# Swarthmore

# College Bulletin 2017–2018

Volume CXV Number 1 Catalog Issue August 2017

# **Directions for Correspondence**

#### Swarthmore College, 500 College Avenue, Swarthmore PA 19081-1390 Online at www.swarthmore.edu Main number 610-328-8000

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Swarthmore College does not discriminate in education or employment on the basis of sex, race, color, age, religion, national origin, marital status, sexual orientation, gender identity or expression, veteran status, medical condition, pregnancy, disability, or any other legally protected status. This policy is consistent with relevant governmental statutes and regulations, including those pursuant to Title IX of the Federal Education Amendments of 1972 and Section 504 of the Federal Rehabilitation Act of 1973.

The Swarthmore College Department of Public Safety is responsible for the overall security of Swarthmore's campus and is the first contact and first responder for all campus emergencies. Its charge is to protect persons and property, preserve the peace, deter crime, apprehend criminal offenders, recover lost and stolen property, perform services as required, enforce appropriate College regulations, and maintain a sense of community security and confidence in the department. A copy of the College's Annual Security Report—describing safety programs and policies, as well as crime statistics—is available at www.swarthmore.edu/public-safety/clery-crimestatistics.xml.

This *Bulletin* contains policies and program descriptions as of July 15, 2017, 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

2017	Fall Semester
Aug. 25-29	International student orientation.
Aug. 29	Residence halls open for new students.
Aug. 29- Sep 3	Orientation and placement days.
Aug. 31	Advising begins. All-adviser meeting in morning. Individual advising begins in afternoon.
Sep. 1	Computer preregistration for first-year and transfer students only.
Sep. 1	Residence halls open for returning students.
Sep. 2	Registration follow-up meeting for students who need to make a change to their schedule.
Sep. 3	Meal plan starts at dinner for returning students.
Sep. 4	Classes and seminars begin.
Sep. 4	Labor Day. Classes in session
Sep. 15	Drop/add ends. Last day to delete a course from or add one to permanent registration.
Sep. 15-16	Board of Managers meeting.
Oct. 1	Final examination schedule available online.
Oct. 6-8	Garnet and Family Weekend.
Oct. 13	October break begins at end of last class or seminar.
Oct. 23	October break ends at 8:30 a.m.
Nov. 1	Schedule of courses and seminars for next semester available online.
Nov. 6-17	Advising period.
Nov. 10	Last day to declare CR/NC grading option. Last day to withdraw from a course and receive the grade notation "W."
Nov. 22	Thanksgiving break begins at end of last class or seminar.
Nov. 27	Thanksgiving break ends at 8:30 a.m.
Nov. 27-29	Pre-enrollment for spring semester.
Nov. 29	Pre-enrollment ends at 4 p.m.
Dec. 1	All accounts must show a zero or positive balance to enroll or select a room for spring semester.
Dec. 1-2	Board of Managers meeting.
Dec. 11-12	Monday follows the "Friday" class schedule, replacing the Friday of Thanksgiving break. Tuesday follows the "Thursday" class schedule, replacing the Thursday of Thanksgiving break.
Dec. 12	Classes end.
Dec. 12	Lottery for spring housing.
Dec. 15	Final examinations begin.
Dec. 15-23	<i>Note:</i> 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.
Dec. 23	Final examinations end at noon.
	Meal plan ends at lunch. Residence halls close at 6 p.m.

Subject to change

# College Calendar

2018	Spring Semester
Jan. 20	Residence halls open at noon.
Jan. 21	Meal plan starts at dinner.
Jan. 15	Martin Luther King Jr. Day (No Classes)
Jan. 22	Classes and seminars begin.
Feb. 2	Drop/add ends. Last day to delete a course from or add one to permanent registration.
Feb. 23-24	Board of Managers meeting.
Mar. 9	Spring break begins at end of last class or seminar.
Mar. 19	Spring break ends at 8:30 a.m.
Mar. 28	Schedule of courses and seminars for next semester available online.
Mar. 30	Last day to declare CR/NC grading option. Last day to withdraw from a course and receive the grade notation "W."
Apr. 1	All accounts must show a zero or positive balance for students to enroll and select a room for the fall semester.
Apr. 2-13	Advising period.
Apr. 16-18	Pre-enrollment for fall semester.
Apr. 18	Pre-enrollment ends at 4 p.m.
May 4	Classes and seminars end.
May 4-5	Board of Managers meeting.
May 10-17	Course Finals and Honors Written examinations.
May 17	Meal plan ends at dinner for all but seniors.
May 18	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 20-22	Oral honors examinations.
May 26	Baccalaureate.
May 27	Commencement.
May 28	Residence halls close to seniors at 9 a.m.
Jun. 1-3	Alumni Weekend.

Subject to change

# 1 Introduction to Swarthmore College

Swarthmore College, founded in 1864 by members of the Religious Society of Friends as a coeducational 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 1,600 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 \$1.877 billion at market value on June 30, 2014. Swarthmore is ranked among the highest in the country in endowment per student. Income from the endowment during the academic year 2013-2014 contributed approximately \$36,052 to meet the total expense of educating each student and provided about 40 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 Tri-College Library Consortium takes advantage of a long history of cooperation and a unified, online catalog to work toward building a research-quality 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 860,000 print volumes with some 10,000 volumes added each year; additionally more than 650,000 e-books are available to patrons. 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 14,000 videos more than 18,000 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 90,000 volumes and serves the curricular and research needs of students and faculty in the sciences. *The Underhill Music and Dance Library* contains 22,000 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 mid-1940s; 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, Danilo Dolci, Belva Lockwood, Homer Jack, A.J. Muste, Scott Nearing, John Nevin Sayre, Wilhelm Sollmann, André and Magda Trocmé, and others as well as the records of the American Peace Society, A Quaker Action Group, Center on Conscience and War, Code Pink, Fellowship of Reconciliation, Friends Committee on National Legislation, The Great Peace March, Lake Mohonk Conferences on International Arbitration, Military Families Speak Out, National Council for

Prevention of War, SANE Inc., United for Peace and Justice, War Resisters League, Women Strike for Peace, and many others. The Peace Collection serves as the official repository for the archives of these organizations. The Peace Collection also houses more than 14,000 books and pamphlets over 3,000 periodical titles, more than 20,000 linear feet of manuscripts, over 50,000 photographs and other images, thousands of audio and video recordings, and memorabilia. Periodicals are currently received from 22 countries. The comprehensive website www.swarthmore.edu/library/peace describes the archival holdings and resources.

