political science: whether political participation, social connectedness, and general cooperation have declined in the United States over the past half-century. If so, why? What might be done? We will consider

## Political Science

the potential civic impact of economic and social marginalization in inner-city areas, the role of education in promoting civic engagement, the problem of civic and political disengagement among America's youth, and the potential for the Internet and other communications technology to resuscitate democratic engagement among the citizenry. We will close by considering some lessons from successful community activists, politicians, and political mobilizers.
2 credits.
Not offered 2011-2012.

## POLS 113. International Politics: War, Peace, and Security

This seminar will investigate in depth the issues of conflict, security, and the use of force in contemporary international politics. The course will begin by considering the changing meaning of "security" and by analyzing the major theoretical approaches including realism, liberalism, and constructivism. The course will then tackle some of the great puzzles of international security including the clash of civilizations hypothesis, the role of nuclear weapons, civil wars and intervention, terrorism, and human rights.
2 credits.
Fall 2011. Tierney.

## POLS 116. International Political Economy

The course studies the main historical and contemporary approaches in international political economy, and focuses on the primary contemporary issues in political-economic relations among states as well as between states and non-state actors. Topics include: domesticinternational level interaction in the politics of international economic relations, economic globalization, the international financial and monetary systems, the international trading system, development and aid, economic crises, multinational corporations, interlinkages between economic and security relations, multilateral platforms to address international political economic issues, including relatively new forums such as the G20.
Prerequisites: POLS 004 and ECON 001 (Introduction to Economics).
2 credits.
Not offered 2011-2012.

## POLS 180. Thesis

With the permission of the department, honors candidates may write a thesis for double course credit.
2 credits.

FRANK H. DURGIN, Professor
DEBORAH G. KEMLER NELSON, Professor
ALLEN M. SCHNEIDER, Professor ${ }^{2}$
BARRY SCHWARTZ, Professor ${ }^{2}$
ANDREW H. WARD, Professor and Chair
JANE E. GILLHAM, Associate Professor
JODIE A. BAIRD, Assistant Professor (part time)
DANIEL J. GRODNER, Assistant Professor
ETSUKO HOSHINO-BROWNE, Assistant Professor ${ }^{3}$
MICHELE REIMER, Assistant Professor (part time)
MALATHI THOTHATHIRI, Visiting Assistant Professor
ZHI LI, Post-Doctoral Research Fellow
JULIA L. WELBON, Academic Coordinator
KATHRYN TIMMONS, Administrative Coordinator
${ }^{2}$ Absent on leave, spring 2012.
${ }^{3}$ Absent on leave, 2011-2012.

Psychology is concerned with the systematic study of human behavior and experience. Psychologists use diverse approaches to understand human relationships, mental and emotional life, and decision-making, as well as the relationships between language, perception, the mind, and the brain. Topics also include the influence of other people on the individual and the origins and treatment of mental illness.

## The Academic Program

The courses and seminars of the department are designed to provide a sound understanding of the principles and methods of psychology. Students learn the nature of psychological inquiry and psychological approaches to various problems encountered in the humanities, the social sciences, and the life sciences.
The Psychology Department offers a course major and minor, honors major and minor, and regularized special majors in neuroscience and in psychology and education. Students may, with approval, develop other individualized special majors, such as psychology and economics.

## Prerequisites

The most common way to fulfill the prerequisite for further work in psychology is to take PSYC 001 Introduction to Psychology. A second entry point is a psychology first-year seminar: PSYC 005 First-Year Seminar: Nature and Nurture; PSYC 006 First-Year Seminar: Happiness.

## Advanced Placement

Alternatively, a student may meet the prerequisite for psychology courses with a grade of AP 5 on the psychology Advanced Placement test or a grade of 6 or 7 for psychology in the International Baccalaureate Program, but this practice is not encouraged. In either case, an entering student should seek
guidance from the department chair or academic coordinator about selection of a first psychology course. Students electing the AP or IB placement option are not permitted to take a core course (numbered in the 30s) in their first semester. (Swarthmore credit is not granted for AP or IB work in psychology.)

## Course Major

A course major consists of 8 credits of coursework in psychology, plus the credit assigned for completing the College's comprehensive requirement, either 0.5 or 1 credit. For students preparing a 2 -credit thesis, a major consists of a minimum of 8 credits including the thesis. One additional credit is required in statistics as a prerequisite for PSYC 025.

Normally, one credit of the 8 credits in psychology may be accepted from a semester abroad. The minimum requirement excludes courses cross-listed in psychology that are taught solely by members of other departments, such as EDUC 021/PSYC 021, EDUC 023/PSYC 023, EDUC 025/PSYC 022 and EDUC 026/PSYC 026. COGS 001 Introduction to Cognitive Science may be counted in the minimum courses required for the major when taught by a member of the psychology department.
A typical sequence of courses toward a major begins with PSYC 001 Introduction to Psychology, followed by a core course (those with numbers in the 30s) and PSYC 025 in the sophomore year.

## Requirements

1. PSYC 001 Introduction to Psychology (or equivalent) is normally a prerequisite for all courses in psychology (see the note about prerequisites above).
2. PSYC 025 Research Design and Analysis is a requirement for the major. Note that STAT

011 Statistical Methods (or equivalent, e.g., ECON 031) is a prerequisite for PSYC 025 , or may be taken concurrently.
3. At least four core courses in psychology are required (those with numbers in the 30s): 030 Physiological Psychology; 031 Cognitive Neuroscience; 032 Perception; 033 Cognitive Psychology; 034 Psychology of Language; 035 Social Psychology; 036 Thinking, Judgment and Decision Making; 037 Cultural Psychology; 038 Clinical Psychology; 039 Developmental Psychology.
4. Finally, to graduate with a major in psychology, students must also complete a culminating research experience, described below. Students preparing a 2 -credit thesis may complete the major with 8 credits. All others must complete 8 credits plus the credit assigned to their comprehensive project, either 0.5 or 1 credit.

## Comprehensive Requirement: Culminating Research Experience

Students in the Course Program must satisfy the College's comprehensive requirement in their majors. In psychology, this can be done in one of the following four ways:

1. Complete a research practicum in psychology in the senior year: PSYC 102 Research Practicum in Cognition and Perception; PSYC 104 Research Practicum in Language and Mind; PSYC 107 Research Practicum in Social Behavior and Cultural Mind; 108 Research Practicum in School-Based Interventions; 109 Research Practicum in Clinical Psychology; 110 Research Practicum in Cognitive Neuroscience. Students may enroll in these practica to conduct original empirical research for one-half or one credit, and may take these courses before the senior year without meeting the comprehensive requirement. When taking these courses to meet the comprehensive requirement, the student will participate in the Senior Research Poster Session.
2. Complete PSYC 098 Senior Research Project. With the approval of the faculty, students may select a topic of their choice in psychology and write a substantial paper on the topic based on library research-and possibly some original empirical research. The paper may constitute a significant expansion and extension of a paper or papers written by the student previously for psychology courses, or it may address a topic on which the student has not written before. Students are encouraged, but not required, to select topics that span more than one content area in psychology. In addition to submitting their written reports, students participate in the Senior Research Poster Session. Students receive one-half course credit for satisfactory work on the Senior Research

Project, and a letter grade is assigned. Students should enroll in the course in the fall semester.
3. Complete PSYC 096-097 Senior Thesis.

Admission to the senior thesis program is by application only. Enrollment in 2 credits of senior thesis, one each semester of the senior year, is required. We require that students wishing to prepare a senior thesis have averages at the high B level in psychology and overall. Application to the senior thesis program is usually made by the end of the junior year. The list of faculty research interests on the department's website will help students identify the appropriate faculty member to consult when developing thesis plans.
4. Complete a clinical practicum (PSYC 090) in the spring semester of the senior year. Extensive advance planning is necessary. See the PSYC 090 description.

## Acceptance Criteria

To be accepted as a course major, students must have successfully completed two courses in psychology and be in good standing at the College.

## Course Minor

A course minor in psychology requires a minimum of 5 credits taken with psychology faculty at Swarthmore. There is no comprehensive requirement.

## Requirements

PSYC 001 Introduction to Psychology (or equivalent) is normally a prerequisite for all courses in Psychology (see the note about prerequisites above).
A minimum of two core courses in psychology (those with numbers in the 30s) is required: 030 Physiological Psychology; 031 Cognitive Neuroscience; 032 Perception; 033 Cognitive Psychology; 034 Psychology of Language; 035 Social Psychology; 036 Thinking, Judgment and Decision Making; 037 Cultural Psychology; 038 Clinical Psychology; 039 Developmental Psychology.

## Acceptance Criteria

To be accepted as a course minor, students must have successfully completed one course in psychology and be in good standing at the College.

## Honors Major

An honors major in psychology requires completing all the requirements for the course major while incorporating three honors preparations in psychology, of which one is a 2credit senior honors thesis. The other two honors preparations in psychology are composed of two core courses (a course numbered in the 30s) along with their
corresponding one-credit seminars (numbered in the 130s).
The Psychology Department currently offers examination in honors in the following fields:

Clinical Psychology
Cognitive Neuroscience
Cognitive Psychology/Perception
Developmental Psychology
Physiological Psychology
Psycholinguistics
Social Psychology
Thinking, Judgment and Decision Making

## Requirements

PSYC 001 Introduction to Psychology (or equivalent) is normally a prerequisite for all courses in psychology (see the note about prerequisites above).
PSYC 025 Research Design and Analysis, is required of honors majors, as it is for course majors. Note that STAT 011 Statistical Methods (or equivalent, e.g., ECON 031) is a prerequisite for PSYC 025 (or may be taken concurrently).
Two seminar-based honors preparations, as described above, must be completed, each consisting of a core course and its corresponding seminar.
In all, a minimum of four core courses in psychology (those with numbers in the 30s) must be completed: 030 Physiological Psychology; 031 Cognitive Neuroscience; 032 Perception; 033 Cognitive Psychology; 034 Psychology of Language; 035 Social Psychology; 036 Thinking, Judgment and Decision Making; 037 Cultural Psychology; 038 Clinical Psychology; 039 Developmental Psychology.
A two-credit honors thesis (PSYC 180), spread over both semesters of the senior year, is the third honors preparation and fulfills the comprehensive requirement in psychology.

## The Honors Examination for Majors

In psychology, the usual form of evaluation is a three-hour written examination prepared by the external examiner and administered during the honors examination period in the senior year. This is followed, during the subsequent examiners' weekend, by an oral examination with the examiner for each of a student's preparations. An honors thesis stands in place of one written examination.

## Acceptance Criteria

Approval of an application to participate in the Honors Program as a major depends upon successfully completing two psychology courses at Swarthmore, normally PSYC 001, Introduction to Psychology, or a psychology first-year seminar, and one core course.

Admission to the Honors Program usually takes place in the spring semester of the sophomore year, but students may apply for honors even in the junior year. To be accepted, students must have high B averages in psychology and overall. Moreover, to continue in honors, students must have attained a B+ average in psychology at the end of the junior year.

## Honors Minor

Completing an honors minor in psychology requires fulfilling the requirements for the course minor while incorporating a single honors preparation in psychology, composed of a core course (a course numbered in the 30 s) and its corresponding one-credit seminar (numbered in the 130s). A complete list of available preparations is given above in the section on honor majors.

## Requirements

A minimum of five credits taken with psychology faculty at Swarthmore, including the honors preparation, are required for the honors minor. PSYC 001 Introduction to Psychology (or equivalent) is normally a prerequisite for all courses in psychology (see the note about prerequisites above).
Two of the five credits must be core courses in psychology (those with numbers in the 30s): 030 Physiological Psychology; 031 Cognitive Neuroscience; 032 Perception; 033 Cognitive Psychology; 034 Psychology of Language; 035 Social Psychology; 036 Thinking, Judgment and Decision Making; 037 Cultural Psychology; 038 Clinical Psychology; 039 Developmental Psychology.
The honors preparation is completed by taking the seminar corresponding to one of the aforementioned core courses. PSYC 025 Research Design and Analysis is strongly recommended for honors minors.

## The Honors Examination for Minors

The usual form of evaluation is a three-hour written examination prepared by the external examiner and administered during the honors examination period in the senior year. This is followed, during the subsequent examiners' weekend, by an oral examination with the examiner.

## Acceptance Criteria

Approval of an application to participate in the Honors Program as a minor depends upon successfully completing two psychology courses at Swarthmore, normally PSYC 001, Introduction to Psychology, or a psychology first-year seminar, and one core course. Admission to the Honors Program usually takes place in the spring semester of the sophomore year, but students may apply for honors even in the junior year. To be accepted, students must
have high B averages in psychology and overall. Moreover, to continue in honors, students must have attained a B+ average in psychology at the end of the junior year.

## Special Major in Neuroscience

The psychology and biology departments have defined a regularized special major in neuroscience that combines work in the two departments. Students interested in developing a special major in Neuroscience are encouraged to consult faculty in both departments. The neuroscience special major is a revision of the special major in psychobiology. Students in the classes of 2012 and 2013 may elect either a neuroscience or a psychobiology special major. The transition to the special major in neuroscience will be complete for students in the class of 2014.

## Entry Requirements

The study of neuroscience involves advanced coursework with the following prerequisites. For admission to the Neuroscience special major, students must
a. complete (or otherwise satisfy) the required courses listed below (up to two credits of these taken at Swarthmore may be counted as Group B electives for the special major), and
b. obtain a minimum GPA of 3.0 for these courses overall, as well as within all biology courses and within all psychology courses.

## Biology

BIOL 001. Cellular and Molecular Biology
BIOL 002. Organismal and Population Biology

## Chemistry

CHEM 010. General Chemistry
CHEM 022. Organic Chemistry I

## Math/Stat

MATH 015. Elementary Single-Variable Calculus
STAT 011. Statistical Methods

## Psychology

PSYC 001. Introduction to Psychology
PSYC 025. Research Design and Analysis

- The requirement for BIOL 001 and/or BIOL 002 may be satisfied by credit from the Biology AP exam (score of 5) if at least one credit in Biology has been completed at Swarthmore.
- The requirement for CHEM 010 will be satisfied if the student has placed out of it and completed CHEM 022.
- The requirements for MATH 015 and STAT 011 may be satisfied by placement out of these courses, as determined by the Mathematics and Statistics Department.
- The requirement for PSYC 001 may be satisfied with a Psychology AP exam score of 5 .
- Provisional admission to the special major will normally be granted based on substantial progress in satisfying these entry requirements at the time of application.


## Course Major Requirements

A Neuroscience major will include two (2) Foundation Courses and eight (8) Elective credits from the lists below, as well as fulfilling the comprehensive requirement. Up to twelve credits may be included in the major.

1. Neuroscience Foundation Courses: Majors will complete both courses.
PSYC 030. Physiological Psychology
BIOL 022. Neurobiology

## 2. Electives

Majors will complete at least eight (8) elective credits from the following lists, to include at least one seminar. At least four elective credits must be from Group A. The others can be from either Group A, Group B (including up to two of the Entry Requirement courses taken at Swarthmore), or Group C (see restrictions below). It is possible to substitute or add electives from other universities (e.g., Systems Neuroscience at the University of
Pennsylvania), including abroad, but students should seek Swarthmore faculty approval for such courses in advance.

## Group A: Neuroscience Electives

BIOL 030. Animal Behavior
BIOL 123. Learning and Memory seminar (2 credits)
BIOL 124. Hormones and Behavior seminar (2 credits)
PSYC 031. Cognitive Neuroscience
PSYC 043. Developmental Cognitive
Neuroscience
PSYC 091. Advanced Topics in Behavioral Neuroscience
PSYC 130. Physiological Psychology seminar (1 credit)
PSYC 131. Cognitive Neuroscience seminar (1 credit)
Group B: Course Electives in Related/Overlapping Scientific Areas
BIOL 010. Genetics
BIOL 014. Cell Biology
BIOL 020. Animal Physiology
BIOL 021. Comparative Vertebrate Anatomy
BIOL 024. Developmental Biology
BIOL 026. Invertebrate Biology
BIOL 034. Evolution
BIOL 110. Human Genetics seminar (2 credits)

BIOL 111. Developmental Genetics seminar (2 credits)
BIOL 119. Genomics and Systems Biology seminar (2 credits)
BIOL 130. Behavioral Ecology seminar (2 credits)
CHEM 038. Biological Chemistry
COGS 001. Introduction to Cognitive Science
CPSC 021. Introduction to Computer Science
PSYC 032. Perception
PSYC 033. Cognitive Psychology
PSYC 034. Psychology of Language
PSYC 036. Thinking, Judgment \& Decision Making
PSYC 038. Clinical Psychology
PSYC 039. Developmental Psychology
PSYC 133. Perception, Cognition, and Embodiment seminar (1 credit)
PSYC 134. Psycholinguistics seminar (1 credit)
PSYC 138. Clinical Psychology seminar (1 credit)
PSYC 139. Developmental Psychology seminar (1 credit)

## Group C: Research Electives in Related/Overlapping Areas of Science

One unit of research (of up to 2 credits) in neuroscience from the following may be counted toward the minimum required 10 credits of the major (additional research units may be counted for optional credits up to 12). Note that research electives are one way of fulfilling the comprehensive requirement (see below) for the Neuroscience major.
BIOL 094. Research Project (1 credit)
PSYC 094. Independent Research (up to 1 credit)
PSYC 096/097. Senior Thesis (2 credits)
PSYC 102. Research Practicum in Perception and Cognition
PSYC 104. Research Practicum in Mind and Language
PSYC 110. Research Practicum in Cognitive Neuroscience

## 3. Comprehensive Requirement

The comprehensive requirement is a Neuroscience Research Thesis, a complete scientific paper based on a research project conducted in Biology or Psychology or some other area related to neuroscience. The Research Thesis may either (1) be a research paper from a Group C elective completed (or substantially revised) during the senior year or (2) be based on a separate research project, such as might occur during a summer (whether at Swarthmore or at another institution) or as part of a laboratory course in a Neuroscience

Elective (e.g., a Biology seminar taken in the Junior or Senior year)*.
In either case, a proposal will be submitted no later than the beginning of the senior year that explains the student's plan for conducting or completing the comprehensive requirement. If option 2 is selected, the proposal must be detailed. Upon approval of an option 2 proposal, students will register for a 0.5 credit unit of Neuroscience Thesis during either (but not both) semester of the senior year. The thesis will be evaluated by two faculty members, typically from two different departments.
*Students in Biology seminars, for example, often work on group projects and sometimes produce multi-authored research papers. Such projects may serve as the basis of a Neuroscience Research Thesis, but the paper must be a unique product of the student who submits it as his/her Thesis.

## Special Major in Psychology and Educational Studies

A student wishing to undertake a special major in psychology and educational studies will propose and justify an integrated program that includes 11-12 credits in the two disciplines, as described below.

## Requirements

The special major will include 6 credits in courses or seminars taught by members of the department of psychology, including at least 3 core areas (see list above) and PSYC 025 Research Design and Analysis. It will include at least 5 credits taught by members of the department of educational studies. One of these courses must be EDUC/PSYC 021 Educational Psychology. Practice Teaching (EDUC 016) and the Curriculum and Methods Seminar (EDUC 017) may not be included in the program.

## Culminating Exercise/Comprehensive Examination

Either a two-semester, two-credit senior thesis, a research practicum ( 0.5 or 1 credit) or comprehensive project ( 0.5 credit) suitable to the special major serves to satisfy the comprehensive requirement. Theses and comprehensive projects are supervised by one member of each department. Students wishing to prepare a senior thesis must have averages at the high B level in psychology, educational studies, and overall. Application to the senior thesis program is usually made by the end of the junior year. Because special majors may not undertake work on a thesis in a semester in which they are student teaching, such students must be sure to apply early and to begin thesis work as second semester juniors.

## Honors special major in psychology and education

The requirements for honors require that four honors preparations be included in the special major, including the senior honors thesis. For special majors involving educational studies, theses are supervised by both departments. Normally, the remaining three honors preparations consist of two two-credit seminars in educational studies and one preparation in psychology composed of a core course (a course numbered in the 30 s ) and its corresponding one-credit seminar (numbered in the 130 s ), but a program could be proposed involving two preparations in psychology and one in educational studies.

## Acceptance Criteria

To be accepted as a special major in psychology and educational studies, a student must have successfully completed two courses in psychology, EDUC 014 Introduction to Education, and be in good standing at the College.

## Other Special Majors Involving Psychology

Other individualized special majors including psychology may be designed. A special major in cognitive science, which may involve psychology, is administered through the program coordinator of cognitive science. A special major in psychology and economics is also an option.

## Transfer Credit

Transfer credit is handled on an individual basis. Whenever possible, prior approval is recommended.

## Off-Campus Study

The Psychology Department recognizes that international study may have an important place in the educational programs of students, and we support those who wish to include such an experience. We usually advise students to complete their time abroad by the middle of the junior year so that it does not interfere with applications for summer research or with the development of thesis proposals and senior research projects proposals, but students may wish to consult with an adviser in the department about their specific plan because of the absence of international standards in psychology. In most cases, we encourage students to emphasize work in areas other than psychology while away. However, the department may permit a student to transfer a single psychology course from a study abroad program to count toward the minimum major requirements, but normally not in fulfillment of
a core course requirement nor as a prerequisite for an advanced seminar. Additional work may be considered for transfer beyond the minimum major requirements. Prior completion of introductory psychology or its equivalent is an important component of approval for transfer credit.

## Research and Service Learning Opportunities

Students are encouraged to get involved with research at any point in their time at Swarthmore, and many seniors also do field placements through the clinical practicum.

## Academic Year Opportunities

There are many opportunities for research with the faculty of the department during the academic year either for academic credit (PSYC 094: Independent Research) or as a paid assistant. Students may participate in the design, conduct and analysis of projects at any stage in their program. In the senior year, such experiences, in the form of a thesis or research practicum, may constitute the culminating comprehensive experience. The list of faculty research interests on the department's website will help students identify the appropriate faculty member to consult about developing research plans.
The clinical practicum (PSYC 090) provides field experience for students who are considering careers in clinical psychology, psychiatry, social work, and counseling. Some advanced students undertake practica to gain experience in clinical settings such as a shelter for battered women, a program for children with autism, or a residential treatment facility. Enrollment is often limited to seniors and requires at least a B average in Psychology as well as appropriate course preparation.

## Summer Research Opportunities

Students may apply for summer funding to conduct research in psychology either through the Social Sciences Division or through the Division of Natural Sciences and Engineering, depending on the nature of the research project. Students should seek the sponsorship of a faculty member who is willing to provide guidance in developing and submitting an application. Funding may be obtained to work with faculty members on campus or, in some cases, at another campus or setting. Students planning to prepare a thesis are especially encouraged to consider ways of integrating a summer of research into their thesis work, but all interested students should feel free to explore their options. The list of faculty research interests on the department's website will help students identify the appropriate faculty member to consult.

## Teacher Certification

Students who wish to qualify for certification at the secondary school level should consult faculty in the educational studies department. Psychology majors can complete the requirements for teacher certification in social science, through a program approved by the Commonwealth of Pennsylvania. For further information about the relevant set of requirements, please refer to the Educational Studies section of the Bulletin.

## Life After Swarthmore

Psychology majors have followed a variety of paths after graduation, including into medicine, law, business, information technology, marketing, counseling, finance, theater, and education, as well as into traditional psychology programs leading to clinical practice and/or academic research in psychology, neuroscience and related fields.

## Courses

PSYC 001. Introduction to Psychology An introduction to the basic processes underlying human and animal behaviorstudied in experimental, social, and clinical contexts. Analysis centers on the extent to which normal and abnormal behaviors are determined by learning, motivation, neural, cognitive, and social processes.
In addition to the course lectures, students are required to participate in a mini-seminar for six weeks during the semester. Each meeting is 1 hour and 15 minutes, typically during the Monday or Wednesday (1:15-4 p.m.), or Friday ( $2: 15-5$ p.m.) class periods. Students will be assigned to a group after classes begin but should keep at least one period open.
Students also act as participants in Psychology
Department student and faculty research projects.
PSYC 001 is a prerequisite for further work in the department.
Social sciences.
1 credit.
Each semester. Staff.

## COGS 001. Introduction to Cognitive Science

(See COGS 001)
COGS 001 is offered in the Cognitive Science Program. It can count toward the minimum required credits in a psychology major when taught by a member of the Psychology Department.
1 credit.
Spring 2012. Grodner.

PSYC 005. First-Year Seminar: Nature and Nurture
An entry-level course that focuses on how nature and nurture combine to produce human universals as well as human differences. It draws on insights derived from studies of the human infant, language and language acquisition, the perception and experience of emotions, and human intelligence. Consideration is given to the variety of methodologies and approaches that can shed light on nature/nurture issues-including those of evolutionary psychology and behavior genetics. PSYC 005: FYS: Nature and Nurture serves as an alternate prerequisite for further work in the department.
No prerequisite.
Social sciences.
1 credit.
Fall 2011. Kemler Nelson.

## PSYC 006. First-Year Seminar: Happiness

What is happiness? How important is it to people? How important should it be to people? Do people know what makes them happy? If they do know, are they able to make decisions that promote happiness? This course asks all of these questions and tries to answer at least some of them by examining current psychological research. PSYC 006: FYS: Happiness serves as an alternate prerequisite for further work in the department.
No prerequisite.
Social Sciences.
1 credit.
Fall 2011. Schwartz.
PSYC 021. Educational Psychology (See EDUC 021)
Note: The Educational Studies Department offers this course. It does not count toward the minimum required credits for a psychology major or minor.
Fall 2011. Renninger.
PSYC 022. Counseling
(See EDUC 025)
Note: The Educational Studies Department offers this course. It does not count toward the minimum required credits for a psychology major or minor.
Not offered 2011-2012.
PSYC 023. Adolescence
(See EDUC 023)
Note: The Educational Studies Department offers this course. It does not count toward the minimum required credits for a psychology major or minor.
Spring 2012. Brenneman.

## PSYC 025. Research Design and

## Analysis

How can one answer psychological questions? What counts as evidence for a theory? This course addresses questions about the formulation and evaluation of theories in psychology. The scientific model of psychological hypothesis testing is emphasized, including the critical evaluation of various research designs and methodology, understanding basic data analysis and statistical issues, and the application of those critical thinking skills to social science findings reported in the media.
Students also learn to design and conduct psychology studies, analyze data generated from those studies, and write up their findings in the format of a psychology journal article.
This course is required for the major prior to the student's senior year. Statistics 011 must be taken prior to or concurrently with the course. Prerequisite: PSYC 001.
Social sciences.
Writing course.
1 credit.
Fall 2011. Section 01: Baird; Section 02: Durgin.
Spring 2012. Baird.

## PSYC 026. Special Education: Issues and Practice <br> (See EDUC 026)

Note: The Educational Studies Department offers this course. It does not count toward the minimum required credits for a psychology major or minor.
Spring 2012. Linn.

## PSYC 027. Language Acquisition and Development

(Cross-listed as LING 027)
This course covers central issues in language development. Is the human mind specially designed to acquire language? Are these constraints specific to language or general features of human cognition? Is there a critical period for language acquisition? How much does language ability depend on the input given to the child? The course explores these and other issues in typically developing children and special populations. Topics include speech perception, word learning, syntax, pragmatics and bilingualism.
Prerequisite: PSYC 001 OR LING 001 Introduction to Language and Linguistics. 1 credit.
Spring 2012. Thothathiri.

## PSYC 029. Practical Wisdom

## (Cross-listed as POLS 077)

What is practical wisdom (what Aristotle called "phronesis")? Is it necessary to enable people to flourish in their friendships, loving relations, education, work, community activities, and political life? What is the relevance of this Aristotelian concept for the choices people make in everyday life, and how does it contrast with contemporary Kantian, utilitarian, and emotivist theories of moral judgment and decision making? What does psychology tell us about the experience and character development necessary for practical wisdom and moral reasoning? And how do contemporary economic and political factors influence the development of practical wisdom?
Prerequisites: Some background in psychology, philosophy or political theory.
Enrollment is limited and by permission of the instructors. (Applications available from either department office.)
1 credit.
Not offered 2011-2012. Schwartz and Sharpe.

## PSYC 030. Physiological Psychology

A survey of the neural and biochemical bases of behavior with special emphasis on sensory processing, motivation, emotion, learning, and memory. Both experimental analyses and clinical implications are considered.
Prerequisite: PSYC 001.
Social sciences.
1 credit.
Not offered 2011-2012. Schneider.

## PSYC 031. Cognitive Neuroscience

What neural systems underlie human perception, memory and language? What deficits arise from damage to these systems?
This course covers a variety of cognitive neuroscience and neuropsychological methods and what they tell us about human cognition.
Prerequisite: PSYC 001.
Social sciences.
1 credit.
Fall 2011. Thothathiri.

## PSYC 032. Perception

Perceptual experience is fundamental to being conscious, and perception is also required for most action. How does perception happen? This course covers the science of perception from an information-processing standpoint while delving into perception-for-action and the often-illusory nature of consciousness. Topics range from the comparative functional anatomy of sensory systems to the informational "ecology" in which they have evolved, with a primary emphasis on a functionalist cognitive
understanding of human perceptual experience. Required weekly laboratory.
Prerequisite: PSYC 001 and PSYC 025:
Research Design and Analysis or permission of instructor.
Natural sciences and engineering practicum.
1 credit.
Spring 2012. Durgin.

## PSYC 033. Cognitive Psychology

Cognitive psychology is one of the intellectual foundations on which modern psychological science is built. This course has two principal goals. On the one hand, it provides an integrated overview of a variety of subfields of cognitive psychology including perception, attention, memory, language, concepts, imagery, thinking, decision-making, and problem solving. On the other hand, it develops a coherent conceptual framework for understanding how behavioral experiments can illuminate the workings of the human mind.
Prerequisite: PSYC 001.
Social sciences.
1 credit.
Fall 2011. Durgin.

## PSYC 034. Psychology of Language (Cross-listed as LING 034)

The capacity for language sets the human mind apart from all other minds, both natural and artificial, and so contributes critically to making us who we are. In this course, we ask several fundamental questions about the psychology of language: How do children acquire it so quickly and accurately? How do we understand and produce it, seemingly without effort? What are its biological underpinnings? What is the relationship between language and thought? How did language evolve? And to what extent is the capacity for language "built in" (genetically) versus "built up" (by experience)? Prerequisite: PSYC 001 or permission of the instructor.
Social sciences.
1 credit.
Fall 2011. Grodner.

## PSYC 035. Social Psychology

Social psychology argues that social context is central to human experience and behavior. This course provides a review of the field with special attention to relevant theory and research. The dynamics of cooperation and conflict, the self, group identity, conformity, social influence, prosocial behavior, aggression, prejudice, attribution, and attitudes are discussed.

Social sciences.
1 credit.
Spring 2012. Ward.

## PSYC 036. Thinking, Judgment, and Decision Making

People in the modern world are flooded with major and minor decisions on a daily basis. The available information is overwhelming, and there is little certainty about the outcomes of any of the decisions people face. This course explores how people should go about making decisions in a complex, uncertain world; how people do go about making decisions in a complex, uncertain world; and how the gap between the two can be closed.
Prerequisite: PSYC 001.
Social sciences.
1 credit.
Not offered 2011-2012. Schwartz.

## PSYC 037. Cultural Psychology

Prerequisite: PSYC 001.
Social sciences.
1 credit.
Not offered 2011-2012.

## PSYC 038. Clinical Psychology

A consideration of major forms of psychological disorder in adults and children. Biogenetic, sociocultural, and psychological theories of abnormality are examined, along with their corresponding modes of treatment. Prerequisite: PSYC 001.
Social sciences.
1 credit.
Fall 2011. Reimer.
Spring 2012. Gillham.

## PSYC 039. Developmental Psychology

Do infants have concepts? How do children learn language? These questions and others are addressed in this survey course of cognitive, social, and emotional development from infancy to adolescence. The course examines theoretical perspectives on the nature of developmental change in addition to empirical and applied issues in the study of children. Topics include the formation of social attachments; the foundations and growth of perceptual, cognitive, and social skills; language acquisition; and the impact of family and peers on the development of the child.
Prerequisite: PSYC 001.
Social sciences.
1 credit.
Fall 2011. Baird.

## PSYC 041. Children at Risk

Violence, educational inequality, war, homelessness, and chronic poverty form the backdrop of many children's lives. We consider children's responses to such occurrences from clinical, developmental and ecosystem perspectives.
Prerequisites: PSYC 001 and either PSYC 038:
Clinical Psychology or PSYC 039:
Developmental Psychology or permission of the instructor.
Social sciences.
1 credit.
Spring 2012. Reimer.

## PSYC 043. Developmental Cognitive Neuroscience

How does the human brain develop? How modular/plastic/lateralized are mental functions? The course covers the neuroscientific techniques that are suitable for studying children and what they tell us about the development of human capacities such as face processing, language, memory and executive function.
Prerequisite: PSYC 001. PSYC 031: Cognitive Neuroscience recommended.
Social Sciences.
1 credit.
Not offered 2011-2012. Thothathiri.

## PSYC 046. Psychology and Economic Rationality

The discipline of economics makes a set of assumptions about human motivation and decision making. This course examines those assumptions in light of evidence from other social sciences, especially psychology. The course is taught in a seminar format, open especially to students in psychology and economics.
Prerequisites: PSYC 001 and ECON 001 or related preparation with permission of instructor.
Social Sciences.
1 credit.
Not offered 2011-2012. Schwartz.

## PSYC 050. Developmental Psychopathology

This course covers several psychological disorders that often first appear in childhood and adolescence, including autism and other developmental disorders, attention-deficit disorder, conduct disorder, eating disorders, and emotional disorders. Theories about the causes and treatment are discussed. A heavy emphasis is on current research questions and empirical findings related to each disorder.
Prerequisites: PSYC 001 and either PSYC 038: Clinical Psychology or PSYC 039:

Developmental Psychology or permission of the instructor.
Social sciences.
1 credit.
Not offered 2011-2012. Gillham.

## PSYC 055. Family Systems Theory and Psychological Change

Systems theory is important in clinical, educational, medical and organizational contexts. This course explores family systems perspectives on illness and change. Research and theory are supplemented with popular film, documentaries, and therapeutic case histories to understand how psychologists work with individuals and organizations to address developmental, communication, and emotional impasses.
Prerequisites: PSYC 001 and permission of the instructor.
Social sciences.
1 credit.
Not offered 2011-2012. Reimer.

## PSYC 056. Psychotherapy and

 Psychosocial InterventionsIn the first part of the course we consider approaches to psychotherapies such as cognitive-behavior therapies, psychodynamic therapies, and narrative therapy. What works? For which problems? For whom? Can therapy inadvertently harm people? How can therapists work with clients whose cultural values and backgrounds are different from their own? In the second part of the course, we study psychosocial interventions for people in emergency situations: civilians caught in military conflicts, victims of natural disasters, refugees and others displaced by violence, and soldiers in combat situations.
Prerequisite: PSYC 001.
Social sciences.
1 credit.
Not offered 2011-2012.

## PSYC 057. Psychology of Prejudice, Stereotyping, and Intergroup Relations

This course focuses on prejudice and intergroup relations, mainly from social psychological perspectives. Where does prejudice or an intergroup conflict come from, and what are possible consequences? We examine the issues of ageism, racism, sexism, ingroup bias, stereotyping, stereotype threat, as well as affirmative action and its fairness and justice issues. Not only explicit but also implicit attitudes are considered. We approach prejudice, stereotyping, and intergroup relations from two perspectives: from the perspective of those who hold prejudicial attitudes and discriminate against others and from the
perspective of those who are the targets of prejudice and discrimination.
Prerequisites: PSYC 001 and PSYC 035: Social Psychology or permission of the instructor. PSYC 025: Research Design and Analysis is preferred.
Social sciences.
1 credit.
Not offered 2011-2012. Hoshino-Browne.

## PSYC 090. Practicum in Clinical Psychology

An opportunity for advanced psychology students to gain supervised experience in offcampus clinical settings. Requirements include, but are not limited to, 8 hours per week in an off-campus placement, guided readings throughout the semester, and a major term paper. Students are expected to have "face-toface" contact with clients/patients and to have an on-site supervisor. Students meet regularly with the instructor for discussion of readings and work experience. Students are responsible for arranging a placement, in consultation with the instructor in advance of the semester. Students should select several possible sites, make contact with them, and review the sites with the instructor. The department has a file of previous practicum sites. This helps students identify general categories as well as specific options. Students applying for this course must have at least a B average in psychology. Consult the department for details and an application form. It is essential to begin planning for a placement well before the semester of enrollment. When taken in the senior year, this course fulfills the comprehensive requirement in psychology. Students who plan to take PSYC 090 to fulfill the senior comprehensive requirement must apply by April 15th of the junior year. For all other students, applications are due November 4th.
Prerequisites: PSYC 001 and one of the following: PSYC 038: Clinical Psychology, PSYC 041: Children at Risk or PSYC 050: Developmental Psychopathology.
Social sciences.
1 credit.
Spring 2012. Gillham.

## PSYC 091. Advanced Topics in Behavioral Neuroscience

Current issues in behavioral neuroscience are considered from both a clinical and an experimental perspective. Topics include learning and memory, with a focus on emotional memory and its relation to anxiety disorders; memory storage, with a focus on the impact of brain damage; neuropsychiatric and degenerative disorders, including
schizophrenia, clinical depression, Alzheimer's and Parkinson's diseases; psychopharmacology, with a focus on drug addiction.
Prerequisites: PSYC 001 and PSYC 030:
Physiological Psychology or permission of the instructor.
Social sciences.
1 credit.
Fall 2011. Schneider.

## PSYC 094. Independent Research

Students conduct independent research projects. They typically study problems with which they are already familiar from their courses. Students must submit a written report of their work. Registration for independent research requires the sponsorship of a faculty member in the Psychology Department who agrees to supervise the work.
Each semester. Staff.

## PSYC 095. Tutorial

Any student may, under the supervision of a member of the Psychology Department, work in a tutorial arrangement for a single semester. The student is thus allowed to select a topic of particular interest and, in consultation with a faculty member, prepare a reading list and work plan. Tutorial work may include field research outside Swarthmore.
Each semester. Staff.

## PSYC 096 and 097. Senior Thesis

A senior thesis, which is a yearlong empirical research project, fulfills the senior comprehensive requirement in psychology. It must be supervised by a member of the department and must be taken as a twosemester sequence for 1 credit each semester. Admission requirements include a $\mathrm{B}+$ average in psychology and overall, an approved topic, an adviser, and sufficient advanced work in psychology to undertake the thesis. The supervisor and an additional reader (normally a member of the department) evaluate the final product. Students should develop a general plan in consultation with an adviser by the end of the junior year. Students are encouraged to begin thesis work during the summer preceding the senior year.
Prerequisites: PSYC 001 and PSYC 025: Research Design and Analysis and permission of a research supervisor.
Social sciences.
1 credit each semester.
Each semester. Staff.
PSYC 098. Senior Research Project
As one means of meeting the comprehensive requirement, a student may select a topic in psychology in consultation with psychology faculty. During the fall semester of the senior
year, the student writes a substantial paper on the topic based on library research or original empirical research. In addition to submitting written reports, students participate in a poster conference at the end of fall semester. One-half credit with a letter grade is awarded for all components of the project. See the department brochure for further details.
Prerequisites: PSYC 001; PSYC 025: Research Design and Analysis and permission of adviser.
Social sciences.
0.5 credit.

Fall semester. Staff.

## PSYC 102. Research Practicum in Perception and Cognition

In this course, students conduct research projects singly or in small groups in collaboration with the instructor. Projects include designing, implementing, analyzing and reporting an experiment. Project topics are negotiated at the beginning of the semester. Past projects have studied eye-movements and decision-making, perception of the bodily self, self-motion and space perception, metaphor processing, and even experimental demand characteristics. All students meet together for a weekly lab meeting; additional weekly meeting times will be scheduled. When taken in the senior year, this course fulfills the comprehensive requirement in psychology.
Prerequisites: PSYC 001; PSYC 025: Research Design and Analysis and permission of the instructor.
Social Sciences.
Section 01: 0.5 credit.
Section 02: 1 credit.
Fall 2011. Durgin.

## PSYC 104. Research Practicum in Language and Mind

In this course students conduct research projects singly or in small groups in collaboration with the instructor. Projects include designing, implementing, analyzing and reporting an experiment. Project topics are negotiated at the beginning of the semester. Past projects have investigated how people understand the perspective of conversational partners, how comprehenders resolve linguistic ambiguity, how perceivers infer what a speaker means from what they have said, and hemispheric differences in the way the brain processes language. All students meet together for a weekly lab meeting; additional weekly meeting times will be scheduled. When taken in the senior year, this course fulfills the comprehensive requirement in psychology. Prerequisites: PSYC 001 and PSYC 025 : Research Design and Analysis and permission of the instructor.

Social Sciences.
Section 01: 0.5 credit.
Section 02: 1 credit.
Fall 2011. Grodner.

## PSYC 107. Research Practicum in Social Behavior and Cultural Mind

In this course, students work in groups to gain research skills. The projects in which the students engage will be relevant to ongoing research conducted in the instructor's lab. We follow the entire process of conducting psychological research, including developing a research question, conducting a literature review, designing a study, preparing research materials, obtaining ethics approval, collecting data, analyzing data using SPSS, presenting the results in a poster session, and writing an empirical research paper using APA format. All students meet together for a weekly lab meeting. When taken in the senior year, this course fulfills the comprehensive requirement in psychology.
Prerequisites: PSYC 001 and PSYC 025: Research Design and Analysis and permission of the instructor. PSYC 035: Social Psychology is strongly preferred.
Social Sciences.
Section 01: 0.5 credit.
Section 02: 1 credit.
Spring 2012. Hoshino-Browne.

## PSYC 108. Research Practicum in

## School-Based Interventions

This course provides experience conducting research on school-based interventions. Students collaborate on research that is evaluating school-based interventions designed to promote well-being in early adolescents. Students gain experience in many aspects of the research process, such as reviewing research literature, developing hypotheses, collecting, entering and analyzing data, writing in journal article format and presenting findings. All students meet together for lab meetings (once weekly for two hours); additional meeting times will be scheduled. When taken in the senior year, this course fulfills the comprehensive requirement in psychology.
Commitment: 2 semester (Fall, Spring) commitment required.
Enrollment limited to 3 students. Please contact Prof. Gillham for an application.
Prerequisites: PSYC 001; PSYC 025: Research Design and Analysis and at least one of the following: PSYC 038: Clinical Psychology; PSYC 041: Children at Risk; PSYC 050: Developmental Psychopathology; PSYC 055: Family Systems Theory and Psychological Change; and permission of the instructor.

Social Sciences
1 credit.
Not offered 2011-2012. Gillham.

## PSYC 109. Research Practicum in Clinical Psychology

This course provides experience conducting research related to clinical psychology or positive psychology. Students collaborate on projects evaluating brief interventions that are designed to promote well-being. Students gain experience in many aspects of the research process, such as reviewing research literature, developing hypotheses, collecting, entering and analyzing data, writing in journal article format and presenting findings. All students meet together for lab meetings (once weekly for two hours); additional meeting times will be scheduled. When taken in the senior year, this course fulfills the comprehensive requirement in psychology.
Commitment: 1 semester.
Prerequisites: PSYC 001; PSYC 025: Research Design and Analysis and permission of the instructor. PSYC 038: Clinical Psychology is strongly preferred.
Social Sciences.
Section 01: 0.5 credit.
Section 02: 1 credit.
Fall 2011. Gillham.

## PSYC 110. Research Practicum in Cognitive Neuroscience

Students conduct research projects singly or in small groups in collaboration with the instructor. Projects include designing, implementing, analyzing and reporting a study. Topics are negotiated at the beginning of the semester and are focused on the neural basis of language, memory and other higher level cognitive processes. How does brain maturation impact different human capacities? What specific roles do different brain regions play in a given capacity? All students meet together for a weekly lab meeting; additional weekly meetings times are scheduled. When taken in the senior year, the course fulfills the comprehensive requirement in psychology. Prerequisites: PSYC 001; PSYC 025: Research Design and Analysis and permission of the instructor.
Social Sciences.
Section 01: 0.5 credit.
Section 02: 1 credit.
Fall 2011. Thothathiri.

## Seminars

## PSYC 130. Seminar in Physiological Psychology

An analysis of the neural bases of motivation, emotion, learning, memory, and language. Generalizations derived from neurobehavioral relations are brought to bear on clinical issues. Prerequisites: PSYC 001 and PSYC 030:
Physiological Psychology. By permission of the instructor.
Social sciences.
1 credit.
Not offered 2011-2012. Schneider.

## PSYC 131. Advanced Seminar in Cognitive Neuroscience

Critical analysis of current cognitive neuroscience literature on cognitive processes such as executive function, language and memory. Students consolidate different theories about these functions and design behavioral or functional neuroimaging studies that test specific hypotheses.
Prerequisites: PSYC 001 and PSYC 031: Cognitive Neuroscience. By permission of the instructor.
Social Sciences.
1 credit.
Spring 2012. Thothathiri.

## PSYC 133. Perception, Cognition and the Embodied Mind

This seminar examines foundational issues and theories in the empirical study of human cognition including the interplay between perception, action, language, and reasoning. Emphasis is placed on skeptical rigor in exploring philosophical and neuroscientific considerations regarding embodied cognition. How does metaphoric language inform us? What counts as an explanation of experience? How could conscious beings evolve? Topics vary from year to year.
Prerequisites: PSYC 001 and either PSYC 032:
Perception or PSYC 033: Cognitive
Psychology. By permission of the instructor.
Social sciences.
1 credit.
Spring 2012. Durgin.

## PSYC 134. Seminar in Psycholinguistics

(Cross-listed as LING 134)
An advanced study of special topics in the psychology of language. A research component is sometimes included.

Prerequisites: PSYC 001 and PSYC 034 :
Psychology of Language. By permission of the instructor.
Social sciences.
1 credit.
Spring 2012. Grodner.

## PSYC 135. Advanced Topics in Social and Cultural Psychology

The seminar aims at a critical exploration of substantive topics in social psychology, including findings from cross-cultural research and social neuroscience research. Various perspectives and methods in investigating how human mind and social behavior interact with situational and environmental factors are considered. Real world implications and applications are emphasized.
Prerequisites: PSYC 001 and PSYC 035: Social Psychology. PSYC 025: Research Design and Analysis is strongly preferred.
By permission of the instructor.
Social sciences.
1 credit.
Fall 2011. Ward.

## PSYC 136. Seminar in Thinking, Judgment, and Decision Making

The seminar considers in depth several of the topics introduced in PSYC 036.
Prerequisites: PSYC 001 and PSYC 036 :
Thinking, Judgment, and Decision Making. By permission of the instructor.
Social sciences.
1 credit.
Not offered 2011-2012. Schwartz.

## PSYC 138. Seminar in Clinical

## Psychology

We take up a variety of topics in clinical psychology, including etiology and treatments for several major disorders, controversies regarding psychodiagnosis and the proliferation of new diagnostic categories, and emerging psychotherapies and community-based treatments. We also examine cultural and historical differences in expressions of psychic suffering, the social meanings attributed to such suffering, and local healing practices.
Prerequisites: PSYC 001 and PSYC 038: Clinical Psychology. By permission of the instructor.
Social sciences.
1 credit.
Fall 2011. Gillham.

## PSYC 139. Seminar in Developmental

 PsychologyThe seminar builds on concepts learned in PSYC 039 and considers special topics of
interest in the field at an advanced level. An original group research component is included. Prerequisites: PSYC 001 and PSYC 039:
Developmental Psychology. By permission of the instructor.
Social sciences.
1 credit.
Spring 2012. Kemler Nelson.

## PSYC 180. Honors Thesis

An honors thesis, a yearlong empirical research project, fulfills the senior comprehensive requirement in psychology as part of an honors major in psychology. It must be supervised by a member of the department and must be taken as a two-semester sequence for 1 credit each semester. Students should develop a general plan in consultation with an adviser by the end of the junior year. When possible, students are encouraged to begin work on their thesis during the summer before their senior year.
Prerequisites: PSYC 001; PSYC 025: Research
Design and Analysis and permission of a research supervisor.
Social sciences.
1 credit each semester.
Each semester. Staff.

Coordinator: JOHN CASKEY (Economics) Cathy Wareham (Administrative Assistant)<br>Committee: Erin Bronchetti (Economics) ${ }^{1}$ Frank Grossman (Educational Studies) Robinson Hollister (Economics) Ellen Magenheim (Economics) Carol Nackenoff (Political Science) ${ }^{3}$ Keith Reeves (Political Science) Richard Valelly (Political Science)<br>Robert Weinberg (History)

${ }^{1}$ Absent on leave, fall 2011
${ }^{3}$ Absent on leave, 2011-2012.

The minor in public policy enables students to combine work in several departments toward both critical and practical understanding of public policy issues, including those in the realm of social welfare, health, energy, environment, food and agriculture, and national and global security. These issues may be within domestic, foreign, or international governmental domains. Courses in the minor encompass the development, formulation, implementation, and evaluation of policy.

## The Academic Program

The minor in public policy may be taken together with a course major in any field or as a minor in the Honors Program. At a minimum, the minor consists of six credits and an internship. The program of each minor should be worked out in consultation with the coordinator of the Public Policy Program and approved by the coordinator, preferably at the same time as majors in the Course and Honors Programs are planned.
The public policy minor consists of 6 credits of work. Basic academic requirements for the minor cover three areas: (1) economic analysis, (2) political analysis, and (3) quantitative analysis. These may each be met by taking one course or seminar in each of the three categories; courses that fulfill these requirements are listed below.
In addition to these three preparatory or prerequisite courses, three credits must be taken from among the substantive policy courses listed below, one of which must be the Public Policy Thesis. These courses deal with substantive sectors and institutional aspects of public policy analysis. The substantive policy requirement may be fulfilled through courses and seminars. Only one credit of a two credit seminar can be counted toward the public policy requirements. Please note that seminars are limited in size and that most departments give priority to departmental majors and minors, so Public Policy minors might not be
admitted. In addition, students should take into account course prerequisites when planning the minor program.
Some students may wish to focus their substantive work in policy heavily in a particular field, e.g. environmental studies, food studies, welfare issues, health, or education. The College generally does not offer interdisciplinary majors; rather it urges students to undertake interdisciplinary work in minors in addition to their major field. It is possible, however, to do broad work in some interdisciplinary areas taking courses that fit the Public Policy minor as well as additional courses that support the culminating policy thesis.

## Internship

Some direct experience or practical responsibility in the field, through work in a public, private, or voluntary agency, is required for graduation with a minor in public policy Normally, students will hold internships between their junior and senior years. The internship program is supervised by the coordinator for the program. Planning for the internship experience should begin six to eight months before the time it might commence. Students should keep the program coordinator informed of their internship plans and, if needed, seek his or her advice in finding an appropriate internship. Funding for an internship is occasionally provided by the agency in which a person serves. Typically, however, students require support to cover their travel and maintenance costs during the eight to ten weeks of a summer internship.
For students who are minors, the College attempts to provide support to those unable to fund themselves. Other possible sources of support for an internship include the James H. Scheuer Summer Internships in Environmental and Population Studies, the J. Roland Pennock Fellowships in Public Affairs, the Joel Dean Awards, the Sam Hayes III Research Grant, the Lippincott Peace Fellowships, and the David G.

Smith Internship in Health and Social Policy. The total award from all Colleges sources may not exceed $\$ 4,350$. Information on each of these sources can be obtained in the Public Policy Program Office, 105 Trotter.

## Thesis / Culminating Exercise

As noted above, one of the requirements of the minor, providing one of the three units of substantive policy work, is a senior thesis. The thesis requirement is designed to provide a structured opportunity to write a substantial paper on a public policy issue. It is especially aimed to allow those who have cultivated (through internships and academic work) a well-developed understanding of some policy question to complete research and analysis under the supervision of the Coordinator of the Public Policy Program. Paper topics may focus on national or international policy issues and may range widely within areas of competence. Students writing a thesis should register for PPOL 097 in the fall of the senior year.

## Honors Minor Option

Students sitting for honors may have a minor in public policy by combining the one-credit thesis with a related course or seminar.
Policy work examined as a minor should meet three criteria: first, the thesis and the associated coursework should fit together in some fashion that is coherent and examinable; second, the honors minor preparation must meet the College requirement that the work be in a discipline outside the student's major department; and third, each student must have his/her proposed preparation approved by the Public Policy Program Coordinator who may consult with the Public Policy Committee.
In most cases, the honors exam will be an oral exam. But, in some cases, the honors exam could include a written exam.
For more information on the public policy minor, internships, theses and related topics, please talk with the Coordinator of the program.

## Off-Campus Study

Minors planning to study abroad during their junior year should confirm that any required courses that have not been completed will be offered during their remaining time on campus. For students who will be away during the spring semester, it is highly recommended that the internship be secured before leaving or that the internship be done after the sophomore year. Communicating with the program office and, more importantly, with a prospective internship organization, from abroad is difficult and will limit opportunities.

## Areas of Policy Focus

Some students may wish to focus their substantive work in policy heavily in a particular field (e.g., environmental studies, food studies, welfare issues, health, or education). Given the size and interests of the faculty, not every area of public policy is well represented within the curriculum and faculty. Nevertheless, there are several policy areas in which a student can take multiple courses, often in a variety of departments. Courses that fulfill the public policy foundation requirements in political analysis, economic analysis, and quantitative analysis as well as other courses that count toward the program are listed subsequently. Students can also petition the program coordinator to have appropriate courses that are not listed below count toward the minor.

## Foundation Requirements Political Analysis Courses

POLS 002. American Politics or equivalent policy analysis in political science
POLS 003. Comparative Politics
POLS 004. International Politics
Economic Analysis Courses
ECON 011. Intermediate Microeconomics
ECON 041. Public Economics
ECON 141. Public Economics*

## Quantitative Analysis Courses

ECON 031. Introduction to Econometrics ECON 035. Econometrics
ENGR 057/ECON 032. Operations Research STAT 011. Statistical Methods
STAT 031. Data Analysis and Visualization
STAT 061. Mathematical Statistics
Policy Courses and Seminars (Arranged by Department)*
ECON 005. Savage Inaccuracies: The Facts and Economics of Education in America (Crosslisted as EDUC 069)
ECON 041. Public Economics
ECON 042. Law and Economics
ECON 044. Urban Economics
ECON 051. The International Economy
ECON 073. Race, Ethnicity, and Gender in Economics
ECON 075. Health Economics
ECON 081. Economic Development
ECON 082. Political Economy of Africa
ECON 101A. Economic Theory: Advanced Microeconomics*
ECON 141. Public Economics*
ECON 151. International Economics*
ECON 171. Labor and Social Economics*

## Public Policy

ECON 181. Economic Development* EDUC 068/SOAN 020B. Urban Education EDUC 069/ECON 005. Savage Inaccuracies: The Facts and Economics of Education in America
ENGR 004. Introduction to Environmental
Protection
ENGR 066. Environmental Systems
Engineering
HIST 049. Race and Foreign Affairs
HIST 054. Women, Society, and Politics
HIST 066. Disease, Culture and Society in the Modern World
PPOL 097/098. Public Policy Thesis
POLS 015. Ethics and Public Policy
POLS 029. Public Opinion, Polling, and Public
Policy
POLS 032. Gender, Politics, and Policy
POLS 033. Race, Ethnicity, and Public Policy:
African Americans
POLS 039. Faith-Based Social Policy in the
United States
POLS 041. Political Economy and Social Policy: The United States in the 1990s
POLS 042. Congress in the American Political System
POLS 043. Environmental Politics and Policy
POLS 048. The Politics of Population
POLS 055. China and the World
POLS 104. American Political System
POLS 106. The Urban Underclass and Public
Policy
POLS 111. International Politics*
SOAN 020B/EDUC 068. Urban Education

Descriptions of the courses listed previously can be found in each department's course listings in this catalog.

* Note: Seminars are limited in size, departmental majors and minors are often given registration priority, so public policy minors may not be admitted.
For more information on the Public Policy Program, internships, theses, and related topics, see www.swarthmore.edu/PublicPolicy.

REBECCA CHOPP, Professor*<br>YVONNE P. CHIREAU, Professor<br>STEVEN P. HOPKINS, Professor and Acting Chair, spring 2011<br>MARK I. WALLACE, Professor ${ }^{1}$<br>ELLEN M. ROSS, Associate Professor and Chair ${ }^{2}$<br>TARIQ AL-JAMIL, Assistant Professor<br>GWYNN KESSLER, Assistant Professor<br>HELEN PLOTKIN, Visiting Assistant Professor (part time)<br>ELLIOT RATZMAN, Visiting Assistant Professor (part time) ${ }^{5}$<br>ANITA PACE, Administrative Assistant

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*President of the College.
\({ }^{1}\) Absent on leave, fall 2011.
\({ }^{2}\) Absent on leave, spring 2012.
\({ }^{5}\) Fall 2011
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The Religion Department plays a central role in the Swarthmore academic program. One attraction of the study of religion is the crosscultural nature of its subject matter. The discipline addresses the complex interplay of culture, history, text, orality, performance, and personal experience. Religion is expressed in numerous ways: ritual and symbol, myth and legend, story and poetry, scripture and theology, festival and ceremony, art and music, moral codes and social values. The department seeks to develop ways of understanding these phenomena in terms of their historical and cultural particularity and in reference to their common patterns.
Courses offered on a regular cycle in the department present the development of Judaism, Islam, Buddhism, Hinduism, AfroCaribbean religions, and Christianity as well as the development of religion and religions in the regional areas of the Indian Sub-Continent (Hindu, Jain, Buddhist, Muslim, Sikh), Sri Lanka and Southeast Asia (Buddhism, Hinduism, and Islam), China (Taoist, Confucian, spirit cults), Japan (Buddhist and Shinto), Africa (Fon, Yoruba, Dahomey, and Kongo), the Middle East (Christian, Islamic, Jewish, Gnostic, Mandean), Jewish, Christian, and Islamic Europe and the Americas (from New World African traditions, Vodou and Candomblé, to Neo Paganism and Civil Religion in North America). Breadth in subject matter is complemented by strong methodological diversity; questions raised include those of historical, theological, philosophical, literary, feminist, sociological, and anthropological interests. This multifaceted focus makes religious studies an ideal liberal arts major.

## The Academic Program

Normally, the student who applies for a major or minor in religion will have completed (or be in the process of completing) two courses in the discipline. Majors successfully complete eight
credits in religion, including the required Senior Symposium (Religion Café) in the fall of the senior year, to meet departmental and college graduation requirements. Minors complete five credits in the Religion Department and are not required to take the Senior Symposium. For many students, courses numbered Religion $001-013$ serve as points of entry for advanced work in the department, and sometimes as prerequisites for higher-level courses, though this is not always the case.
Students come to the study of religion through various courses at various levels, and the department encourages this flexibility and diversity of entry-points by having no introductory course requirements, nor are there required distribution courses. The major in religion is planned in consultation with faculty members in the department, the individual student's adviser, along with other relevant faculty, who encourage curricular breadth (close work in more than one religious tradition) and methodological diversity in the proposed program. Such breadth and diversity in the program is encouraged at the very beginning in the major's Sophomore Paper statement.
The curriculum in the Religion Department is strongly comparative, thematic, and interdisciplinary, so it is relatively easy for students to propose programs that are crosscultural and trans-disciplinary in scope. Religion majors are encouraged to include study abroad in their programs, planned in collaboration with the department. Often a student's independent study project done while studying abroad is expanded into a one or twocredit honors or course thesis upon return to Swarthmore.

## Course Major and Minor

## Requirements

General major requirements are 8 credits in religion, including the Senior Symposium. En
route to completing (at least) eight religion credits, students who major in religion are free to take a variety of courses of their own choice, in consultation with the department and their departmental adviser, but are required to enroll in the Senior Symposium: Religion Café, in the fall of the student's senior year. Successful completion of the symposium will be the culminating requirement for the course major. For all religion majors the symposium will be a one-credit seminar and will include a term essay assignment.
Religion minors will complete (at least) five religion credits, and will not enroll in the Senior Symposium: Religion Café.
Students may choose to write a thesis. Those seniors who desire to complete a long paper (one credit) or thesis (two credits) as part of the major will need to obtain permission from a faculty adviser in consultation with the department. For majors, this exercise will not substitute for the Senior Symposium.
With department approval, up to three courses cross-listed but not housed within the Religion Department may count toward the major. Only one such cross-listed course will count toward the minor. Up to two non-Swarthmore courses (i.e., courses taken abroad or domestically) may count toward the major; only one such course is permissible for the minor. The department will accept two courses in language (Arabic, Hebrew, or other proposed research languages) toward the major with the approval of department faculty. The department will accept one course in language (Arabic, Hebrew, or other proposed research languages) toward the minor with the approval of department faculty.

## Admission to the Major

The Religion Department considers two areas when evaluating applications: overall GPA and quality of prior work in religion courses. Applicants are sometimes deferred for a term so the department can better evaluate an application for the major (generally it is expected that students will have taken two courses in religion before being accepted into the major/minor). A student's demonstrated ability to do at least $\mathrm{B} / \mathrm{B}$ - work in religion is required for admission to the major in course.

## Honors Major and Minor

## Requirements

All honors majors and minors fulfill requirements for the Course Program. Beyond this step, the normal method of preparation for the honors major will be done through three seminars, although with the consent of the department, a single 2-credit thesis, a 1-credit thesis/course combination, or a combination of two courses (including attachments and study
abroad options) can count for one honors preparation. In general, only one such preparation can consist of non-seminar-based studies.
In the religion major, the mode of assessing a student's three 2 -credit preparations in religion (seminars or course combinations, but not 2credit theses) will be a three-hour written examination set by an external examiner. In addition, with the exception of a thesis preparation, a student will submit to each external examiner a Senior Honors Study paper. Senior Honors Study papers will be between 2500 and 4000 words and will normally be a revision of the final seminar paper or, in the event of a non-seminar mode of preparation, a revised course paper. A final oral examination by the examiner follows the written exam. 2credit theses will be read and orally examined by an external examiner (with no extra Senior Honors Study requirement).
In the minor, the mode of assessing a student's one 2 -credit preparation in religion will also be a three-hour written examination (and the oral) set by an external examiner, along with a Senior Honors Study paper.
Seminars and the written and oral external examinations are the hallmarks of honors. Seminars are a collaborative and cooperative venture among students and faculty members designed to promote self-directed learning. The teaching faculty evaluates seminar performance based on the quality of seminar papers, comments during seminar discussions, and when required, a final paper. Since the seminar depends on the active participation of all its members, the department expects students to live up to the standards of honors. These standards include: attendance at every seminar session, timely submission of seminar papers, reading of seminar papers before the seminar, completion of the assigned readings prior to the seminar, active engagement in seminar discussions, and respect for the opinions of the members of the seminar. Students earn doublecredit for seminars and should expect twice the work normally done in a course. The external examination, both written and oral, is the capstone of the honors experience.

## Admission to the Honors Program

Because of the nature of different instructional formats (e.g., seminars) and of the culminating exercise in the Honors Program, the department expects applicants to this program to have at least a $\mathrm{B}+/ \mathrm{B}$ average in religion courses as well as an overall average above the College graduation requirement for admission to the Honors Program.

## Application Process for the Major or the Minor

Sophomore Paper applications, and other applications to the religion major or minor, should include (1) a one to two paragraph statement that details the applicant's reason for applying to the department (we encourage curricular breadth and diversity of courses) and (2) all students must complete the "Semester-by-Semester Course Planning" form. This form must be filled out as a supplement to the Sophomore Paper Statement.
Please note: All religion majors must take RELG 095 Religion Café: Senior Symposium in the fall of senior year.

## Transfer Credit

For policy regarding domestic study or any summer study see the Registrar's Office and website: Policies, "Transfer Credit Policy Credit for Work Done Elsewhere."

## Off-Campus Study

In many cases, credit may be earned in the Religion Department for study abroad or at other institutions in this country. Typically, the Religion Department will approve a maximum of 2 religion credits for off-campus study. For international study during the academic year, see the Off-Campus Study Office and website. In addition, students who are seeking credit for study to be completed at other institutions should consult with the Religion Department off-campus study representative prior to enrolling in courses. In order to seek credit for any work completed while away from Swarthmore the general policy is that students must have the Registrar's or Off-Campus Study Office's approval form signed by the Religion Department representative prior to undertaking the course or courses.
Further Notes about International Off-Campus Study:

1. Prior to the international study opportunity, speak with Sharon Friedler, Faculty Adviser for Off-Campus Study, or with Rosa Bernard, Assistant Director for Off-Campus Study, in the Off-Campus Study office. Carefully review all material received from the Off-Campus Study Office.
2. Complete the "Application for PreEstimation of Study Abroad Credit." This will include getting signatures from representatives in departments from which you will be requesting credit.
3. While away, contact the Religion

Department if any changes are made to the preapproved schedule.
4. During your study away from Swarthmore, keep all relevant course material including
syllabi, class notes, papers, and examinations, etc.
5. At the beginning of the semester after your return, meet with an Off-Campus Study Office staff member to organize your materials for evaluation for credit.
6. Complete the "Record of Departmental Materials Submission" (available at the OffCampus Study Office). At the time you submit all supporting documents (e.g., syllabi, papers, examinations, class notes, etc.) to the Religion Department, have this form signed by the Religion Department representative who oversees transfer credit requests in religion.
7. The Religion Department will then consider credit award and will send the student, the Registrar, and the Off-Campus Study Office its decision. At this time, you may pick up your supporting materials in the Religion Department Office.

## Courses

## RELG 001. Religion and Human Experience

This course introduces the nature of religious worldviews, their cultural manifestations, and their influence on personal and social selfunderstanding and action. The course explores various themes and structures seminal to the nature of religion and its study: sacred scripture, visions of ultimate reality and their various manifestations, religious experience and its expression in systems of thought, and ritual behavior and moral action. Members of the department will lecture and lead weekly discussion sections.
Writing course.
1 credit.
Not offered 2011-2012.

## RELG 001C. Religion and Terror in an Age of Hope and Fear

Religion kills: this is the verdict against religion since the September 11, 2001 attacks on the World Trade Center. Since that time, here and abroad, the United States views many forms of religion as potent security threats. Various forms of Judaism, Christianity, and Islam, in particular, are seen as direct challenges to the secular ethos and global mission of late capitalist societies. This team-taught course will offer a counter-narrative to the argument that religion and violence are equivalent terms using the resources of postcolonial theory, critical race theory, sustainability economics, liberation theology, and psychoanalytic theory. No prerequisites.
1 credit.
Not offered 2011-2012.

## RELG 002B. Religion in America

This course is an introduction to religion in the United States, beginning with Native American religions and European-Indian contact in the colonial era, and moving forward in time to present-day movements and ideas. The course will explore a variety of themes in American religious history, such as slavery and religion, politics and religion, evangelicalism, Judaism and Islam in the United States, "cults" and alternative spiritualities, New Age religions, popular traditions, and religion and film, with an emphasis on the impact of gender, race, and national culture on American spiritual life.
1 credit.
Not offered 2011-2012.
RELG 003. The Bible: In the Beginning... The Bible has exerted more cultural influence on the West than any other single document; whether we know it or not, it impacts our lives. This class critically examines the Hebrew Bible (Old Testament)-from its Ancient Near Eastern context to its continued use today. We explore a variety of scholarly approaches to the Bible-historical, literary, postmodern-as we read the Bible both with the tools of sourcecriticism and as cultural critics. Particular focus will be placed on constructions of God, gender, nature, and the "other" in biblical writings as well as the themes of collective identity, violence, and power.
Eligible for GSST credit.
1 credit.
Fall 2011. Kessler.

## RELG 004. New Testament and Early Christianity

A discussion-rich introduction to the New Testament in light of recent biblical scholarship. The class engages the issues of authorship and redaction, purpose and structure, and historical context and cultural setting. Some of the particular themes that are studied include the dynamic of canon formation, the synoptic problem in relation to the Gospel of John, firstcentury Judaism, Greek and Roman influences, the messianic consciousness of Jesus, the use of epistolary literature in Paul, the problem of apocalyptic material, and the wealth of extracanonical writings (e.g., Gospel of Thomas) that are crucial for examining the rise of Christianity in the years from 30 CE to 150 CE . Novels and films inspired by the New Testament are read and viewed as well.
Eligible for INTP credit.
1 credit.
Not offered 2011-2012.

RELG 004B. Jewish Interpretation: From the HolyLand to Hollywood
A famous rabbinic statement proclaims, "If you wish to know The-One-Who-Spoke-and-the-World-Came-Into-Being, learn aggadah" (Sifre Deuteronomy 11:22). This course further proclaims, if you wish to know Judaism, study Jewish interpretation. The process of Jewish interpretation, begun in the Hebrew Bible and continuing to the present day, offers great insight not only into the ways Jewish tradition, literature, and culture have come into being, but also how these facets of Judaism, and Judaism writ large, adapt and develop over time. This class begins with Jewish interpretations during the 2nd Temple Period, proceeds to examine in some depth classical rabbinic exegesis, moves on to explore some "off the beaten track" medieval sources, and culminates in contemporary meditations (and movies) about Judaism. We pay attention to both the continuities and disjunctions of Jewish writings and representations over time as we explore what the boundaries are-if indeed there are anyof both Jewish interpretation and Judaism.
1 credit.
Not offered 2011-2012.

## RELG 005. World Religions

Wars are fought; walls go up; hope marches on. Religion plays a crucial role in culture, politics, global events, and in the lives of contemporary peoples world-wide. This class, by examining what religion is and how it manifests itself in multiple ways around the world and in the United States, provides students with religious literacy and analytic skills to better engage as citizens of the world in the 21st century. This course introduces students to both the academic study of religion and to religions as practiced around the world. We will explore textual traditions and lived practices of religions-and investigate the relationships between such texts and practices-in numerous historical and cultural contexts. Topics covered include: definitions and meanings of the term "religion;" understandings and expressions of the sacred; the relationship between violence and religion. We will examine the myths and rituals, the beliefs and practices, institutions, and expression of global religious traditions.
Eligible for PEAC credit.
1 credit.
Fall 2011. Chireau, Kessler.

## RELG 005B. Introduction to Christianity

This course is a selective introduction to Christian religious beliefs and practices. This course introduces students to the development and diverse forms of Christianity, drawing on
categories from the study of religion including ritual, narrative, art, and theology.
1 credit.
Not offered 2011-2012.
RELG 006. Judaism: God, Torah, Israel
This course explores Judaism through a survey of its history, literature, practices and beliefswith particular emphasis on the concepts of God, Torah, and Israel (the Jewish people). We examine the fundamental historical developments of Judaism from the biblical to modern eras, paying attention to how Judaism has developed and continues to develop over time. We consider the diversity of Judaism as a religion and the diverse expressions of Jewish identity, particularly in their contemporary North American context(s).
1 credit.
Not offered 2011-2012.

## RELG 007B. Women and Religion

This course will examine the variety of women's religious experiences in the United States. Topics will include the construction of gender and religion, religious experiences of women of color, spiritual autobiographies and narratives by women, Wicca and witchcraft in the United States, and feminist and womanist theology.
Eligible for GSST credit.
1 credit.
Not offered 2011-2012.
RELG 008. Patterns of Asian Religions
A thematic introduction to the study of religion through an examination of selected texts, teachings, and practices of the religious traditions of South and East Asia structured as patterns of religious life. Materials are drawn from the Buddhist traditions of India, Tibet, China, and Japan; the Hindu and Jain traditions of India; the Confucian and Taoist traditions of China; and the Shinto tradition of Japan. Themes include deities, the body, ritual, cosmology, sacred space, religious specialists, and death and the afterlife.
Writing course.
Eligible for ASIA credit.
1 credit.
Spring 2012. Hopkins.

## RELG 008B. The Qur'an and Its Interpreters

This is course will include detailed reading of the Qur'an in English translation. The first part of the course will be devoted to the history of the Qur'an and its importance to Muslim devotional life. The first portion of the course will include: discussion of the history of the compilation of the text, the methods used to
preserve it, styles of Qur'anic recitation, and the principles of Qur'anic abrogation. Thereafter, attention will be devoted to a theme or issue arising from Qur'anic interpretation. Students will be exposed to the various sub-genres of Qur'anic exegesis including historical, legal, grammatical, theological and modernist approaches.
Eligible for ISLM credit.
1 credit.
Not offered 2011-2012.

## RELG 009. The Buddhist Traditions of

 AsiaThis course explores the unity and variety of Buddhist traditions within their historical developments in South, Central, and East Asia, by way of the study of its texts The course will be organized chronologically and geographically, and to a lesser extent thematically, focusing on the formations of early Indian Buddhism (the Nikaya traditions in Påli and Sanskrit), the Theravada in Sri Lanka and Thailand, Mahayana Ch'an/Zen traditions in China and Japan, and Vajrayana (tantra) traditions in Tibet. Themes include narratives of the Buddha and the consecration of Buddha images; gender, power, and religious authority, meditation, liberation, and devotional vision; love, memory, attachment and Buddhist devotion; the body, and the social construction of emotions and asceticism.
Writing course.
Eligible for ASIA credit.
1 credit.
Fall 2011. Hopkins.

## RELG 010. African American Religions

What makes African American religion
"African" and "American"? Using texts, films, and music, we will examine the sacred institutions of Americans of African descent. Major themes will include Africanisms in American religion, slavery and religion, gospel music, African American women and religion, black and womanist theology, the civil rights movement, and Islam and urban religions. Field trips include visits to Father Divine's Peace Mission and the first independent black church in the United States, Mother Bethel A.M.E. Church.
Writing course.
Eligible for BLST credit.
1 credit.
Spring 2012. Chireau.

## RELG 011. First-Year Seminar: Religion and the Meaning of Life

"Whoever wants to save their life will lose it, but whoever loses their life for my sake will save it." One of the most intriguing
contradictions in comparative religious studies is the claim that only when one forfeits the self can one discover genuine selfhood; the journey to the true self begins by first abandoning one's assumptions about selfhood through practicing the disciplines of self-emptying and self-giving. In this seminar, we will analyze the collapse of the received notions of the stable self in classical thought and then move toward a postmodern recovery of the self-that-is-not-aself founded on the spiritual practice of solicitude for the other. Readings may include Plato, Augustine, Rumi, Kierkegaard, Weil, Nishitani, Bonhoeffer, Levinas, Thich Nhat Hanh, and Dillard. This discussion-rich seminar includes regular student presentations and a community service-learning component. 1 credit.
Not offered 2011-2012.

## RELG 011B. The Religion of Islam: The Islamic Humanities

This course is a comprehensive introduction to Islamic doctrines, practices, and religious institutions in a variety of geographic settings from the rise of Islam in the seventh century to the present. Translated source materials from the Qur'an, sayings of Muhammad, legal texts, and mystical works will provide an overview of the literary expressions of the religion. Among the topics to be covered are: the Qur'an as scripture and as liturgy; conversion and the spread of Islam; Muhammad in history and in the popular imagination; concepts of the feminine; Muslim women; sectarian developments; transmission of religious knowledge and spiritual power; Sufism and the historical elaboration of mystical communities; modern reaffirmation of Islamic identity; and Islam in the American environment.
Writing course.
1 credit.
Spring 2012. al-Jamil.

## RELG 012. The History, Religion, and Culture of India I: From the Indus Valley to the Hindu Saints

A study of the religious history of India from the ancient Indo-Aryan civilization of the north to the establishment of Islam under Moghul rule. Topics include the ritual system of the Vedas, the philosophy of the Upanishads, the rise of Buddhist and Jain communities, and the development of classical Hindu society. Focal themes are hierarchy, caste and class, purity and pollution, gender, untouchability, world renunciation, and the construction of a religiously defined social order.
Eligible for ASIA credit.
1 credit.
Not offered 2011-2012.

## RELG 012B. Hindu Traditions of India: Power, Love, and Knowledge

This course is an introduction to the religious and cultural history of Hindu traditions of India from the prehistoric Indus Valley in the northwest to the medieval period in the southeast, and major points and periods in between, with a look also at formative points of the early modern period. Our focus will be on the interactions between Vedic, Buddhist, brahmanical, popular/ritual, and Jain religious traditions in the development, and formation of Hindu religious streams, along with major ritual and ascetic practices, hagiographies, and myths, hymns and poetry, and art and images associated with Hindu identities and sectarian formations, pre-modern and modern. In addition to providing students with a grasp of the basic doctrines, practices, and beings (human, superhuman, and divine) associated with various Hindu traditions, the course also seeks to equip them with the ability to analyze primary and secondary sources.
1 credit.
Not offered 2011-2012.

## RELG 013. The History, Religion, and Culture of India II: Muslim, Hindu, Sikh, and Dalit in North India

After a survey of premodern Hindu traditions, the course tracks the sources of Indo-Muslim culture in North India, including the development of Sufi mysticism; Sindhi, Urdu, and Tamil poetry in honor of the Prophet Muhammad; syncretism under Mughal emperor Akbar; and the consolidation of orthodoxy with Armad Sirhindi and his school in the 16th to 17th century. We then trace the rise of the Sikh tradition in the milieu of the Mughals, northern Hindu Sants and mendicant Sufis, popular goddess worship and village piety, focusing on several issues of religious experience. We then turn to the colonial and post-colonial period through the lenses of the Hindu saints, artists, and reformers (the "nationalist elite") of the Bengali Renaissance, and the political and religious thought of Mohandas Gandhi and Dalit reformer Ambedkar. We will use perspectives of various theorists and social historians, from Ashis Nandy, Partha Chatterjee, Peter van der Veer, to Veena Das and Gail Omvedt.

Eligible for ASIA or ISLM credit.
1 credit.
Not offered 2011-2012.

## RELG 014B. Christian Life and Thought in the Middle Ages

Survey of western Christian religious culture and thought from the early to the late Middle Ages. Among other topics, the course will consider debates about the nature of the Divine,
the person and work of Jesus Christ, heresy and dissent, bodily devotion, love, mysticism, scholasticism, and holy persons. Readings may include Augustine, Anselm, Avicenna, Abelard, Hildegard of Bingen, Francis of Assisi, Catherine of Siena, Thomas Aquinas, Julian of Norwich, and John Wyclif.
1 credit.
Not offered 2011-2012.

## RELG 015. First-Year Seminar: Religion and Literature: Blood and Spirit

A seminar-style introduction to study of relation of religious ideas to visionary literature, including novels, stories, sacred texts, and films. A variety of critical theories are deployed to understand (or construct) the meaning of different imaginative variations on reality. Academic and creative writers include many or all of the following: Sophocles, Augustine, Joyce, Morrison, O'Connor, Updike, Dostoevsky, Crace, Lewis, Weil, Scorsese, Kazantzakis, Snyder, Abbey, and Camus.
Eligible for INTP credit.
1 credit.
Not offered 2011-2012.

## RELG 015B. Philosophy of Religion (Cross-listed as PHIL 016)

Searching for wisdom about the meaning of life? Curious as to whether there is a God? Questioning the nature of truth and falsehood? Right and wrong? You might think of philosophy of religion as your guide to the universe. This course considers AngloAmerican and Continental philosophical approaches to religious thought using different disciplinary perspectives; it is a selective overview of the history of philosophy with special attention to the religious dimensions of many contemporary thinkers' intellectual projects. Topics include rationality and belief, proofs for existence of God, the problem of evil, moral philosophy, biblical hermeneutics, feminist revisionism, postmodernism, and interreligious dialogue. Thinkers include, among others, Anselm, Kierkegaard, Dostoevsky, Nietzsche, Kant, Wittgenstein, Derrida, Levinas, Weil, and Abe. This year, the central theme of the course is the problem of evil.
Eligible for INTP credit.
1 credit.
Fall 2011. Ratzman.

## RELG 016. First-Year Seminar: Spiritual Journeys: Into the Wild

What does it mean to take religion "on the road"? How does one "pray with one's feet"? Where is the sacred to be found-on the journey itself or at the place of destination-or
both? What is the sacred anyway? Spiritual journeys-pilgrimages to places old and neware on the rise in contemporary society. By reading a number of accounts of personal spiritual journeys we will travel the landscape of contemporary religious America-with its vibrancy and variety-and consider our own journeys (spiritual or otherwise) along the way. 1 credit.
Not offered 2011-2012.

## RELG 019. First-Year Seminar: Religion and Food

Why do some people eat the body of their god? What is soul food? Is the pig an abomination? Is there such a thing as "devils food" and "angel's food"? Which is more spiritual, to feast or to fast? All of these questions are tied together by a common theme: They point to the relationship between food, eating, and the religious experiences of human beings. This seminar will introduce students to the study of religion, using food as an entry point. We will investigate the significance of food across a variety of traditions and explore such issues as diet, sacrifice, healing, the body, ethics, and religious doctrines concerning food. Topics will include religious fasting, vegetarianism, eating rituals, food controversies, purity and pollution, theophagy and cannibalism as sacred practice. 1 credit.
Fall 2011. Chireau.

## RELG 020B. Christian Mysticism

This course considers topics in the history of Christian mysticism. Themes include mysticism as a way of life, relationships between mystics and religious communities, physical manifestations and spiritual experiences, varieties of mystical union, and the diverse images for naming the relationship between humanity and the Divine. Readings that explore the meaning, sources, and practices of Christian mystical traditions may include Marguerite Porete, Francis of Assisi, Julian of Norwich, Simone Weil, Thomas Merton, and Dorothee Soelle.
Eligible for MDST credit.
1 credit.
Not offered 2011-2012.

## RELG 022. Religion and Ecology

This course focuses on how different religious traditions have shaped human beings' fundamental outlook on the environment in ancient and modern times. In turn, it examines how various religious worldviews can aid the development of an earth-centered philosophy of life. The thesis of this course is that the environment crisis, at its core, is a spiritual crisis because it is human beings' deep ecocidal dispositions toward nature that are the cause of
the earth's continued degradation. Course topics include ecological thought in Western philosophy, theology, and biblical studies; the role of Asian religious thought in forging an ecological worldview; the value of American nature writings for environmental awareness, including both Euro-American and Amerindian literatures; the public policy debates concerning vegetarianism and the antitoxics movement; and the contemporary relevance of ecofeminism, deep ecology, Neopaganism, and wilderness activism. In addition to writing assignments, there will be occasional contemplative practicums, journaling exercises, and a community-based learning component. Eligible for ENVS credit.
1 credit.
Spring 2012. Wallace.

## RELG 023. Living in the Light: Quakers Past and Present

This course explores the beliefs and practices, the social activism, and the impact of Quakers in North America from the 1650s to the present. Topics include Quakers and social reform including peace work, women's rights advocacy, prison reform; Quakers and nature; Quakers and education; and Quaker writings about God, self, and the world. Readings will include the work of George Fox, Margaret Fell, William Penn, John Woolman, John Bartram, Lucretia Mott, Elias Hicks, Elise Boulding, and Rufus Jones. Students will have the opportunity to work with the resources of Swarthmore College's Friends Historical Library and Peace Collection.
Writing course.
Eligible for PEAC credit.
1 credit.
Not offered 2011-2012.

## RELG 024. From Vodun to Voodoo: African Religions in the Old and New Worlds

Is there a kindred spirituality expressed within the ceremonies, beliefs, music and movement of African religions? This course explores the dynamics of African religions throughout the diaspora and the Atlantic world. Using text, art, film, and music, we will look at the interaction of society and religion in the black world, beginning with traditional religions in west and central Africa, examining the impact of slavery and migration, and the dispersal of African religions throughout the Western Hemisphere. The course will focus on the varieties of religious experiences in Africa and their transformations in the Caribbean, Brazil and North America in the religions of Candomblé, Santeria, Conjure, and other New World traditions. At the end of the term, in consultation with the professor, students will
create a web-based project in lieu of a final paper.
Study abroad credit may be available.
Eligible for BLST credit.
1 credit.
Not offered 2011-2012.

## RELG 025B. Black Women and Religion in the United States

This course is an exploration of the spiritual lives of African American women. We will hear black women's voices in history and in literature, in film, in performance and music, and within diverse periods and contexts, and reflect upon the multidimensionality of religious experience in African American women's lives. We will also examine the ways that religion has served to empower black women in their personal and collective attempts at the realization of a sacred self. Topics include: African women's religious worlds; women in the black diaspora; African American women in Islam, Christianity, and New World traditions; womanist and feminist thought; and sexuality and spirituality. Readings include works by: Alice Walker; Audre Lorde; bell hooks; Zora Neale Hurston; Patricia Williams, and others.
No prerequisites.
Eligible for BLST or GSST credit.
1 credit.
Not offered 2011-2012.

## RELG 026. Performing Judaism: Feasts and Fasts

This course introduces students to Judaism as lived-enacted and embodied-through a critical examination of Jewish holiday and lifecycle rituals. We will study the beginnings of Jewish rituals and chart their development throughout centuries of Jewish history, noting how ritual allows Judaism to retain ancient roots and grow new branches. Our discussions will be informed by contemporary scholarship in Performance Studies, Ritual Studies, Gender Studies, and Anthropology. These current approaches will help us compare (and contrast) Jewish rituals with rituals of other religions.
1 credit.
Not offered 2011-2012.

## RELG 027. The Radical Jesus

This class is a discussion-intensive, student-led exercise in the critical study of Jesus that centers on analytical reading and writing; contemplative practice; and community action. Beginning with the joyous and terrifying Gospel of Mark and the recently discovered Gospel of Judas, and continuing with the rise of Constantine, Martin Luther's Ninety-Five Theses, and Dostoevsky's "The Grand

Inquisitor," this class theologically analyzes Jesus today as the mystic-prophet revolutionary who, alternately, is "the first and last Christian" (Friedrich Nietzsche), "the preacher of Christian atheism" (Dietrich Bonhoeffer), "the face of divine affliction" (Simone Weil), "my great brother" (Martin Buber), "the advocate for the disinherited" (Howard Thurman), "the God within each of us" (Thich Nhat Hanh), "the prophet of simplicity" (Shane Claiborne), and "the liberating Corn Mother" (George Tinker). 1 credit.
Spring 2012. Wallace.

## RELG 030B. The Power of Images: Icons and Iconoclasts

This course is a cross-cultural, comparative study of the use and critique of sacred images in biblical Judaism; Eastern Christianity; and the Hindu, Buddhist, and Jain traditions of India. Students will explore differing attitudes toward the physical embodiment of divinity, including issues of divine "presence" and "absence"; icons, aniconism, and "idolatry"; and distinctions drawn in some traditions between different types of images and different devotional attitudes toward sacred images, from Yahweh's back and bleeding icons to Jain worship of "absent" saints.
Eligible for ASIA credit.
1 credit.
Spring 2012. Hopkins.

## RELG 031B. Religion and Literature: From the Song of Songs to the Hindu Saints

A cross-cultural, comparative study of religious literatures in Jewish, Christian, Islamic, and Hindu traditions. How "secular" love poetry and poetics have both influenced and been influenced by devotional poetry in these traditions, past and present.
1 credit.
Not offered 2011-2012.

## RELG 032. Queering God: Feminist and Queer Theology

The God of the Bible and later Jewish and Christian literature is distinctively masculine, definitely male. Or is He ? If we can point out places in traditional writings where God is nurturing, forgiving, and loving, does that mean that God is feminine, or female? This course examines feminist and queer writings about God, explores the tensions between feminist and queer theology, and seeks to stretch the limits of gendering - and sexing - the divine. Key themes include: gender; embodiment; masculinity; liberation; sexuality; feminist and queer theory.

Eligible for GSST or INTP credit.
1 credit.
Spring 2012. Kessler.

## RELG 036. Christian Visions of Self and Nature

This course is a thematic introduction to Christianity. Beginning with early Christian writings and moving historically up through the contemporary period, we will explore a wide variety of ideas about God, self, and nature. Readings will focus on scientific and natural history treatises in dialogue with theological texts. We will explore the writings of Christian naturalists to study the linking of science and religion, and we will investigate a multiplicity of views about Christian understandings of the relationship between the human and non-human world. This class includes a community-based learning component: Students will participate in designing and teaching a mini-course on "Nature and Chester" to students in the nearby community of Chester. Readings include Aristotle (critical for understanding science in the later Middle Ages), Hildegard of Bingen, Roger Bacon, Galileo Galilei, Charles Darwin, Herman Melville, Ralph Waldo Emerson, John Muir, Graceanna Lewis, Thomas Berry, Nalini Nadkarni, and Terry Tempest Williams. 1 credit.
Not offered 2011-2012.

## RELG 038. Religion and Film

An introductory course that uses popular film as a primary text/medium to explore fundamental questions in the academic study of religion. In particular, we will be concerned with the ways that religion and religious experience are constituted and defined on film as well as through film viewing. In discussing films from across a range of subjects and genres, we will engage in the work of mythical, theological and ideological criticism, while examining the nature, function, and value of religion and religious experience. We will also consider some of the most significant writers and traditions in the field of Religion and develop the analytical and interpretive skills of the discipline. Scheduled films include The Seventh Seal, The Matrix, Breaking the Waves, Contact, Jacob's Ladder, The Passion of the Christ, The Rapture, The Apostle, as well as additional student selections. Weekly readings, writing assignments, and evening screening sessions are required.
1 credit.
Spring 2012. Chireau.

## RELG 053. Gender, Sexuality, and the Body in Islamic Discourses

An exploration of sexuality, gender roles, and notions of the body within the Islamic tradition
from the formative period of Islam to the present. This course will examine the historical development of gendered and patriarchal readings of Islamic legal, historical, and scriptural texts. Particular attention will be given to both the premodern and modern strategies employed by women to subvert these exclusionary forms of interpretation and to ensure more egalitarian outcomes for themselves in the public sphere. Topics discussed include female piety, marriage and divorce, motherhood, polygamy, sex and desire, honor and shame, same-sex sexuality, and the role of women in the transmission of knowledge.
Eligible for GSST, ISLM, or MDST credit.
1 credit.
Fall 2011. al-Jamil.

## RELG 054. Power and Authority in Modern Islam

This course examines some of the salient issues of concern for Muslims thinkers during the modern period (defined for the purposes of this course as the colonial and post-colonial periods). Beginning with discussion of the impact of colonialism on Islamic discourses, the course moves on to address a number of recurrent themes that have characterized Muslim engagement with modernity. Readings and/or films will include religious, political, and literary works by Muslims in variety of cultural and linguistic settings. Topics to be discussed will include: nationalism and the rise of the modern nation-state, questions of religion and gender, the Israeli-Palestinian conflict, developments in Islam in the United States and Canada, and case studies of reformist and revivalist movements in the modern nationstates of Iran, Iraq, Afghanistan, Pakistan, and Saudi Arabia. Special attention will be paid to contemporary Muslim responses to feminist critiques, democracy, pluralism, religious violence, extremism, and authoritarianism. Eligible for ISLM credit.
1 credit.
Not offered 2011-2012.

## RELG 057. Hebrew for Text Study I

 (Cross-listed as LING 007)What does the Bible really say? Have you ever noticed how radically different the Hebrew Bible seems in different translations? If you want to understand the enigma of this text, if you want to experience it through your own eyes, if you want to plumb its depths, appreciate its beauty, confront its challenges, and understand its influence, you must read it in Hebrew. In this course, you will learn the grammar and vocabulary required to experience the Hebrew Bible and ancient Hebrew commentaries in the original language. You
will learn to use dictionaries, concordances, and translations to investigate word roots and to authenticate interpretations of the texts. In addition to teaching basic language skills, this course offers students the opportunity for direct encounter with primary biblical, rabbinic, and Jewish liturgical sources. No experience necessary. If you already have some Hebrew competence, contact the instructor for advice. 1 credit.
Spring 2012. Plotkin.

## RELG 059. Hebrew for Text Study II

(Cross-listed as LING 010)
This course is a continuation of Hebrew for Text Study I. Students who have not completed that course will require the permission of the instructor to enroll in this course.
This set of courses teaches the grammar and vocabulary required to experience the Hebrew Bible and ancient Hebrew commentaries in the original language. You will learn to use dictionaries, concordances, and translations to investigate word roots and to authenticate interpretations of the texts. In addition to teaching basic language skills, this course offers students the opportunity for direct encounter with primary biblical, rabbinic, and Jewish liturgical sources.
1 credit.
Not offered 2011-2012.

## RELG 067. Judaism and Nature

"We are not obligated to complete the task; neither are we free to abstain from it." (Pirke Avot 2:21) The task before us is to examine the relationship(s) between Judaism and Nature. We are setting out to decide-or at least ponder-the following questions (though we will surely encounter more along the way): What does Jewish literature from the Garden of Eden to the present day say about the earth and humanity's relationship with it? Because of the growing awareness about current ecological concerns and crises, Jewish tradition is being mined-or cultivated-for historical precedents that reflect ecologically sound models of Jewish living. How fruitful is this process? To what extent can contemporary Jews rely on tradition to provide such models, and to what extent must Jews today find new ways of bringing humanity and nature together?
1 credit.
Not offered 2011-2012.

## RELG 093. Directed Reading: Readings in Classical Jewish Text

Section 01.
0.5 credit.

Fall 2011. Plotkin.

## RELG 093. Directed Reading

Section 02.
1 credit.
Fall 2011 and spring 2012. Staff.

## RELG 095. Religion Café: Senior Symposium

This seminar is a weekly symposium for senior majors addressing some of the major themes, theories, and methods in the academic study of religion. The seminar will highlight the inherently multidisclipinary nature of religious studies by reading scholars from several disciplines who have influenced certain theoretical and philosophical assumptions and vocabularies in the field. The seminar will examine a number of approaches to religious studies including, but not limited to, those drawn from: post-structuralism, gender studies, critical theory, cognitive science,
phenomenology, ethics, pragmatism, social history, and anthropology.
1 credit.
Fall 2011. al-Jamil.

## RELG 096. Thesis

Writing course.
1 credit.
Staff.

## Seminars

## RELG 100. Holy War, Martyrdom, and Suicide in Christianity, Judaism, and Islam

An examination of the concepts of martyrdom, holy war, and suicide in Islam, Christianity, and Judaism. How are "just" war, suicide, martyrdom presented in the sacred texts of these three traditions? How are the different perspectives related to conceptions of death and the afterlife within each tradition? Historically, how have these three traditions idealized and/or valorized the martyr and/or the "just" warrior? In what ways have modern post-colonial political groups and nationalist movements appropriated martyrdom and holy war in our time?
Eligible for ISLM or PEAC credit.
2 credits.
Spring 2012. al-Jamil.

## RELG 101. Jesus in History, Literature, and Theology <br> This seminar explores depictions of Jesus in narrative, history, theology, and popular culture. We consider Jesus as historical figure, trickster, mother, healer, suffering savior, visionary, embodiment of the Divine, lover,

victorious warrior, political liberator, and prophet.
2 credits.
Not offered 2011-2012.
RELG 102. Folk and Popular Religion
This seminar investigates the cultural complexity of the American religious experience through the lens of folk and popular traditions. We will utilize historical, anthropological, and literary approaches to explore folk Catholicism in the United States, local religious celebrations, 19th- and 20thcentury popular movements, and folk art and other material representations of religion. Topics include serpent handling in Appalachia; American consumerism as religion; heterodox spiritualities in America; Marian shrines and spirit apparitions; and black Gods and racial folk religions.
2 credits.
Not offered 2011-2012.

## RELG 108. Poets, Saints, and Storytellers: The Poetry and Poetics of Devotion in South Asian Religions

A study of the major forms of Hindu religious culture through the lenses of its varied regional and pan-regional literatures, with a focus on the literature of devotion (bhakti), including comparative readings from Buddhist and Islamic traditions of India. The course will focus on both primary texts in translation (religious poetry and prose narratives in epic and medieval Sanskrit, Tamil, Kannada, Bengali, Hindi, Pali, Sinhala, Sindhi, and Urdu) as well as pertinent secondary literature on the poetry and poetics of religious devotion. We will also pay close attention to specific literary forms, genres, and regional styles, as well as the performance (music and dance) and hagiographical traditions that frame the poems of Hindu saint-poets, Buddhist monks, and Muslim mystics. Along with a chronological and geographical focus, the seminar will be organized around major themes such as popular/vernacular and "elite" traditions; the performance and ritual contexts of religious poetry; the place of the body in religious emotion; love, karma, caste, and family identity; asceticism and eroticism; gender and power; renunciation and family obligations.
Eligible for ASIA credit.
1 credit.
Not offered 2011-2012. Hopkins.
RELG 109. Afro-Atlantic Religions
This seminar explores the historical experiences of the millions of persons who worship African divinities in the West. We will consider the
following questions: How were these religions and their communities created? How have they survived? How are African-based traditions perpetuated through ritual, song, dance, drumming, and healing practices? Special attention will be given to Yoruba religion and its New World offspring, Santeria, Voodoo and Candomblé.
Eligible for BLST or LAS credit. 2 credits.
Fall 2011. Chireau.

## RELG 110. Religious Belief and Moral Action

The seminar will explore the relationship between religion and morality. Basic moral concepts in Buddhism, Christianity, Judaism, Taoism, Islam and Hinduism will be studied in relationship to their cosmological/theological frameworks and their historical contexts. The course will analyze concepts of virtue and moral reasoning, the religious view of what it means to be a moral person, and the religious evaluation of a just society.
Eligible for PEAC credit.
2 credits.
Not offered 2011-2012.

## RELG 112. Postmodern Religious Thought

This seminar asks whether religious belief is possible in the absence of a "transcendental signified." Topics include metaphysics and theology, the death of God, female divinity, apophatic mysticism and deconstruction, ethics without foundations, the question of God beyond Being, and analogues to notions of truth in ancient Buddhist thought. Readings include Eckhart, Kierkegaard, Nietzsche, Wittgenstein, Derrida, Nagarjuna, Nishitani, Ricoeur, Marion, Rorty, Loy, Taylor, Panikkar and Vattimo.
Eligible for INTP credit.
2 credits.
Not offered 2011-2012.

## RELG 114. Love and Religion

The course will explore the concept of "love" and many of its ramifications in several western traditions and in Hindu traditions of ancient and contemporary India through a careful reading of both primary and secondary texts. We will focus primarily on the uses of erotic love (along with the body and the "passions") in religious discourse-in poetry, commentary, and prose narratives - the many ways passionate love and/or sexuality are used cross-culturally to describe the relationship between the human and the divine. We will also explore other emotions and attitudes evoked by the word love: devotion, affection, friendship, "charity" (caritas), parental love, and the tensions of these
forms of "love" with erotic love. Along with primary texts from the Greek, Jewish, Christian, Islamic, secular troubadour, and Hindu traditions, we will explore the theoretical writings of Martha Nussbaum, Peter Brown, David Halperin, Julia Kristeva, David Biale, Daniel Boyarin, Caroline Walker Bynum, Henry Corbin, Michael Sells, A.K. Ramanujan, Wendy Doniger, David Shulman, and Margaret Trawick. Such a thematic treatment of what we in the English-speaking West call "love" brings to the fore many important theoretical questions concerning the cultural construction of emotions, particular love and "ennobling virtues," the erotic life, the body, and religion. Eligible for GSST credit.
2 credits.
Not offered 2011-2012.

## RELG 119. Islamic Law and Society

A survey of the history of Islamic law and its developments, with particular attention to the ways Islamic legal principles were formed, organized, operated in practice, and changed over time. It will focus on issues in Islamic legal theory, methodology, constitutional law, personal law, and family law that have had the greatest relevance to our contemporary world. This course functions as a basic introduction to the Islamic legal system in its pre-modern and contemporary forms. The course will also provide comparative discussion of the contrasts between Islamic legal theory and positive law and European and American legal and constitutional thought.
Eligible for ISLM credit.
2 credits.
Not offered 2011-2012.

## RELG 126. The Poetry and Prophesies of William Blake

This course focuses on the lyric poems, extended epic cycles, and illuminated books of one of the most unique poets in English literature, William Blake (1757-1827). We will do a close reading of the poetry and images of the major works of Blake, with the help of textcritical, theoretical and historical perspectives, views of the body, innocence, experience, sexuality, the "margins" of literature; selfhood, self-giving, and "the gift of death" in the late prophetic books. Along with published books of the designs and extended commentaries on the illuminated books by David Erdman, images, bibliographies, and other resources from the online "Blake Archive" of Eaves and Viscomi will be used for "close reading" of Blake's illuminated books and visionary designs.
2 credits.
Fall 2011. Hopkins.

RELG 127. Secrecy and Heresy
This seminar will explore religious literature, bodily practices, and social behaviors associated with the performance of secrecy in various geographical, historical, and political contexts. Religious communities have often employed secrecy as a strategy for the maintenance of group solidarity and religious identity when faced with allegations of heresy. Secrecy functions not only as a means to subvert and undermine the marginalization of religious minorities but as a powerful tool for the creation of more egalitarian possibilities through preservation of privileged knowledge and the presence of internally shared though externally undisclosed social and religious connections. What kinds of religious secrets are meant to be safeguarded? What set of behaviors and strategies are required to keep these "secrets" or sustain adopted personas? Is religious secrecy merely a tactic for ensuring survival in the context of social marginalization and political persecution? What is the relationship between secrecy and suspicion? Is it necessary that what one wishes to conceal is inherently negative, pernicious or even heretical?
Eligible for ISLM credit.
2 credits.
Not offered 2011-2012.
RELG 128. Sex, Gender, and the Bible
The first two chapters of the biblical book of Genesis offer two very different ancient accounts of the creation of humanity and the construction of gender. The rest of the book of Genesis offers a unique portrayal of family dynamics, drama and dysfunction, full of complex and compelling narratives where gender is constantly negotiated and renegotiated. In this class, we will engage in close readings of primary biblical sources and contemporary feminist and queer scholarship about these texts, as we explore what the first book of the Bible says about God, gender, power, sexuality, and "family values."
Eligible for GSST or INTP credit.
2 credits.
Spring 2012. Kessler.

## RELG 180. Senior Honors Thesis

1 credit.
Fall 2011. Staff.
RELG 180S. Senior Honors Thesis
Writing course.
1 credit.
Spring 2012. Staff.

## RELG 199. Senior Honors Study

0.5 credit.

Staff.

JOY CHARLTON, Professor of Sociology ${ }^{4}$
MICHAEL L. MULLAN, Professor of Sociology ${ }^{2}$
BRAULIO MUÑOZ, Professor of Sociology
FARHA N. GHANNAM, Associate Professor of Anthropology
LEE A. SMITHEY, Associate Professor of Sociology ${ }^{2}$
SARAH WILLIE-LEBRETON, Associate Professor of Sociology, Chair
MICHAEL REAY, Assistant Professor of Sociology ${ }^{3}$
CHRISTINE SCHUETZE, Assistant Professor of Anthropology
REBEKAH MASSENGILL Visiting Assistant Professor of Sociology
MAYA NADKARNI, Visiting Assistant Professor of Anthropology
ELIZABETH A. FALCONI, Visiting Instructor of Anthropology
NINA JOHNSON, Pre-Doctoral Fellow and Visiting Instructor of Sociology and Black Studies ROSE MAIO, Administrative Coordinator
${ }^{2}$ Absent on leave, spring 2012.
${ }^{3}$ Absent on leave, 2011-2012.
${ }^{4}$ Absent on administrative leave, 2011-2012.

The Sociology and Anthropology Department provides students with intellectual tools for understanding contemporary and historical social issues, such as globalization, nationalism, racism, sexism, bioethical decisions, and the complex layering of social inequalities in everyday life. These two disciplines approach the study of social life from different avenues, each bringing a set of separate and overlapping analytical and research tools to intellectual tasks that are complementary and synergistic. Our students seek knowledge about societies of the world and the social dynamics within them. To that end, our majors each conduct independent projects based on primary research and/or fieldwork during their senior year.
Sociology and anthropology often analyze experiences at the level of the individual or the group and connect them to larger social dynamics. The disciplines illustrate how matters that are often perceived as "private troubles" are actually consequences of social structures, including those that appear and feel natural and inevitable. Among the goals of sociology and anthropology are to acquire knowledge about different groups, systems, and societies and to engage critically with the complexities of social life.
The Sociology and Anthropology Department offers a course major, honors major and minor, and several special majors, but no course minor.

## The Academic Program <br> Course Major

Applicants for the major normally have completed at least two courses in the department. Courses numbered SOAN 001 to 020 serve as points of entry for students wishing to begin work in the department and normally serve as prerequisites to higher-level work in the department (SOAN 021-099).
(Some higher courses may, however, with
permission of the instructor, be taken without prerequisite.) Seminars are numbered SOAN 100 to 199.

## Requirements

Course majors are required to take eight units of work in the department; of the eight, five are assigned. Assigned courses include SOAN 012M Exemplary Studies in Sociology and Anthropology (optimally taken during the sophomore year), (at least) one designated theory course, (at least) one designated methods course (STAT 011 Statistical Methods) and a two-credit senior thesis.

## Culminating Exercise/Comprehensive Examination

In order to graduate, all course majors must complete a two-credit senior thesis.

## Acceptance Criteria

For course majors, the department usually looks for at least a C average overall and at least a C average for work in the department.

## Course Minor

The Sociology and Anthropology Department does not offer a course minor.

## Honors Major

## Requirements

Students pursuing an honors major are required to complete at least nine SOAN credits, five of which are assigned: SOAN 012M Exemplary Studies in Sociology and Anthropology (optimally taken during the sophomore year), (at least) one designated theory course, (at least) one designated methods course (STAT 011 Statistical Methods) and a two-credit senior thesis. In addition, two, 2 credit preparations may be seminars, or, with permission, a course plus attachment, or paired upper-level courses, or study abroad.

Honors preparations include:

1. Three honors preparations in Sociology and Anthropology, of which one must be a double credit thesis. The other two may be a seminar, course plus attachment, paired upper level courses, or in special circumstances, study abroad. The latter three forms of preparation must have the advance approval of the supervising faculty member and of the department.
2. For thesis preparations: the thesis will be sent (the last day of April in your senior year) to and read by an external examiner, who will also administer an oral exam in the traditional manner. These will be the bases for the examiner's evaluation of the thesis.
3. For non-thesis preparations: evaluations will be in the form of written assignments or examinations given by the external examiners and completed by honors students at the end of the senior year. External examiners will also administer oral examinations in the traditional manner.
4. In lieu of one of the three honors preparations specified above, majors may propose other work as the basis for an honors preparation. Acceptance will be at the discretion of the department.

## Acceptance Criteria

Applicants for the Honors Program (majors and minors) will usually be expected to have completed at least two courses in the department outside the honors preparations, to have at least a B average overall and grades of at least $B$ for work taken in the department.
The department will evaluate the progress of students writing Senior Honor Thesis before the end of November. If progress is deemed inadequate, the student will be asked to withdraw from honors.

## Honors Preparation with Attachments

Students wishing to prepare for honors through a course plus an attachment must obtain permission from the instructor. Honors preparation will consist of the following materials: a) the syllabus for the course. b) the bibliography for the attachment, and c) written materials as requested by the instructor. The syllabus, the bibliography for the attachment, plus the written materials will be forwarded to the external examiner. The external examiner will be asked to prepare a written examination based on the material as a unified whole. An oral examination will follow.

## Honors and Off-Campus Study

There are a number of ways in which study abroad can be either integral or complementary to a major in sociology and anthropology. These include, but are not restricted to, the
development of an honors preparation from work abroad and preparation for the senior thesis. To explore study abroad possibilities, students are encouraged to consult with the chair of the department.
Students who contemplate basing an honors preparation on off-campus study work must seek the department's conditional approval for this, before undertaking the off-campus study. Upon returning from abroad, students must request departmental approval of the honors preparation based on work done abroad. To do this, students must submit to the department all materials done abroad, including syllabi and written work, which are intended to be part of the honors preparation. Upon review of these materials, the department will notify the student as to whether or not the proposed honors preparation is approved. Students should expect approval of only one honors preparation which includes off-campus study.

## Honors Minor

Students seeking to do an Honors minor normally complete at least five SOAN credits, three of which are assigned: "Exemplary Studies in Sociology and Anthropology," (at least) one designated theory course, (at least) one designated methods course.
Minors in the Honors Program must complete one two-credit preparation: a seminar or a thesis, or with permission paired courses.

The Honors Minor preparations include: 1. One honors preparation in SOAN, selected from the menu presented in (1), above.
2. Depending on the format of the presentation, the examiner will receive the materials described in (2) and (3), above. The minor student's work for this preparation will be the same as the major student's work.

## Requirements

Applicants for the Honors Program (majors and minors) will usually be expected to have completed at least two courses in the department outside the honors preparations, to have at least a B average overall and grades of at least $B$ for work taken in the department.
The department will evaluate the progress of students writing Senior Honor Thesis before the end of November. If progress is deemed inadequate, the student will be asked to withdraw from Honors.

## Acceptance Criteria

Applicants for the Honors Program (majors and minors) will usually be expected to have completed at least two courses in the department outside the honors preparations, to have at least a B average overall and grades of at least $B$ for work taken in the department.

## Special Major

Most Special Majors need to be anchored in a home department. When a student anchors their special major in the department of Sociology and Anthropology they must fulfill the requirements below. In many cases, the best option is pursuing a course major, since the department is not required to approve a Special Major application.

## Requirements

- In SOAN, we normally require five SOAN credits to be a home department. One credit must be "Exemplary Studies in Sociology and Anthropology," (at least) one designated theory course, (at least) one designated methods course and a two-credit senior thesis.
- Four credits from outside of the department must be included as part of the special major.
- In putting together the special major, it is advisable that the student only designate ten courses as part of the major. That way there will be no problems with the 20 -course rule.


## Culminating Exercise/Comprehensive Examination

In order to graduate, all special majors must complete a two-credit thesis.

## Acceptance Criteria

The department usually looks for at least a C average overall and at least a C average for work in the department.

## Thesis / Culminating Exercise

The 2-credit senior thesis requirement, normally completed in the fall and spring semesters of the senior year, includes the Thesis Writers Masters Class and a thesis tutorial in which the student works closely with a faculty adviser.

## Application Process Notes for the Major or the Minor

Students intending to major or minor in sociology/anthropology must submit a
Sophomore Paper application to the department office.

## Advanced Placement/International Baccalaureate Credit

Considered on a case-by-case basis for majors and minors.

## Transfer Credit

Considered on a case-by-case basis for majors and minors.

## Off-Campus Study

Because of its strong cross-cultural and transnational orientations, the department encourages students to study abroad. For many, study abroad provides a basis for their senior thesis project (see the department's homepage for a listing of students' projects). The senior thesis project allows students to develop their research interests through working directly with a faculty member. This combination of breadth of knowledge, global understanding, and independent research make sociology and anthropology an ideal liberal arts major.

## Research and Service-Learning Opportunities

Students have the opportunity to conduct original research with faculty-whose approaches run the gamut from ethnography to textual analysis to survey research. Students also explore the historical development of sociology and anthropology. Research design and statistical analysis are an important component of many academic programs, enabling students to undertake rigorous research projects and best analyze, interpret, and communicate their findings. The curriculum also provides opportunities for students to learn techniques to creatively convey their work through photography and documentary films.
Experiential learning is an important component of much work in sociology and anthropology. Our department strongly supports participation in study abroad as well as work in the field. For many students, these experiences challenge them to ask questions that eventually serve as foundation of their senior thesis project. Summer funding opportunities exist and are particularly relevant for juniors planning research towards their senior thesis projects. Study aboard and fieldwork provide an opportunity for students to develop contacts and gain rapport within their eventual research setting. Funding is available from the department and the College to support students in their pursuit of these experiences.
The Sociology and Anthropology Department emphasizes independent research. We prepare students to conduct research on primary and secondary documents as well as to conduct interviews, engage in participant observation, organize focus groups, administer surveys, and produce ethnographic films. By senior year, our students are ready to write a senior thesis that is not only based on library research but also in real-world experience. Recent student research projects have focused on issues such as alternative development programs in Latin America, immigration policies in the United States, and human rights in Africa. Independent
research conducted by our students is one feature that consistently distinguishes them when they are pursuing jobs, fellowships, or graduate school admission.

## Summer Opportunities

Grants from a variety of college-administered sources are available to support research by students during the summer. Please look at our website for information about our extensive and generous funds for travel, research, internships, and faculty/student collaboration.
We encourage our juniors to explore these possibilities. Each year for the past several years, some of our majors have been awarded these grants and, in most cases, the summer research done under their auspices has been the basis for fine senior theses.

## Teacher Certification

Each year, in conjunction with the Educational Studies Department, a number of our majors seek teacher certification. Students contemplating teacher certification would normally schedule their program in a semester which does not conflict with their senior thesis. Such programs should be developed in close consultation with advisers in the Educational Studies Department.

## Courses

Note: Course labeling within each of the three tiers of offerings-introductory courses [SOAN 001-019], regular courses [SOAN 020-099] and seminars [SOAN 100-199]-reflect internal departmental codes rather than levels of advancement or particular research areas. Please consult the listings for prerequisites particular to each course.

## SOAN 002D. First-Year Seminar: Culture and Gender

The aim of this first-year seminar is to dismantle many of our commonplace assumptions about gender, sexuality, and sexual difference. It introduces the study of gender theory and anthropology by bringing key theoretical texts by Foucault, Butler, and others into conversation with recent ethnographies that have responded to, problematized, or advanced these theoretical claims. Central to our investigation is the gendered body as the site of specific paradigms of power and resistance, in contexts that range from the colonial empire to present-day labor inequalities, and from technologies of reproduction to drag performances of femininity.
Theory course.
Eligible for GSST credit.
1 credit.
Spring 2012. Nadkarni.

## SOAN 002E. Anthropology of Mass Media

This course is an introduction to the anthropology of modernity and the massmediation of modern forms of knowledge. It examines how the emergence of mass media has produced new kinds of subjects, social relations, and ways of narrating and interpreting modern social life: from novel images of national community to mass experiences of crime, war, and violence. Along the way, the course also asks the impact of new media technologies on the theory and practice of anthropology itself, and how such technologies force us to re-imagine identity, community, and locality.
Theory course.
Eligible for FMST credit.
1 credit.
Not offered 2011-2012. Nadkarni.

## SOAN 003F. Culture and Religion in Africa

In this course, we will explore the powerful interplay between religion, politics, and culture in Africa. Students engage in exploration of a wide range of topics designed to provide a historical and geographical overview of religious practices in different regions of subSaharan Africa. In our readings and in class discussions, we will pay close attention to how world views and systems of meaning shape actions and attitudes, and focus our anthropological eye on the practices of daily life: the material conditions and day-to-day routines of living. Throughout the course, we will consider the usefulness of the term "religion" itself, as we examine how daily practices that emerge in and through religious practices in Africa transcend Western distinctions between "religion," "politics," "economics," and "society."
Eligible for BLST credit.
1 credit.
Spring 2012. Schuetze.

## SOAN 003G. First-Year Seminar:

## Development and its Discontents

In this course, our goal will be to gain a new perspective on an often unquestioned social "good": that of international economic development, including foreign aid to countries in the global south. This course will provide students with an introduction to the origin and evolution of ideas about development, and will encourage them to examine major theories and approaches to development from classical modernization theories to world-systems theories. Students will gain insight into how ideas of development fit into larger global dynamics of power and politics and how, contrary to professed goals, the practices of
international development have often perpetuated poverty and widened the gap between rich and poor. During the course, we will investigate these issues through an array of texts that address different audiences including a novel, academic books and journals, film, popular writings and ethnographic monographs. Writing course and theory course.
Eligible for BLST credit.
1 credit.
Spring 2012. Schuetze.

## SOAN 003H. Introduction to Africa

Popular films, academic studies and the media often convey a view of Africa and Africans through stereotypical images of war, famine and disease. However, this course offers students a view of Africa as a complex, significant, and richly diverse continent. This course presents students with an introduction to history, politics and cultures of sub-Saharan Africa through various media, including academic writing, literature, films, and music. In the course, we will examine important historical developments in Africa before the arrival of Europeans and analyze the reshaping of Africa's political economy during the colonial period. After considering the contentious legacies of the Atlantic slave trade and the colonial era, we will explore challenges facing independent Africa. We will also discuss historical links between Africa and the world, as well as contemporary Western attitudes towards Africa.
Eligible for BLST credit.
1 credit
Not offered 2011-2012. Schuetze.

## SOAN 004B. First-Year Seminar: Introduction to Contemporary Social Thought

A general introduction to major theoretical developments in the study of social life since the 19th century. Selected readings will be drawn from the work of such modern social theorists as Marx, Weber, Durkheim, Freud, and Simmel. Readings from contemporary authors such as Geertz, Goffman, Adorno, and Arendt will also be included. These
developments will be studied against the background of the sociophilosophical climate of the 19th century.
Theory course.
1 credit.
Fall 2011. Muñoz.
SOAN 006D. Culture and Poverty in the American Ghetto
When Hurricane Katrina devastated New Orleans in 2005, numerous onlookers proposed that one positive outcome may be that the city's
"decrepit institutions" and "disorganized neighborhoods" could be rebuilt in ways that undermined the "the culture of poverty." Yet the concept of a "culture of poverty" deserves close scrutiny and empirical study. This introductory level course introduces students to key works that examine the relationship between culture, poverty, and neighborhood through the analysis of social problems such as violence, unemployment, and nonmarital childbearing. Also explored will be how poverty and place can influence individuals' interactions with key social processes and institutions such as schools, labor markets, and the criminal justice system.
1 credit.
Fall 2011. Massengill.

## SOAN 006E. Sociology of Religion

Some of the questions that sociologists of religion ask in contemporary society include what people believe, how religion is organized, and how religion affects various aspects of social life. These questions become ever more important in light of religion's diverse significance today: for instance, religious organizations provide assistance to the needy, help immigrants maintain ethnic identity, and offer ideals of gender appropriate roles for their followers; some religious extremists even see the use of violence as appropriate to change the course of human events. In this introductory level course, we will explore religion from a variety of vantage points and consider the influence of religion in areas of social life that include family, race, immigration, and politics. 1 credit.
Spring 2012. Massengill.

## SOAN 007B. Introduction to Race and Ethnicity in the United States

This course uses classic ethnographies, current race theory, and journalistic accounts to examine the experiences of selected ethnic groups in the United States and to investigate theories of racism, the meaning of race and ethnicity in the 20th century, and contemporary racialized public debates over affirmative action, welfare, and English-only policies. Theory course.
Eligible for BLST credit.
1 credit.
Spring 2012. Johnson.

## SOAN 007C. Sociology Through African American Women's Writing

Interrogating the explicit and implicit claims that black women writers make in relation to work by social scientists, we will read texts closely for literary appreciation, sociological significance, and personal relevance, examining especially issues that revolve around race,
gender, and class. Of special interest will be where authors position their characters vis-à-vis white supremacy, patriarchy, capitalism, and the United States.
Eligible for BLST or GSST credit. 1 credit.
Not offered 2011-2012. Willie-LeBreton.

## SOAN 008F. First-Year Seminar: Technology and Humanity

It sometimes seems as if science and technology tend to replace communal understanding and human relationships. Historical and social scientific investigations suggest this is an illusion however; technology has always been shaped by and embedded in personal connections, group struggles, and cultural understandings. The real danger in fact lies in letting false impressions of technological dominance create unnecessary inequality and oppression. The class will explore this topic using examples such as the development of modern industry, the construction of railroads, the risks of nuclear catastrophe, the digital divide, and the development of online identities. 1 credit.
Not offered 2011-2012. Reay.

## SOAN 009C. Cultures of the Middle East

Looking at ethnographic texts, films, and literature from different parts of the region, this class examines the complexity and richness of culture and life in the Middle East. The topics we will cover include orientalism, colonization, gender, ethnicity, tribalism, nationalism, migration, nomadism, and religious beliefs. We will also analyze the local, national, and global forces that are reshaping daily practices and cultural identities in various Middle Eastern countries.
Eligible for ISLM credit.
Writing course.
1 credit.
Fall 2011. Ghannam.

## SOAN 009E. First-Year Seminar: Social

 Action and Social ResponsibilityWe will explore the conditions and consequences of various types of effort to bring about positive social change, using theory and case studies from sociology and anthropology; class visits from individuals working directly with different strategies for social change; and off-campus opportunities for students to learn from groups and individuals dedicated to activism and service.
1 credit.
Spring 2012. Charlton.

## SOAN 010C. The Social Development of Sport

The course is designed as an introduction to the subfield of sport sociology. The primary focus of the course will rest on the developmental history of the institution of Western sport and the principal analytical frameworks constructed to explain its origins. Although the historical and theoretical material is centered on European developments, contemporary issues and debates on the relationship of gender, race, and ethnicity to sport will concentrate on American society. Readings will be drawn from the work of sociologists and historians working directly in sport studies.
1 credit.
Not offered 2011-2012. Mullan.
SOAN 010H. The Tribal Identity of Sport: Nationalism, Ethnicity, and the Rise of Sport in the Modern Era
This course focuses on the development of modern sport of multiple levels of analysis. First, it is a primer on the descriptive facts of sport development in the late 19th and early 20th centuries and the social theory employed to study it. Second, it is more detailed at the connections between nationalism and sport, the nexus of national, communal association with sporting achievement as a social mechanism in the construction of group identity. 1 credit.
Not offered 2011-2012. Mullan.

## SOAN 010J. War, Sport, and the Construction of Masculine Identity

 The course will concentrate on the themes of sport and war and the historical construction of male identity. Our culturally endorsed ideals of manhood are related to tests of skill and physical exertion. The influence of the sport/warrior ethic on modern sensibilities will take us to 19th-century England and the United States as these nations grappled with the meaning of sport and war as markers of the adult male. Contemporary works that challenge stock impressions of masculinity will be read. Eligible for GSST or PEAC credit. 1 credit.Not offered 2011-2012. Mullan.

## SOAN 010Q First-Year Seminar: The

 Mexico of AnthropologyThis course provides students with a foundation in anthropological literature on Mexican cultures and society as well as an overview of the history of applied anthropology in Mexico. Mexico has been a social scientific laboratory of sorts for testing out state-sponsored strategies for the incorporation, assimilation, and education of indigenous, frequently nonSpanish speaking populations. Beginning after
the Mexican Revolution many anthropologists worked in the dual capacity of researchers and employees of the state. Using Mexico as a case study, students will review literature spanning both "development anthropology" and the "anthropology of development."
Eligible for LASC credit.
1 credit.
Fall 2011. Falconi.

## SOAN 010R. The Tales We (and They) Tell

Telling stories about people and the places they inhabit is a fundamental way of making sense of the world, both for anthropologists and the people they study. Anthropological data often comes in the form of personal narratives and stories, which people use to organize and describe their life experiences, and which are collected in interviews and through participant observation. Ethnographic writing itself constitutes both a form of personal narrative about the experiences of the anthropologist, and a form of storytelling about the people and places they study. In this course we will study examples of the stories and narratives that anthropologists collect during fieldwork and those that they produce later, when they are back at their desks reflecting on their experiences. Students will be asked to think critically about these forms of storytelling, and to consider possible pros and cons of various strategies used to represent other cultures.
Methods course.
Eligible for LASC credit.
1 credit.
Spring 2012. Falconi.

## SOAN 012M. Exemplary Studies

How do sociologists approach social structures, organizational systems, and dynamics between groups? How do anthropologists study cultural meanings, daily practices, and social identities? What are the methods and theories that sociologists and anthropologists utilize to understand our contemporary society and other cultures? These are some of the questions that our class will explore through looking at studies in anthropology and sociology that are methodologically and theoretically distinguished and self-reflexive. Our purpose will be to capture the productive aspects of the methods and theoretical framings used in these studies. We will also seek to appreciate how sociological and anthropological concepts, research methods, and writing styles have changed and shifted over time. The optimal time to take this course is sophomore year. 1 credit.
Fall 2011. Muñoz, Nadkarni.

## SOAN 020B. Urban Education

(See EDUC 068)
Theory course.
1 credit.
Fall 2011. Grossman.
SOAN 020J. Dance and Diaspora (See DANCE 025A)
Theory course.
Writing course.
1 credit.
Not offered 2011-2012. Chakravorty.
SOAN 023C. Anthropological Perspectives on Conservation
Conservation of biodiversity through the creation of national parks is an idea and a practice that began in the United States with the creation of Yellowstone in 1872. In this course, we will examine the ideas behind the initial creation of national parks and explore the global spread of these ideas through the historical and contemporary creation of parks in other countries. As we examine the origin of the idea for parks, we will also consider the human costs that have been associated with their creation. Ultimately, the class offers a critical exploration of theories and themes related to nature, political economy, and culture-themes that fundamentally underlie the relationship between society and environment.
Theory course.
Eligible for ENVS and BLST credit. 1 credit.
Fall 2011. Schuetze.

## SOAN 024B. Latin American Society and

 CultureAn introduction to the relationship between culture and society in Latin America. Recent and historical works in social research, literature, philosophy, and theology will be examined.
Eligible for LASC or PEAC credit.
1 credit.
Not offered 2011-2012. Muñoz.

## SOAN 024C. Latin American Society

 Through Its Novel(Cross-listed as LITR 071S)
From an interdisciplinary framework, we will explore the relationship between society and its representation in the Latin America novel. The course will also help us understand the links between fiction and reality, and the role of literature as a form of cognition. Selected works by Carlos Fuentes, Mario Vargas Llosa, Gabriel García Márquez, Isabel Allende, Luisa
Valenzuela, Jose María Arguedas and others. Readings, assignments, and open-dialogue class
are in English. No prior knowledge of Spanish necessary.
Eligible for LASC credit.
1 credit.
Not offered 2011-2012. Muñoz.

## SOAN 024D. Topics in Social Theory

This course deals with Kant's and Hegel's social philosophy insofar as it influenced the development of modern social theory. Works by Marx, Weber, Durkheim, Freud, and critical theorists, neo-conservatives, and postmodernists will also be discussed.
Theory course.
1 credit.
Not offered 2011-2012. Muñoz.

## SOAN 025B. Transforming Intractable Conflict

This course will address the sociology of peace process and intractable identity conflicts in deeply divided societies. Northern Ireland will serve as the primary case study, and the course outline will include the history of the conflict, the peace process, and grassroots conflict transformation initiatives. Special attention will be given to the cultural underpinnings of division, such as sectarianism and collective identity, and their expression through symbols, language, and collective actions, such as parades and commemorations.
Eligible for PEAC credit.
1 credit.
Fall 2011. Smithey.

## SOAN 026E. Discourse and Democracy

Political conversation and public deliberation are fundamental underpinnings of democratic governance, yet our national political discourse appears increasingly polarized. In this mid-level course, students are introduced to the method of discourse analysis to explore key connections between citizens, institutions and the American political process. Some questions raised include: Does our current political process facilitate democratic deliberation? What makes speech political? How do setting and audience influence the discourse of organizations and individuals? And finally, how is such discourse received among its various publics?
Methods course.
1 credit.
Fall 2011. Massengill.

## SOAN 027B. The Constitution of Knowledge in Modern Society

This course takes classic sociology of knowledge texts as a starting place for an interrogation and discussion of how knowledge is constructed in this culture. Additional texts will be drawn from gender and sexuality
studies, black studies, and media studies as we examine the powerful ways that knowledge can be and is differently constructed within our own culture as well as the ways that some kinds of knowledge seem to be categorically intractable across time and space.
Prerequisite: A course in theory, sociology/anthropology, literature, or philosophy.
Theory course.
1 credit.
Not offered 2011-2012. Willie-LeBreton.

## SOAN 027C. Classical Theory

Through the works of Marx, Weber, Durkheim, Simmel, DuBois, and Freud, the recurrent and foundational themes of late 19th- and early 20th-century social theory will be examined: capitalism, class conflict and solidarity, alienation and loneliness, social disorganization and community, and secularization and new forms of religiosity.
Theory course.
1 credit.
Not offered 2011-2012. Willie-LeBreton.

## SOAN 028D. Deviance

The first part of this course introduces some basic theories of why norms arise and why some people may go against them, or be labeled as doing so. It emphasizes the fact that standards of normality and deviance always involve issues of group membership, political power, and unequal opportunity. The second part looks at the special case of crime in the U.S., covering explanations focused on biology, family history, group association, physical environment, community disorganization, and life course patterns, illustrating once again the central role of power, and in this case racial inequality. The third part of the course applies the same theories to non-criminal subgroups and cultural resistance, with examples from sex/sexuality/gender, youth and music, nonorthodox religion, and extremist politics. 1 credit.
Not offered 2011-2012. Reay.

## SOAN 028E. Methods of Social Exploration

Social phenomena aren't made up of a bunch of transparent facts open to all; they have to be explored using particular methods and technologies. None of these methods are wholly objective, reliable, or comprehensive, and none of them are as easy as one might think. This is mainly because evidence of social activity can only be obtained by way of further social activity, such as talking and reading, becoming involved in people's lives, going to archives, and interacting with other powerful
organizations. This course discusses these issues and covers a wide range of different methods of social exploration, including; archival and oral history; interviews; participant observation; analysis of interactions, conversations, texts, and media images; use of audio and video recording; sample surveys and questionnaires; government and academic databases; Geographic Information Systems, and network mapping. With all of these options at their fingertips researchers can hopefully use the combinations most suited to getting at what interests them, as well as better understand, critique, and make use of relevant past research.
Methods course.
1 credit.
Not offered 2011-2012. Reay.

## SOAN 029B. Ethnography: Theory and Practice

This class maps anthropological theories and methods through reading and critically analyzing the discipline's flagship genre, ethnography. We work historically by reading classical texts that exemplify different approaches (such as functionalism, structuralism, symbolic anthropology, and reflexive anthropology) used to analyze culture and social structure. We address questions such as: How did Malinowski understand ethnography? How does this understanding compare to more recent views of anthropologists such as Geertz? How did the meaning of fieldwork change over time? We pay special attention to the politics of representation and the anthropologists' continuous struggle to find new ways to write about culture.
Theory and methods course.
Writing course.
1 credit.
Not offered 2011-2012. Ghannam.
SOAN 030M. The Power of Words: Language and Social Inequality in the Americas
This course explores the relationship between language and structures of inequality, including issues such as language-based discrimination, language shift, and language endangerment, language revitalization movements and other activist efforts. Colonization and conquest in the Americas brought European colonists and indigenous populations into contact with each other, often resulting in the disruption, transformation or elimination of preexisting cultural practices and linguistic systems, as well as the imposition of an official language of power. We will consider the implications of these historical processes for contemporary American communities, discussing unequal power relations and surveying debates
regarding multilingualism, the implementation of official languages, and language standardization.
Eligible for LASC credit.
1 credit.
Fall 2011. Falconi.

## SOAN 030N. Migration, Transnationalism, and Transborder Circulation

The global flow of people back and forth across national, regional, as well as social borders, is a defining attribute of 21st-century life. By engaging with literature from across disciplines students will gain insights into the complex historical foundations of contemporary migration, as well as the central role of migration in the redefinition, transformation and vitality of nations and societies. We will investigate links between the local and the global, drawing in particular on the rich immigrant history of the Philadelphia region, and incorporating field trips to area neighborhoods and museums to the extent possible.
Eligible for LASC credit.
1 credit.
Spring 2012. Falconi.

## SOAN 032C. Anthropological Perspectives on Childhood and the Family

The experience of being a child would appear to be universal, and yet the construction of childhood varies greatly across cultures and throughout history. In this course, we examine childhood and child-rearing in a variety of ethnographic contexts, investigating how the figure of the child has become the site of specific cultural ambitions and anxieties, as well as how children themselves are social actors. Topics include new and traditional forms of family and reproduction; the construction of threats and endangerment to (and from) the child; and how childhood is conceptualized by human rights discourse, among others.
Theory course.
1 credit.
Spring 2012. Nadkarni.

## SOAN 035C. Social Movements and Strategic Action

Social Movements and Strategic Action will address the sociological literature on social movements, including their emergence and maintenance. When and why do people participate? We will also take a strategic perspective and investigate a range of tactics and methods that movements employ. We will emphasize the power in social relations upon
which collective nonviolent action capitalizes and the effects of strategic choices within movements. Case studies might include the U.S. civil rights movement, the Soviet bloc revolutions, People Power in the Philippines, and the Zapatistas, among others.
Theory course.
1 credit.
Not offered 2011-2012. Smithey.
SOAN 038C. Sociology of Economic Life
The discipline of economics tends to focus primarily on how markets work, i.e. how rational calculations influence commodity prices. There are many other things involved in economic life however, such as resource inequalities, institutional hierarchies, cultural worldviews, patterns of habitual interaction, and specific historical sequences of events. This class explores how consideration of these kinds of factors-power, culture, networks, and history-can be added to market models to create a fuller picture of how humans organize production, exchange, and consumption in what we currently call "the economy." Specific topics covered include the difference between precapitalist and capitalist economies, the nature of modern advertising, the causes of financial bubbles and crashes, corporate culture and managerial behavior, the institutional arrangements behind different varieties of capitalism, the nature and effects of globalization, and the operation of gift exchange systems.
Theory course.
1 credit.
Not offered 2011-2012. Reay.

## SOAN 039B. Globalization and Culture

What is globalization? Is globalization "cultural imperialism," Westernization, Americanization, or McDonaldization? Our class will examine such questions and critically analyze how global flows (of goods, capital, labor, information, and people) are shaping cultural practices and identities. We will study recent theories of globalization and transnationalism and read various ethnographic studies of how global processes are articulated and resisted in various cultural settings.
Theory course.
Writing course.
1 credit.
Not offered 2011-2012. Ghannam.

## SOAN 040B. Language, Culture, and Society

(See LING 025)
Prerequisite: At least one linguistics course.

1 credit.
Not offered 2011-2012. Staff.

## SOAN 043E. Culture, Health, Illness

People in all societies encounter and manage sickness. Yet, there are diverse and unique approaches to understanding and managing health and disease. The human experience of sickness entails a complex interplay between biological, socio-economic and cultural factors. This course offers an introduction to medical anthropology, a subfield of anthropology that draws upon social, cultural, biological, and linguistic anthropology to better understand those factors which influence health and well being (broadly defined), the experience and distribution of illness, the prevention and treatment of sickness, healing processes, the social relations of therapy management, and the cultural importance and use of pluralistic medical systems. In this course, we will examine ethnographic writings about Western and non-Western settings that highlight different cultural understandings of health and illness and practices of healing. We will explore how beliefs about health, disease and the body are constructed and transmitted, how healers are chosen and trained, how medical knowledge is procured, why diseases have a social and geographical distribution, and why healing is effective. Finally, we will consider the ways in which medical anthropology can shed light upon important contemporary medical and social concerns.
Theory course.
1 credit.
Fall 2011. Schuetze.

## SOAN 044B. Colloquium: Art and Society

An examination of the relationship between art and society from a sociohermeneutical perspective. Literary and sociotheoretical works will be the main focus of analysis this semester. Selected works by Plato, Nietzsche, Hegel, Mann, Dostoevski, Kafka, Benjamin, Lukacs, Freud, Borges, Foucault, and Sontag will be examined.
Eligible for INTP credit.
Theory course.
1 credit.
Not offered 2011-2012. Muñoz.

## SOAN 044C. Colloquium: Contemporary Social Theory

A discussion of contemporary social theory and its antecedents. The first part of the course will be devoted to a discussion of works by Nietzsche, Marx, and Freud. The second part will deal with works by contemporary theorist such as Charles Taylor, Jürgen Habermas, Michael Foucault, Anthony Giddens, Pierre

Bourdieu, Jana Sawicki, Luce Irigaray, and Jean Baudrillar.
Prerequisite: SOAN 044E. Limited enrollment. Theory course.
1 credit.
Not offered 2011-2012. Muñoz.

## SOAN 044D. Colloquium: Critical Social Theory

An overview of major developments of critical social theory since the 19th century. Readings from Marx, Freud, Nietszche, Lukacs, Adorno, Horkheimer, Benjamin, Habermas, Foucault, Bourdieu and Freire. It is highly recommended that students take SOAN: 044E Colloquium: Modern Social Theory before taking this course.
Theory course.
1 credit.
Spring 2012. Muñoz.

## SOAN 044E. Colloquium: Modern Social Theory

This course is an analysis of the rise and development of modern social theory. The introduction to the colloquium deals with works by such social philosophers as Rousseau, Kant, and Hegel. The core of the colloquium focuses on selected works by Marx, Weber, Durkheim, and Freud. The colloquium is recommended for advanced work in social theory and is particularly well for students interested in the areas of sociology and anthropology and interpretation theory.
Eligible for INTP credit.
Theory course.
1 credit.
Fall 2011. Muñoz.

## SOAN 046C. Walmart Nation

Americans love to shop-an affirnity underscored by Walmart's popularity as America's largest retailer with 120 million customers each week. Critics ask if this kind of consumption brings undesirable consequences for workers, the environment, and citizens themselves. In this mid-level course, we begin by addressing a fundamental question about mass consumption: Are we a society destined to be filled with McDonalds and Walmarts or are these trends toward standardized retailing inherently unsustainable? We consider some of the ways consumerism shapes human relationships among individuals, within families, and within larger groups, like social classes. And finally we consider the social and ethical consequences of mass retailing for the global community, focusing on work, environmenalism, and economic inequality.

1 credit.
Spring 2011. Massengill.
SOAN 048C. Sociology of Science
This class explores the wide range of work on science as a social phenomenon. After a brief discussion of key themes in the philosophy of science, it looks at the various 'internal' aspects of science as an institution, including its organizational structures, work practices, status systems, and forms of discourse. It then turns to the 'external' issues of how science relates to the rest of society, including its connection to gender, racial, and international inequality, its portrayal in the media, its relationship to technology, its conflicts with religion, and its authority as 'objective' truth in law and government. Authors covered will include Robert Merton, Karin Knorr, Bruno Latour, Ian Hacking, Sharon Traweek, Emily Martin, Dorothy Nelkin, and Sheila Jasanoff. The class will also involve a field trip to analyze The Franklin Institute Science Museum. 1 credit.
Not offered 2011-2012. Reay.
SOAN 049B. Comparative Perspectives on the Body
This class explores how different societies regulate, discipline, and shape the human body. In the first part, we examine theories of the body and how they have evolved over time. In the second part, we focus on in-depth ethnographic cases and compare diverse cultural practices that range from the seemingly traditional practices, such as circumcision, foot binding, and veiling to the currently fashionable, such as piercing, tattooing, dieting, and plastic surgery. By comparing body modification through space and time, we ask questions such as: Is contemporary anorexia similar to wearing the corset during the 19th century? Is female circumcision different from breast implants? Furthermore, we investigate how embodiment shapes personal and collective identities (especially gender identities) and vice versa.
Eligible for GSST or INTP credit. 1 credit.
Spring 2012. Ghannam.
SOAN 062B. Sociology of Education (See EDUC 062)
Theory course.
1 credit.
Not offered 2011-2012.
SOAN 071B. Research Seminar: Strategy and Nonviolent Struggle (See PEAC 071B) Writing course.

1 credit.
Fall 2011 and spring 2012. Lakey.

## SOAN 072C. Memory, History, Nation

How do national communities remember-and forget? What roles do commemoration and amnesia play in constructing, maintaining, or challenging national and collective identities? This seminar considers memory and its pathologies as a central problematic for the nation-state. It reads theory and ethnography against each other to explore the politics and aesthetics of national memory across a number of sites and contexts, attentive to both the collectivities such commemorations inspire and their points of resistance and failure.
Eligible for INTP credit.
Theory course.
1 credit.
Not offered 2011-2012. Nadkarni.

## SOAN 077B. The Visual Anthropology of Performance <br> (See DANC 077B) <br> Theory course. <br> 1 credit. <br> Not offered 2011-2012. Chakravorty.

## SOAN 080B. Anthropological

Linguistics: Endangered Languages
(See LING 120)
Theory course.
1 credit.
Not offered 2011-2012. Harrison.

## SOAN 082B. After Empire: Ethnographies of Postsocialism and Postcolonialism

This course brings together two bodies of literature concerned with the experience and legacies of imperial rule. Treating the "post" as both a temporal marker and a critical stance, we will ask what postsocialist studies can learn from postcolonial studies, and vice-versa. To do so, we will investigate how each conceptualizes questions of power, epistemology, subjectivity, and difference in order to paint a more nuanced picture of the histories of colonialism and state socialism, as well as their after-effects upon contemporary politics, economy, and culture. 1 credit.
Not offered 2011-2012. Nadkarni.

## SOAN 095. Independent Study

Two options exist for students wishing to get credit for independent work. All students wishing to do independent work must have the advance consent of the department and of an instructor who agrees to supervise the proposed project.

Option 1 - consists of individual or group directed reading and study in fields of special interest to the students not dealt with in the regular course offerings.
Option 2 - credit may be received for practical work in which direct experience lends itself to intellectual analysis and is likely to contribute to a student's progress in regular course work. Students must demonstrate to the instructor and the department a basis for the work in previous academic study. Students will normally be required to examine pertinent literature and produce a written report to receive credit.
0.5 or 1 credit.

Fall 2011 and spring 2012. Staff.

## SOAN 096-097. Thesis

Theses will be required of all majors. Seniors will normally take two consecutive semesters of thesis tutorial. Students are urged to discuss their thesis proposals with faculty during the spring semester of their junior year, especially if they are interested in the possibility of fieldwork. In order to receive credit for SOAN 096 you must attend SOAN 098.
Writing course (for SOAN 097 only).
1 credit each semester.
Fall 2011 and spring 2012. Staff.
SOAN 098. Thesis Writers Master Class
This class meets weekly to support sociology and anthropology students in developing the skills necessary for writing their theses, including conducting literature searches, interpreting data, formulating research questions, and writing in a way that contributes to the disciplines. The class complements and supports the work that students are doing with their thesis advisers. Students who have signed up for a senior thesis credit are automatically enrolled in the class. The class is open to only senior thesis writers.
Fall 2011. Willie-LeBreton.

## Seminars

SOAN 112. Cities, Spaces, and Power
This seminar explores recent interdisciplinary insights to the analysis of spatial practices, power relationships, and urban forms. In addition, we read ethnographies and novels and watch films to explore questions such as: How is space socially constructed? What is the relationship between space and power? How is this relationship embedded in urban forms under projects of modernity and postmodernity? How do the ordinary practitioners of the city resist and transform these forms? Our discussion will pay special attention to issues related to racism and segregation, ethnic enclaves, urban danger, gendered spaces, colonial urbanism, and the "global" city.

Theory course.
2 credits.
Spring 2012. Ghannam.

## SOAN 122. Urban Ethnographies Through Time and Space

As key players in the global economy, cities are becoming the focus of a growing number of studies that show how urban life is shaped by the complex interplay of global, national, and local processes. In this class, we look at urban ethnographies (texts and films) through space and examine how the representation of the city has changed over time. These ethnographies are conducted in Western cities such as New York, London, and Paris as well as cities in other parts of the world such as Cairo, Casablanca, Bombay, São Paolo, and Shanghai. We read these ethnographies to (1) discuss different techniques and approaches used to study urban cultures and identities, (2) examine how the collection of data relates to anthropological theories and methods, and (3) explore how research in cities shapes the field of cultural anthropology. In our discussions, we also explore important urban problems such as poverty, gangs, violence, and homelessness. 2 credits.
Not offered 2011-2012. Ghannam.
SOAN 123. Culture, Power, Islam
This seminar will be an interdisciplinary investigation into the shifting manners by which Islam is multiply understood as a creatively mystical force, a canonically organized religion, a political platform, a particular approach to economic investment, and a secular but powerful identity put forth in interethnic conflicts, to name only a handful of incarnations. Though wide ranging in our theoretical perspective, a deeply ethnographic approach to the lived experience of Islam in a number of cultural settings guides this study. Eligible for ISLM credit.
2 credits.
Not offered 2011-2012. Ghanam.

## SOAN 127. Race Theories

Contemporary theories of race and racism by sociologists such as Winant, Gilroy, Williams, Gallagher, Ansell, Omi, and others will be explored. Concepts and controversies explored will include racial identity and social status, the question of social engineering, the social construction of justice, social stasis, and change. The United States is the focus, but other countries will be examined. Without exception, an introductory course on race and/or racism is a prerequisite.
Theory course.
Eligible for BLST credit.

2 credits.
Fall 2011. Willie-LeBreton.
SOAN 128. Culture, State, Citizenship
This honors seminar examines the challenges of citizenship in a number of ethnographic contexts: from immigrants seeking legal and cultural recognition in the U.S. to battles over multiculturalism in Europe, and from disability activists in the former Soviet Union to refugees from Southeast Asia. It investigates how people and communities experience citizenship as a crucial facet of their identities, and how these identities are produced, reinforced, or challenged in national and transnational contexts. Readings include selections from Gershon Shafir's The Citizenship Debates: A Reader, as well as work by Renato Rosaldo, Aihwa Ong, and other anthropologists who analyze citizenship as a form of practice. 2 credits.
Fall 2011. Nadkarni.

## SOAN 138. Work and Identity

This is a senior seminar about work experiences in the United States over the last thirty years. It looks at how different occupations and work conditions are central to the construction of identity and to the reproduction of class, racial, ethnic, and gender inequalities. It explores these issues by looking primarily at ethnographies and interviews, getting into a fair amount of detail concerning what it's like to do different jobs. Particular topics covered include factory work (both traditional assembly-line and more recent 'humanized' arrangements), construction (focusing on gender aspects), managerial work, service work (typically seen as low-status), domestic labor (which is often 'invisible' because it is gendered as female), office work, and illegal work (i.e. sex and drugs).
2 credits.
Not offered 2011-2012. Reay.

## SOAN 162. Sociology of Education

 (See EDUC 162)Prerequisite: EDUC 014 or permission of the instructor.
Theory course.
2 credits.
Not offered 2011-2012.

## SOAN 180. Thesis

Candidates for honors will usually write theses during the senior year. Students are urged to have their thesis proposals approved as early as possible during the junior year.
Writing course.
2 credits.
Fall 2011 and spring 2012. Staff.

ALLEN KUHARSKI, Professor and Chair<br>ERIN B. MEE, Assistant Professor ${ }^{1}$<br>K. ELIZABETH STEVENS, Assistant Professor<br>MATT SAUNDERS, Assistant Professor (part time)<br>LAILA SWANSON, Assistant Professor (part time)<br>GABRIEL QUINN BAURIEDEL, Visiting Assistant Professor (part time)<br>CHARLES COES, Visiting Assistant Professor (part time)<br>JAMES MAGRUDER, Visiting Assistant Professor (part time)<br>ADRIANO SHAPLIN, Visiting Assistant Professor (part time)<br>JAMES MURPHY, Visiting Instructor (part time)<br>THOMAS SNYDER, Production Manager and Technical Director (part time)<br>JEAN TIERNO, Administrative Assistant (part time)<br>TARA WEBB, Costume Shop Supervisor and Arts Administrator

${ }^{1}$ Absent on leave, fall 2011.

The theater major uses the study of all aspects of performance as the center of a liberal arts education. It is intended to be of broad benefit regardless of a student's professional intentions. All courses in the department address the processes of play production, especially as they involve collaboration; all production for performance in the department is part of coursework.
The Theater Department emphasizes writing as an important aspect of discursive thinking and communication. Many courses have a significant writing component, the nature of which varies from course to course.

## The Academic Program

Planning a major or minor in theater requires thoughtful care and deliberate planning. Firstand second-year students thinking about a theater major should read these requirements and recommendations closely and should consult with their faculty adviser or the chair of the Theater Department early and often. Leave schedules, study abroad, a wide variety of intern and apprentice programs, and the importance of course sequences make longrange planning essential.
THEA 001: Theater and Performance is a prerequisite for most intermediate and advanced classes and seminars.
Courses numbered 001 to 010 are introductory and are prerequisite to intermediate courses. Courses numbered 011 to 049 are intermediate and are prerequisite to advanced courses numbered 050 through 099.
Seminars carry numbers 100 and above. Intermediate work in each of the course sequences requires a beginning course in that area.
Some advanced courses carry additional prerequisites that are listed in the course descriptions.

For those majors who intend a career in theater, whether academic, not-for-profit, or commercial, internships in professional theaters are strongly recommended. Because of scheduling difficulties, students should plan and apply for internships, time spent off campus, and community projects as far in advance as possible.
Alumni guest artists are typically in residence on campus during the summer as part of the Swarthmore Project in Theater. Positions are usually available in production, development, public relations, marketing, box office, and house or stage management. Positions are usually not available in acting, directing, or design.

## Course Major

## Requirements

10 credits of work including:
THEA 001: Theater and Performance; THEA
002A: Acting I; 1 credit in design (THEA 003, $004 \mathrm{~A}, 004 \mathrm{~B}, 004 \mathrm{C}, 004 \mathrm{D}$ or 004 E ): THEA 015 : Performance Theory and Practice; either THEA 006: Playwriting Workshop, or THEA 021: Production Dramaturgy, or THEA 025: Solo Performance, or THEA 035: Directing I; THEA 022: Production Ensemble I or THEA 034: Special Project in Design; THEA 099: Senior Company; and a 100 -level seminar. In addition, each major will choose an area of specialization and take one additional course in that area.
All course majors and minors are required to fulfill a set number of hours doing technical/crew work before the end of the junior year. Students can obtain details on how to fulfill the technical/crew requirement from their major advisers, the department office, or from advising forms available outside the chair's office. Technical/crew hours can be arranged directly with the department's Production Manager/Technical Director or Costume Shop Supervisor.
N.B.: Requirements for course major will be modified starting with the class of 2014. See department advising materials for details.
The areas of specialization are acting, solo performance, directing, design, playwriting, dramaturgy, and theater history. Special arrangements will be made for students who seek secondary school certification. Prospective majors should consult with the chair or their department adviser about their choice.
In addition to these course requirements, the major includes a comprehensive examination in two parts: (1) an essay relating the student's experience in Senior Company; and (2) an oral examination on the essay and related subjects by theater faculty.

## Course Minor

Course minors are required to take 7.0 credits of work including:
THEA 001: Theater and Performance; THEA 002 A : Acting I; 1 credit in design (THEA 003, $004 \mathrm{~A}, 004 \mathrm{~B}, 004 \mathrm{C}, 004 \mathrm{D}$ or 004 E ); THEA 015 : Performance Theory and Practice; either THEA 006: Playwriting Workshop, or THEA 021: Production Dramaturgy, or THEA 025: Solo Performance, or THEA 035: Directing I; and THEA 022: Production Ensemble I or THEA 034: Special Project in Design. In addition, each minor will choose an area of specialization and take one additional course in that area. Course minors who complete these requirements by the end of the junior year may petition to enroll in THEA 099: Senior Company in the fall semester of their senior year.
All course minors need to fulfill the same technical/crew requirement described for course majors above.
N.B.: Requirements for course minor will be modified starting with the class of 2014. See department advising materials for details.

## Honors Major

General requirements include:
THEA 001: Theater and Performance; THEA
002A: Acting I; 1 credit in design (THEA 003, $004 \mathrm{~A}, 004 \mathrm{~B}, 004 \mathrm{C}, 004 \mathrm{D}$ or 004 E ); THEA 015 : Performance Theory and Practice; either THEA 006: Playwriting Workshop, or THEA 021: Production Dramaturgy, or THEA 025: Solo Performance, or THEA 035: Directing I; THEA 022: Production Ensemble I or THEA 034: Special Project in Design; THEA 099: Senior Company; and a 100-level seminar.
All potential honors majors need to fulfill the same technical/crew requirement described for course majors above.
N.B.: Requirements for honors major will be modified starting with the class of 2014. See department advising materials for details.
In addition, each major will choose an area of specialization and take one additional course in that area. One specialization will constitute the normal honors major in theater. Honors students will take Senior Company in the fall of senior year, while they are planning their production project. The usual schedule will be spring of junior year, Theater Seminar, fall of senior year, THEA 099 and pre-rehearsal thesis project preparation; and spring of senior year, rehearsal and performance of the thesis project. Double majors taking three examinations in theater will also follow that schedule.
For double majors taking one honors examination and comps in theater, the examination may be a production project, depending on available resources.
Approval of the sophomore paper for any honors major is conditional upon the student maintaining good academic standing through the end of the junior year. Theater honors majors approved for production thesis projects in the senior year are required to notify the department chair of their intention to drop or change their Honors Program by the end of the junior year. An honors major in theater must receive the approval of their major adviser before committing to any extracurricular or offcampus projects during the senior year in order to avoid potential conflicts with their honors thesis work. Students who prove unable to fulfill the expectations of the faculty for their Honors Programs in theater may be dropped from honors at the department's discretion. Unless for reasons of health or other personal circumstance beyond the student's control, leaving the department's Honors Program after the end of the junior year is considered a significant compromise of a student's academic performance.
Honors students majoring in theater will typically make a total of three preparations as follows:

1. Seminar (listed earlier), written examination, and an oral set by an outside examiner.
2. THEA 015 and a written thesis attachment to be evaluated by an outside examiner along with an oral or THEA 021 and a production thesis attachment to the course to be evaluated by an outside examiner along with an oral.
3. A production project in one of the following fields:

## Acting

The student, together with their adviser, will select and prepare a role from an appropriate script. The program will hire a professional director for a set number of rehearsal hours,
which the student will supplement with practice and other acting "homework." The adviser will assist in this work on a regular basis. The external examiner will attend as many rehearsal sessions as possible to observe the student's process. The examiner also attends one or more of the public performances. The examination proper will consist of an extended interview directly following the performance and a briefer oral during honors weekend. The subject of the first interview will be the student's processes as he or she relates to the production. The second oral will concern the student's assessment of the entire process as a part of his or her undergraduate education and future plans.

## Design

The student will function as the designer for a production presented by the Theater Department in one area of design. The student will produce appropriate preparatory materials for this project (research, sketches, color renderings, drafting, models, digital media, light or sound plots, etc). Because this is a collaborative project, a production time line will need to be prepared and production meetings scheduled. In addition to the development of the design, the student will collaborate with all relevant staff and craftsmen during the fabrication stage, ensuring the fullscale design is executed as designed. The local instructor will supervise these activities appropriately, on the model of a special project in theater. The external examiner will receive copies of all materials as the student creates them and will pay close attention to the way in which the project develops under continual revision. The examiner will attend one of the public performances and in advance of honors weekend will receive in digital form the student's completed portfolio for presentation. The examination proper will consist of an extended interview directly following the performance and a briefer oral during honors weekend. The subject of the first interview will be the student's processes as he or she relates to the production. The second oral will concern the student's assessment of the entire process as a part of his or her undergraduate education and future plans.

## Directing

The student will, under faculty supervision, read around a given playwright's work, make a director's preparation for the entire play, and rehearse for public presentation a locally castable portion of the chosen play. Original developmental projects may be proposed, subject to the approval of the faculty adviser for the thesis. The department will hire a professional collaborator (usually an actor) for a set number of rehearsal hours in connection with the project. The instructor will supervise
these activities appropriately, on the model of a special project in theater. The external examiner will visit this project several times (depending on schedule and available funds). These visits (to rehearsal or planning session) will not include feedback from the examiner. The examiner attends rehearsal to know as much as possible about the student's methods of making the work. The examiner also attends one or more of the public performances. The examination proper will consist of an extended interview directly following the performance and a briefer oral during honors weekend. The subject of the first interview will be the student's processes as he or she relates to the production. The second oral will concern the student's assessment of the entire process as a part of his or her undergraduate education and future plans.

## Dramaturgy

This project will be done in one of the following ways:

1. As a production project in the form of a onecredit attachment to the Production Dramaturgy class (THEA 021) consisting of work with a faculty or student director. This will typically be in connection with Production Ensemble or an honors thesis in directing. The student will create a body of writing appropriate to the specific project. This will include (but is not limited to) notes on production history, given circumstances, script analysis, program and press-kit notes, study guide, and a grant proposal. The student's work will continue in rehearsal. The external examiner will receive all materials as they are generated. The examiner also attends one or more of the public performances. The examination proper will consist of an extended interview directly following the performance and a briefer oral during honors weekend. The subject of the first interview will be the student's processes as he or she relates to the production. The second oral will concern the student's assessment of the entire process as a part of his or her undergraduate education and future plans.
2. The completion of a stage adaptation of a non-dramatic text or combination of texts. A complete draft of the adaptation will be completed under the supervision of a faculty member in production dramaturgy, and a staged reading of a revised version of the text will be presented in collaboration with a professional director as guest artist. This is a two-credit thesis project to be completed over two semesters in the senior year, generally parallel to the honors thesis model for playwriting. The examiner will attend at least two rehearsals and the final staged reading, in addition to reading the final text and its original source. The examination will consist of an extended oral presentation given during honors weekend
3. Students fluent in a second language can apply to do a translation of a play into or out of English as an honors thesis attachment to Production Dramaturgy. This may be a onecredit attachment for a written draft only (done with a member of the faculty) or as a two-credit thesis with a staged reading done in collaboration with a guest director, as in the adaptation thesis above. In the case of a staged reading, the examiner will attend at least two rehearsals and the final staged reading, in addition to reading the final text together with the original source. The examination proper will consist of an extended interview directly following the performance and a briefer oral during honors weekend. The subject of the first interview will be the student's processes as he or she relates to the production. The second oral will concern the student's assessment of the entire process as a part of his or her undergraduate education and future plans.

## Playwriting

The student will write a complete draft of a play over the course of a semester in collaboration with a faculty member or other professional production dramaturgy. In a second semester, the department will hire a professional director for a set number of rehearsal hours in preparation for a staged reading, which whom the student will work through a rehearsal and revision process based on the earlier work with the production dramaturgy. The faculty adviser and/or the production dramaturgy faculty will continue to assist during the rehearsal/revision process. The external examiner will read the completed first draft and attend as many rehearsal sessions as possible and the final staged reading to observe the student's writing and collaborative process. The examination proper will consist of an extended interview directly following the staged reading, the reading of the student's revised draft based on the rehearsal process and performances, and a briefer oral examination during honors weekend. There is also the option of a purely written playwriting thesis preparation, without the production component.

## Solo Performance

The student, with guidance from their adviser, will create and perform a solo performance. The program will hire a professional director for a set number of rehearsal hours, which the student will supplement with practice and other writing, acting, and design "homework." The adviser will assist in this work on a regular basis. The external examiner will attend as many rehearsal sessions as possible to observe the student's process. The examiner attends rehearsal to know as much as possible about the student's methods of making the work. The examiner also attends one or more of the public
performances. The examination proper will consist of an extended interview directly following the performance and a briefer oral during honors weekend. The subject of the first interview will be the student's processes as he or she relates to the production. The second oral will concern the student's assessment of the entire process as a part of his or her undergraduate education and future plans.

## Honors Minor

Seven credits of work including:
THEA 001: Theater and Performance; THEA 002A: Acting I; 1 credit in design (THEA 003, $004 \mathrm{~A}, 004 \mathrm{~B}, 004 \mathrm{C}, 004 \mathrm{D}$ or 004 E ); THEA 015: Performance Theory and Practice; either THEA 006: Playwriting Workshop, or THEA 021: Production Dramaturgy, or THEA 025: Solo Performance, or THEA 035: Directing I; and a 100-level seminar or THEA 022: Special Project in Dramaturgy. Honors minors who complete these requirements and complete a sequence in acting, design, directing, or playwriting/dramaturgy by the end of the junior year may petition to enroll in THEA 099: Senior Company in the fall semester of their senior year.
There is an option for students to pursue a course major in conjunction with an Honors minor, in which case the student may be eligible for an individual thesis project along the lines of those described for honors majors above. Interested students should discuss the details of this with their major advisers before preparing their sophomore papers.
All potential honors minors need to fulfill the same technical/crew requirement described for course majors above.
N.B.: Requirements for honors minor will be modified starting with the class of 2014. See department advising materials for details.
Co-curricular and extracurricular work in the Theater Department, although not specifically required, is strongly recommended for majors. Opportunities include paid and volunteer staff positions with the department, in-house projects for various classes, production work in The Eugene M. and Theresa Lang Performing Arts Center, and Drama Board productions.
With respect to the 20 -course rule, courses in dramatic literature taught in the English Literature, Classics, or Modern Languages and Literatures departments may be designated as part of the major. Courses in non-dramatic literatures taught in those departments will not be considered part of the major.

## Off-Campus Study

## Semester Abroad in Poland

The Department of Theater's semester abroad in Poland is currently on hiatus until a future date still to be determined. Interest students are welcome to contact Professor Allen Kuharski.

## Recommended Course/Seminar Sequence for Majors and Minors

## Freshman Year

THEA 001. Theater and Performance, fall or spring semester* (counts for writing intensive course credit in the humanities)
THEA 002A. Acting I, fall or spring semester* THEA 003. or any course in THEA 004, fall or spring semester*
THEA 022 or THEA 034 . Spring semester*, (THEA 022 by audition if student has taken Acting I in the fall semester)

## Sophomore Year

Any course in THEA 003 or THEA 004, fall or spring semester* (if not taken in freshman year) THEA 015. Performance Theory \& Practice, fall semester*
(counts for writing intensive course credit in the humanities)
1 credit from this list:,
THEA 006. Playwriting Workshop, fall semester*
THEA 021. Production Dramaturgy, spring semester*
1 credit from this list:
THEA 022. Production Ensemble I, spring semester*, or
THEA 034. Advanced Design, spring semester*
(If not taken in freshman year - THEA 022 or
034 recommended here for students considering study abroad in their junior year)
NB: Theater majors planning a semester abroad should plan to do so in the spring of the Sophomore year or the fall of the junior year.

## Junior Year

THEA 015. Performance Theory \& Practice (if not taken in sophomore year)
1 credit from this list :
THEA 006. Playwriting Workshop, fall or spring semester*, or
THEA 035. Directing I, fall semester*
THEA 021. Production Dramaturgy, spring semester (if not taken in sophomore year).
THEA 022. Production Ensemble I, spring semester* (if not taken in sophomore year) THEA 106. Theater History Seminar, spring semester* (counts for writing intensive course credit in the humanities)

NB: Theater 106 is required for all theater majors and honors minors and should be taken in the junior year.
Completion of a sequence in acting, directing, design, or playwriting/production dramaturgy*.
Completion of the technical/crew hours requirement (required for all course and honors majors in Theater)

## Senior Year

THEA 099. Senior Company, fall semester* (honors majors add at least one credit of thesis credit each semester of the senior year) * indicates requirements for all course and honors majors in theater.
NB: The recommended program for the first three years is the same for course and honors majors.
All introductory level courses (THEA 001, $002 \mathrm{~A}, 002 \mathrm{~B}, 003,004 \mathrm{~A}, 004 \mathrm{~B}, 004 \mathrm{C}, 004 \mathrm{D}$, $005,006)$ can be taken without prerequisite.
THEA 001 . Theater \& Performance is a prerequisite for most intermediate and advanced level classes and seminars offered in the department.
THEA $001,002 \mathrm{~A}, 004$, and 0015 should be completed by the end of the sophomore year by all students applying for course or honors majors, particularly those planning a semester abroad.
THEA 022 or THEA 054 is required of all majors and course minors in the department. Exact prerequisites for THEA 022/054 vary according to the student's area of emphasis in the department. THEA 022 can be repeated up to three times using other advanced course numbers.
THEA 106 should be completed before the end of the junior year in order to enroll in THEA 099 Senior Company. Exceptions are made in the case of those planning junior semesters abroad.
All course and honors majors must complete one of the sequences of courses in acting, directing, design, or playwriting/production dramaturgy by the end of the junior year in order to enroll in Senior Company.
Course and honors minors may petition to enroll in THEA 099 Senior Company if they have completed requirements for the minor as well as a sequence in acting, directing, design, or playwriting/dramaturgy by the end of the junior year.
Students wishing to study abroad should see Prof. Kuharski as early as possible regarding their plans, particularly regarding the College's semester abroad program in Poland. The programs of theater majors usually benefit from study abroad in the spring of the sophomore
year or fall of the junior year. Honors thesis work is possible as part of the Poland Program. Majors with an emphasis in directing in particular generally need to be on campus during the spring of their junior year in order to complete their requirements and should anticipate this in their plans for study abroad. Study abroad in the spring semester of the sophomore year is usually both necessary and desirable for directing students.
Comprehensive written and oral exams for course majors are given in the spring semester of the senior year. The written comprehensive examination is based on the work of the Senior Company class, and constitutes the final graded work for the course.
Approval of honors majors and minors is conditional upon the student being in good academic standing at the end of the junior year. Honors majors or minors doing production thesis work should notify the chair of any possible change in their Honors Program no later than the end of the junior year. Honors majors or minors approved for production thesis work are required to obtain advance approval from their major advisers before committing to any extracurricular or off-campus production work in the senior year.

## Introductory Courses

All introductory courses are open to all students without prerequisite.
THEA 001. Theater and Performance By combining a survey of many different approaches to theatrical performance, this class should give you an understanding and appreciation of the importance of theater and performance in the world. Study will include history, performance theory, and production design in relationship to play scripts and videotaped or live performances. Sessions will include exercises that pertain to the collaboration between actors, directors and designers. Writing requirements will include journal keeping, responses to readings and performances and research papers.
Fulfills a general requirement for all theater majors and minors.
Writing course.
1 credit.
Fall 2011. Swanson. Spring 2012. Stevens.

## THEA 002A. Acting I

This course is designed as a practical introduction to some of the principles, techniques, and tools of acting. We will use theater games and improvisation exercises (from Stanislavsky, Viola Spolin, Viewpoints, and other sources) to unleash the actor's
imagination, expand the boundaries of accepted logic, encourage risk taking, and prepare the actor for the creative process. We will focus on preparing the body and voice for rehearsal and performance and will pay special attention to vocal and physical imagination. We will focus on increasing "presence" on stage, developing a character, learning how to rehearse, and evoking a response from the audience in the context of scene study. Four hours per week. Fulfills a general requirement for all theater majors and minors.
1 credit.
Fall 2011. Stevens. Spring 2012. Bauriedel.

## THEA 002B. Special Project in Voice Performance

By individual arrangement with the directing or acting faculty for performance work in connection with department directing workshops, honors thesis projects, or Senior Company.
0.5 or 1 credit.

Fall and spring semesters. Staff.

## THEA 002C. Special Project in Acting

By individual arrangement with the directing or acting faculty for performance work in connection with department directing workshops, honors thesis projects, or Senior Company.
Prerequisite: Concurrent or past enrollment in THEA 002A.
0.5 or 1 credit. CR/NC grade.

Fall and spring semesters. Staff.

## THEA 003. Fundamentals of Design for Theater and Performance

This course offers an introduction to creative aspects of designing scenery, costumes, lighting, and sound for theater and performance with emphasis on the correlation of text, imagination, and space. In a collaborative classroom setting, the students will have the opportunity to explore individual ideas and transform these into a design that is cohesive and relevant to a production. The lab component of the course will provide a broad introduction to the technical aspects of theater production. The course is designed to serve all students regardless of prior experience in theater production.
N.B.: Starting with the class of 2014, fulfills a general requirement for all theater majors and minors.
1 credit.
Fall 2011. Saunders. Spring 2012. Swanson.

## THEA 004A. Set Design

This course will focus on set design and introduce methods that apply to designing for stage. In class, we will take a look at the set designer's responsibilities as an artist and collaborator and explore the relationship between text, concept, and production in addition to learning the basic skills of drafting and model making. In addition, we will discuss the relationship between scenery, costumes, and light in performance. A lab component of this class will include an introduction to computer drafting and additional information about materials used for stage construction. The course is designed to serve all students regardless of prior experience in theater production.
N.B.: For graduating classes through 2013, fulfills a general requirement for all theater majors and minors.
1 credit.
Fall 2011. Saunders.

## THEA 004B. Lighting Design

This class explores the fundamentals of lighting design. The course objective is to introduce lighting concepts and how to express them for both theater and dance. It is intended to demystify an enormously powerful medium. Reading and class discussion provide a theoretical basis for such creativity while the assignments and projects provide the practice for this artistic endeavor. The course is designed to serve all students regardless of prior experience in theater production.
N.B.: For graduating classes through 2013, fulfills a general requirement for all theater majors and minors.
1 credit.
Fall 2011. Murphy.

## THEA 004C. Costume Design

This course will focus on costume design and introduce methods that apply to designing for stage. In class, we will take a look at the costume designer's responsibilities as an artist and collaborator and explore the relationship between text, concept, and production. In addition to formal lecture, we will discuss fabrics and colors and how they relate to light and scenery in performance, and we will explore different medium and techniques for presentation of a design. A lab component of this class will introduce the student to costume shop operation and equipment in addition to a brief overview of costume history. The course is designed to serve all students regardless of prior experience in theater production.
N.B.: For graduating classes through 2013, fulfills a general requirement for all theater majors and minors.
1 credit.
Fall 2011. Swanson.

## THEA 004D. Integrated Media Design for Live Performance

The purpose of this course is to introduce students to the application of various visual and audio technologies in live theater and dance performance. Discussion of the historical and theoretical context of contemporary mixedmedia performance will be combined with an orientation to the available technologies found at Swarthmore and beyond. The class will include the conceptualization and preparation of a series of individual studio projects. The course is designed to serve all students regardless of prior experience in theater production.
N.B.: For graduating classes through 2013, fulfills a general requirement for all theater majors and minors.
1 credit.
Spring 2012. Saunders.

## THEA 004E. Sound Design

This course will provide an introduction to sound design concepts for live performance. Course work will emphasize research, design development, collaboration, and the creative process. Laboratory work will focus on basic audio engineering, software, field recording, and documentation in a theatrical context. The course is designed to serve all students regardless of prior experience in theater production.
N.B.: For graduating classes through 2013, fulfills a general requirement for all theater majors and minors.
1 credit.
Spring 2012. Coes.

## THEA 006. Playwriting Workshop

This creative workshop course introduces students to essential elements of dramatic writing. In-class writing exercises and weekly assignments lead to the development of character monologues, scenes, and two original one-act plays. A variety of stylistic approaches and thematic concerns are identified through the reading and discussion of plays by contemporary playwrights. Students will explore their individual creative voice, learning how to translate their vision through character, image, and story. In addition to writing, students will develop and rehearse their work with guest actors and directors and experience the transition from page to stage firsthand.

Fulfills a general requirement for all theater majors and minors.
1 credit.
Fall 2011. Shaplin.

## THEA 007. Theater of Witness

(Cross-listed as DANC 070)
Based on Teya Sepinuck's model of the Theater of Witness developed during the past 15 years, the class will focus on creating original theater with people and communities who have not had a voice in mainstream society. The class will be highly experiential, with students exploring techniques to build safe community, elicit stories, and create theater that gives voice to social issues. The class, open to sophomores, juniors, and seniors, does not require prior theater experience. Students will participate in an internship/apprenticeship, matched with artists who are working in various communities creating and/or directing Theater of Witness projects.
1 credit.
Not offered 2011-2012.

## THEA 008. Movement Theater Workshop

 (Cross-listed as DANC 049)This class will offer an orientation to movement-based acting through various approaches: traditional performance traditions in Bali and elsewhere, commedia dell'arte, the teachings of Jacques Lecoq, and so forth. Taught by Gabriel Quinn Bauriedel of the Pig Iron Theatre Company in Philadelphia. The class will require rehearsal with other students outside of class time and will end with a public showing of work generated by the students. Six hours per week.
Note: Movement Theater Workshop cannot be taken in lieu of THEA 012 either as a prerequisite for Acting III or by students seeking a major or a minor with an emphasis in acting.
Prerequisites: THEA 001 or 002A, any dance course numbered 040-044, or consent of the instructor.
1 credit.
Fall 2011. Bauriedel.

## Intermediate Courses

## THEA 012. Acting II

In this course, we will use scene work as a tool to sharpen the actor's skill. The course will include physical exercises designed to remind the actor that acting is about give and take. We then begin work on scenes by a variety of playwrights as a way of investigating what is required of the actor at all times vs. what is required of the actor in different situations and genres. While working on these scenes, actors
will learn how to develop a character; how to rehearse; how to interact with other actors; how to increase their vocal, physical, and emotional flexibility; and how to evoke a response from the audience. Actors will also learn how to increase their presence onstage, how to harness their imagination and sharpen their observations. Six hours per week.
Prerequisites: THEA 002A. Interested students may simultaneously enroll in THEA 001 if they have not previously taken the class.
1 credit.
Fall 2011. Stevens.
THEA 012A. Intermediate Special Project in Acting
By individual arrangement with the acting or directing faculty for performance work in connection with department directing projects, honors thesis projects, or Senior Company. May be taken concurrently with THEA 008 or 012 .
Prerequisite: THEA 002A, THEA 002C, AND THEA 008 or 012 or 022 .
0.5 or 1 credit. CR/NC grade.

Fall and spring semesters. Staff.

## THEA 013. Special Project in Theater Practicum

By individual arrangement with the design or directing faculty for production work in connection with department directing workshops, honors thesis productions, Production Ensemble, or Senior Company. Prerequisite: THEA 003 or any 004 design class.
0.5 or 1 credit. $\mathrm{CR} / \mathrm{NC}$ grade.

Fall and spring semesters. Staff.

## THEA 014. Special Project in Design

By individual arrangement for a production project in connection with department directing workshops, Production Ensemble, honors thesis projects, Acting III, or Senior Company.
Prerequisite: Current or past enrollment in THEA 004A, THEA 004B, THEA 004C, or THEA 004D, or 004E.
0.5 or 1 credit.

Fall and spring semesters. Staff.

## THEA 015. Performance Theory and Practice

This course covers a series of major texts on performance theory and practice, with emphasis on directing and acting. Assigned readings will focus on theoretical writings by or about the performance work of artists such as Zeami, Stanislavsky, Artaud, Brecht, Grotowski, Mnouchkine, Chaikin, Suzuki, and Robert Wilson as well as selected theoretical and critical texts by nonpractitioners. The course includes units on performance traditions and
genres outside of Europe and North America. Weekly video screenings required.
Fulfills a general requirement for all theater majors and minors.
Prerequisite: THEA 001.
Writing course.
1 credit.
Fall 2011. Kuharski.

## THEA 016. Special Project in Playwriting

An independent study in playwriting taken either as a tutorial or in connection with a production project in the department. By individual arrangement between the student and department faculty.
Prerequisites: THEA 001 and THEA 006. 1 credit.
Fall and spring semesters. Staff.

## THEA 021. Production Dramaturgy

This course will investigate a tripartite nature of dramaturgy as it is currently regarded and practiced in American theater. Structural dramaturgy: tragedy, comedy, melodrama, farce, the well-made play, and modern departures thereof. Production dramaturgy: collaborative process, methods and strategies for historical research, note taking, script editing, and adaptation. Institutional dramaturgy: script evaluation, season planning, mission statements, grant proposals, marketing and audience outreach. Through readings, discussions, writing assignments, and engagement with campus productions (and perhaps area productions), students will sidestep the deathless-and deadly-question, "What is a dramaturg?" to focus on how dramaturgs think and what they do with what they know.
Fulfills a general requirement for all theater majors and minors.
Prerequisites: THEA 001.
1 credit.
Spring 2012. Magruder.

## THEA 022. Production Ensemble I

Rehearsal of a full-length work for public performance with a faculty director: ensemble techniques, improvisation, using the audience as part of the given circumstances. Required for all course and honors majors in acting, directing, and dramaturgy; also required for course minors in acting, directing, and dramaturgy.
Fulfills a general requirement for all theater majors and minors.
Prerequisites for acting students: THEA 002A and audition in fall semester.
Prerequisites for directing students: THEA 001, THEA 002A, and THEA 035.

Prerequisites for dramaturgy students: THEA 001 and THEA 021.
1 credit.
Spring 2012. Stevens.

## THEA 023. Special Project: Intermediate

 Theater PracticumBy individual arrangement with the design or directing faculty for production work in connection with department directing workshops, honors thesis productions, Production Ensemble, or Senior Company. Prerequisite: THEA 003 or any 004 design class, and THEA 013. 0.5 or 1 credit. CR/NC grade.

Fall and spring semesters. Staff.

## THEA 024. Special Project in Stage Management

By individual arrangement for a production project in connection with department directing workshops, honors thesis projects, Acting III, or Senior Company.
Prerequisite: THEA 003, or THEA 004B, or THEA 035.
0.5 or 1 credit.

Fall and spring semesters. Staff.

## THEA 025. Solo Performance

Solo performance is a theater of inclusion: it creates a space in which everyone can speak up and be heard. In this course students will research, write, and perform a one-person show using the writing, composition, and performance techniques of Deb Margolin, Second City, Anna Deavere Smith, Anne Bogart, Pina Bausch, and others. We will use memories, interviews, personal experiences, images, favorite quotations, obsessions, desires, things no one else thinks are important, bits of pop culture, and songs usually sung in the shower to make our performances, keeping in mind that the most personal truths have political resonance.
This course fulfills the intermediate acting requirement for acting majors and minors (Acting I is still required for all majors and minors). It also counts as a prerequisite for Production Ensemble in the spring.
Fulfills a general requirement for all theater majors and minors.
1 credit.
Not offered 2011-2012.

## THEA 034. Special Project in Design

This course is an independent study in any area of design. This special project will examine the forms and techniques of design applied in actual production. Students will develop a design for Production Ensemble as assistants under a faculty designer. By individual
arrangement between the student and the department faculty.
Prerequisite: 004 design class.
Fulfills a general requirement for all theater majors and minors.
0.5 or 1 credit. CR/NC grade.

Fall and spring semesters. Staff.
THEA 035. Directing I: Directors' Lab
This course focuses on the theater director's role in a collaborative ensemble and on the ensemble's relation to the audience. Units cover the director's relationship with actors, designers, composers, technicians, and choreographers as well as playwrights and their playscripts. The student's directorial selfdefinition through this collaborative process is the laboratory's ultimate concern. Final project consists of an extended scene to be performed as part of a program presented by the class.
Prerequisites: THEA 001, 002A, and any course in design.
Fulfills a general requirement for all theater majors and minors.
1 credit.
Fall 2011. Kuharski.
THEA 042. Production Ensemble II
Available by audition or consent of instructor to students who have successfully completed THEA 022.
Prerequisites for acting students: THEA 002A, 022, and audition in fall semester.
Prerequisites for directing students: THEA 001, $002 \mathrm{~A}, 022$, and THEA 035.
Prerequisites for dramaturgy students: THEA 001,021 or THEA 035, 022. 1 credit.
Spring 2012. Stevens.

## THEA 044. Special Project: Intermediate Design

This course is an independent study in any area of design. This special project will examine the forms and techniques of design applied in actual production. By individual arrangement under the mentorship of the design faculty for work in connection with department directing workshops, honors thesis productions, Production Ensemble, or Senior Company. Prerequisite: 004 design class, and THEA 034. 0.5 or 1 credit. CR/NC grade.

Fall and spring semesters. Staff.

## Advanced Courses

THEA 051. Special Project in Production Dramaturgy
Production dramaturgy in connection with a production completed on or off campus. To be
taken concurrently with or following THEA 021: Production Dramaturgy. By individual arrangement between the student and the department faculty.
Prerequisites: THEA 001 and 021.
1 credit.
Fall and spring semesters. Magruder.
THEA 052. Production Ensemble III
Available by audition or consent of instructor to students who have successfully completed THEA 022 and 042.
Prerequisites for acting students: THEA 002A, 022,042 , and audition in fall semester.
Prerequisites for directing students: THEA 001, $002 \mathrm{~A}, 022$, THEA 035, and 042.
Prerequisites for dramaturgy students: THEA 001, 021 or THEA 035, 022, and 042.
1 credit.
Spring 2012. Stevens.

## THEA 053. Special Project: Advanced

## Theater Practicum

By individual arrangement with the design or directing faculty for production work in connection with department directing workshops, honors thesis productions, Production Ensemble, or Senior Company.
Prerequisite: THEA 003 or any 004 design class, and THEA 013, and THEA 023.
0.5 or 1 credit. CR/NC grade.

Fall and spring semesters. Staff.

## THEA 054. Special Project: Advanced Design

This course is an independent study in any area of design. This special project will examine the forms and techniques of design applied in actual production. By individual arrangement under the mentorship of the design faculty for work in connection with department directing workshops, honors thesis productions, Production Ensemble, or Senior Company.
Prerequisite: 004 design class, and THEA 034, and THEA 044.
0.5 or 1 credit. CR/NC grade.

Fall and spring semesters. Staff.

## THEA 054B. Special Project: Advanced Lighting Design

For the student, this course is an advanced study in lighting design. This project will examine complex forms and techniques of lighting design applied in actual production. Students will develop the design of the lights for Theater Department productions as assistants under the mentorship of a faculty lighting designer. By individual arrangement between the student and the department faculty.

Prerequisites: THEA 004B.
1 credit.
Fall and spring semesters. Murphy.

## THEA 055. Directing II: Advanced Directing Workshop

Directing II requires students to apply the exercises from THEA 035: Directing I to a variety of scene assignments. These will address a variety of theatrical genres and various approaches to dramatic text (improvisation, cutting, and/or augmentation of play scripts, adaptation of nondramatic texts for performance, etc.). Projects will be presented for public performance.
Prerequisites: THEA 001, 002A, 015, THEA 035 , and any class in design.
1 credit.
Spring 2012. Kuharski.

## THEA 062. Production Ensemble IV

Available by audition or consent of instructor to students who have successfully completed THEA 022, 042, and 052.
Prerequisites for acting students: THEA 002A, $022,042,052$, and audition in fall semester. Prerequisites for directing students: THEA 001, $002 \mathrm{~A}, 022,035,042$, and 052.
Prerequisites for dramaturgy students: THEA 001,021 or $035,022,042$, and 052.
1 credit.
Spring 2012. Stevens.

## THEA 064. Advanced Special Project in

 Scenography, Sound, and TechnologyA portfolio design or other design project in connection with a production completed on or off campus. To be taken concurrently or following THEA 054 or THEA 054A. By individual arrangement between the student and the department faculty.
Prerequisites: Any course in the THEA 004 group, THEA 014, THEA 054 or 054A. 0.5 or 1 credit.

Fall and spring semesters. Staff.

## THEA 072. Advanced Special Project in Acting

By individual arrangement with the acting or directing faculty for performance work in connection with department directing projects, honors thesis projects, or Senior Company. With faculty approval, acting in a production off campus may qualify for this credit.
Prerequisites: THEA 002A, THEA 002C, THEA 008 or 012 or 022, THEA 012A.
0.5 or 1 credit. CR/NC grade.

Fall and spring semesters. Staff.

## THEA 074. Special Project: Senior Project in Design

This course is an independent study in any area of design. This special project will examine the forms and techniques of design applied in actual production. By individual arrangement under the mentorship of the design faculty for work in connection with department directing workshops, honors thesis productions, Production Ensemble, or Senior Company.
Prerequisite: THEA 004 design class, and THEA 034, THEA 044, and THEA 054.
0.5 or 1 credit. CR/NC grade.

Fall and spring semesters. Staff.

## THEA 075. Advanced Special Project in

 DirectingBy individual arrangement with the directing faculty. With faculty approval, directing or assistant directing off campus may qualify for this credit.
Prerequisites: THEA 001, THEA 015 or THEA 021, THEA 022, THEA 035, THEA 106.
Fall and spring semesters. Staff.

## THEA 076. Polish Theater and Drama

Available to students participating in the Semester Abroad Program in Poland. No reading knowledge of Polish required.
By arrangement with Allen Kuharski.
Prerequisite: THEA 001.
1 credit.

## THEA 092. Off-Campus Projects in Theater

Residence at local arts organizations and theaters. Fields include management, financial and audience development, community outreach, and stage and house management.
Prerequisites: THEA 001 and appropriate preparation in the major.
1 credit.
Fall and spring semesters. Staff.

## THEA 093. Directed Reading

1 credit.
Fall and spring semesters. Staff.

## THEA 094. Special Projects in Theater

1 credit.
Fall and spring semesters. Staff.

## THEA 099. Senior Company

A workshop course emphasizing issues of collaborative play making across lines of specialization, ensemble development of performance projects, and the collective dynamics of forming the prototype of a theater company. Work with an audience in performance of a single project or a series of projects.

This course is required of all theater majors in their senior year and can not be taken for external examination in the Honors Program. Class members will consult with the instructor during spring semester of their junior year, before registration, to organize and make preparations. Course and honors minors may petition to enroll, provided they have met the prerequisites.
Prerequisites: THEA 001; 002A; any design class; $015 ; 006,021,025$, or 035; 022; a 100level seminar; and the completion of one threecourse sequence in theater.
Fulfills a general requirement for all theater majors and minors.
1 credit.
Fall 2011. Stevens.

## Seminars

## THEA 106. Theater History Seminar

A critical comparative study of a selected theatrical company together with a comparative survey of world theater history. Emphasis on company structures and evolution, the placement of theatrical performance within specific cultural and political contexts, and the relevance of historical sources to contemporary theatrical practice. Readings will include, but not be limited to, dramatic texts as one form of artifact of the theatrical event.
Spring 2012: Ariane Mnouchkine and the Théâtre du Soleil.
Prerequisites: THEA 001 and 015.
Fulfills a general requirement for all theater majors and minors.
Writing course.
2 credits.
Spring 2012. Kuharski.

## THEA 180. Honors Thesis Preparation

Credit either for honors attachments to courses or for honors thesis projects in directing, design, acting, and so on. By arrangement with the student's faculty adviser in theater.
Fall and spring semesters. Staff.

## THEA 181. Honors Thesis Project

Credit for honors thesis projects in directing, design, acting, and so on. By arrangement with the student's faculty adviser in theater.
Fall and spring semesters. Staff.

## Swarthmore College

Map of the campus

## 165669 College entrances

## (P) Visitor Parking

(P)

Faculty/staff Parking



## Directions to Swarthmore College

Swarthmore College is located 11 miles southwest of the city of Philadelphia in the Borough of Swarthmore, Pennsylvania. The College is just a 30 minute drive from Philadelphia. New York and Washington, D.C. are each about two hours away.

## DRIVING

## From the NORTH (New Jersey Turnpike or I-95)

Take the New Jersey Turnpike to Exit 6 (I-276 West/Pennsylvania Turnpike). Follow I-276 West to Exit 20 (I-476 South, toward Philadelphia/Chester). Take I-476 South to Exit 3,
Media/Swarthmore. At the bottom of the exit ramp turn left onto Baltimore Pike. (Directions continue below)

## From the SOUTH (I-95)

Follow I-95 North to Pennsylvania Exit 7 (I-476 North/Plymouth Meeting). Take I-476 to Exit 3 (Media/Swarthmore). At the bottom of the exit ramp turn right onto Baltimore Pike. (Directions continue below.)

## From the EAST (via the Pennsylvania Turnpike)

From Exit 333(Norristown), follow signs for I-476 South. Stay on I-476 approximately 17 miles to Exit 3 (Media/Swarthmore). At the bottom of the exit ramp turn left onto Baltimore Pike.
(Directions continue below.)

## From the WEST (via the Pennsylvania Turnpike)

From Exit 326(Valley Forge), Take I-76 East (Schuylkill Expressway), about 4 miles to I-476 South. Take I-476 approximately 12 miles to Exit 3 (Media/Swarthmore). At the bottom of the exit ramp turn left onto Baltimore Pike. (Directions continue below.)

## From the AIRPORT

Take I-95 South. Continue to Exit 7 (I-476 North/Plymouth Meeting). Take I-476 North to Exit 3 (Media/Swarthmore). At the bottom of the exit ramp turn right onto Baltimore Pike. (Directions continue below.)

## Continue to the Visitor's Center

Stay in the right lane and in less than $1 / 4$ mile turn right onto state Route 320 South. At the first light turn right to stay on state Route 320. Proceed through two traffic lights on College Avenue, and then turn right into the first driveway on your right toward visitor parking at the Benjamin West House. The Benjamin West House is the College's visitor center and is open 24 hours a day.

## Continue to the Admissions Office

Stay in the right lane and in less than $1 / 4$ mile turn right onto state Route 320 South. At the first light turn right to stay on state Route 320. At the next light turn right onto College Avenue. On College Avenue take the first right onto Cedar Lane. At the next stop sign turn left onto Elm Avenue. Turn left onto Whittier Place, marked by stone pillars. Proceed to the end of Whittier Place and turn right into the DuPont parking lot, beside the Science Center. After parking in the DuPont parking lot, it is a short walk to the Admissions Office in Parrish Hall. Follow the path in front of the Science Center, continue past Kohlberg Hall, and you will see the back entrance of Parrish straight ahead. The Admissions Office is on the second floor.

## TRAIN

The College is readily accessible from Philadelphia by train. Amtrak trains from New York and Washington arrive hourly at Philadelphia's 30th Street Station. From 30th Street Station, the SEPTA Media/Elwyn Local takes approximately 23 minutes to reach the Swarthmore station, which is adjacent to campus.

## AIR

An express train runs from the Philadelphia International Airport to 30th Street Station, where you can take the SEPTA Media/Elwyn Local train directly to the Swarthmore campus. Taxi service is also available.

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[^1]:    ${ }^{1}$ Term ends 2012.
    ${ }^{2}$ Term ends 2013.

[^2]:    ${ }^{1}$ Absent on leave, fall 2011.
    ${ }^{2}$ Absent on leave, spring 2012.
    ${ }^{3}$ Absent on leave, 2011-2012.

[^3]:    ${ }^{1}$ Absent on leave, fall 2011.
    ${ }^{2}$ Absent on leave, spring 2012.
    ${ }^{3}$ Absent on leave, 2011-2012.
    ${ }^{9}$ Campus coordinator, Swarthmore Program in Grenoble, fall 2011.
    ${ }^{10}$ Campus coordinator, Swarthmore Program in Grenoble, spring 2012.

[^4]:    ${ }^{1}$ Absent on leave, fall 2011.
    ${ }^{2}$ Absent on leave, spring 2012.
    ${ }^{3}$ Absent on leave, 2011-2012.

[^5]:    LING 014. Old English/History of the Language
    (See ENGL 014)
    This course counts for distribution in humanities under the English rubric and in social sciences under the linguistics rubric. 1 credit.
    Spring 2012. Williamson.

[^6]:    ${ }^{1}$ Absent on leave, fall 2011.
    ${ }^{2}$ Absent on leave, spring 2012.
    ${ }^{3}$ Absent on leave, 2011-2012.
    ${ }^{9}$ Campus coordinator, Swarthmore Program in Grenoble, fall 2011.
    ${ }^{11}$ Program director, Swarthmore Program in Grenoble, fall 2011.

[^7]:    LITR 061FJ. Manga, Bande Dessinée, and the Graphic Novel: A Transnational Study of Graphic Fiction
    (Cross-listed as JPNS 061)
    1 credit.
    Not offered 2011-2012.

[^8]:    ${ }^{2}$ Absent on leave, spring 2012.
    ${ }^{3}$ Absent on leave, 2011-2012.