#### 2.3 Information Technology Services

Information Technology Services (ITS) provides technology resources to support the instructional mission, residential life, and administrative work of the College. Services are available to all students, faculty, staff, and alumni. ITS works in partnership with the Swarthmore community to meet its mission.

Swarthmore provides a rich, robust, and secure technology infrastructure. All campus buildings are served by wired and wireless networks. In addition to network services, a cell phone signal distribution system is installed in the residence halls. Presentation technology is available in every classroom. Swarthmore's information systems provide a wide range of academic and administrative information services to the College community.

Public computers and printing services are available to students in the residence halls, McCabe, Science, and Music Libraries, and in other public spaces on campus. Public computer labs are located in Trotter and McCabe Library, and there are many departmental computer labs across campus that meet the specific needs of academic disciplines. A wide array of commercial and open source software is available for use on all public computers to support academic work. The Media Center in Beardsley provides access to a rich set of multimedia tools and the newest technologies available for experimentation and creation of audio, video, multimedia, high-quality color and 3-D output for curricular and extracurricular work. Music composition/editing computers are available in the Music Library. Language study and video editing are supported in the Language Resource Center in Kohlberg Hall. Some academic software is available for downloading by the College community. The Swarthmore Campus and Community Store also sells a variety of software at competitive prices. The ITS Help Desk located in Beardsley Hall serves students, faculty, and staff who have technology questions or problems and is available by phone on campus at X4357 (HELP), off campus at 610-328-8513, or via email at

help@swarthmore.edu. Computer repair services are also available for students (a fee is charged for parts and labor).

### 2.4 Communications

The Communications Office coordinates strategic communications efforts at the College, particularly those relating to admissions, alumni, 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 produces a broad range of print and digital materials for the College's internal and external communities. A selection includes the quarterly *Swarthmore College Bulletin*, the annual college calendar, and the Sw@tNews email newsletter. News about Swarthmore newsmakers, campus activities, and special events are available on the College's website (www.swarthmore.edu), which also features a rich variety of videos, podcasts, and faculty experts. The Communications Office also maintains the College's social media presence on Twitter, Facebook, Instagram, YouTube, and Snapchat.

The Communications Office maintains a set of standards for print and digital publications, including a College design guide, a College style guide, and the appropriate use of the College logo. Permission from the office is required for all photo, film, or video shooting on the Swarthmore campus by external vendors or members of the media.

Communications Office staff members provide editorial, photographic, graphic design, print production, and web content support 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 1,550 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 The Academic Core of Campus

*Parrish Hall*, the original College building, remains the heart 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. Sited by the founders on a ridge at the highest elevation in Delaware County, Parrish commands views south toward the Delaware River and New Jersey and north and west toward the Crum Woods, the largest remaining stand of woods in the area and an important College resource for recreation and research. Most academic buildings are located on the plateau to the north of Parrish Hall; the main dining hall, residence halls, and athletic facilities are located on the gentle slope to the south. The North Quad is bounded by Kohlberg Hall, with its popular coffee bar and state of the art facilities for the departments of Modern Languages and Literatures, Economics, and Sociology and Anthropology; Martin Biological Laboratory and associated greenhouse; Beardsley Hall, the home of the Department of Art, with large studio spaces; the Department of Philosophy; and a Media Center staffed by the Department of Information Technology Services; and the Science Center, which physically links Biology with the departments of Chemistry and Biochemistry, Computer Science, Mathematics and Statistics, Physics and Astronomy, and the Cornell Science and Engineering Library. Eldridge Commons, with its coffee bar, group study tables and lounge, is an important gathering spot which fosters serendipitous conversations and interdisciplinary collaboration.

Nearby, surrounding the Nason Garden, are *Hicks Hall*, home of the Department of Engineering; *Trotter Hall*, which houses the departments of History, Political Science, and Classics, along with the *Center for Social and Policy Studies* and interdisciplinary programs in Latin American Studies, Peace and Conflict Studies, Interpretation Theory, Cognitive Science, Gender and Sexuality Studies, Black Studies, and Asian studies and the Writing Center; and *Pearson Hall*, home to the Linguistics, Educational Studies, and Religion departments.

The Metasequoia Allée leads from Parrish Hall to the Lang Performing Arts Center, home to the English Literature and Theater departments and the program in Dance. The Pearson-Hall Theater seats 730 in a divisible tiered space with sophisticated lighting and sound systems. The *Frear Ensemble Theatre* on the lower level is a black box theater which serves as an experimental and instructional studio. The Boyer Dance Studio and the Troy Dance Lab support the Dance program. The List Gallery entered from the allée, hosts student and alumni exhibits as well as those of invited artists.

An open bridge, with views into the Crum Woods, connects the Performing Arts Center to *Lang Music Building*, home to the Music and Dance Department. The Eugene and Theresa M. Lang Concert Hall is one of the College's iconic spaces, seating 425 in an unusual tiered arrangement.

Windows cover the entire back wall of the stage, offering an expansive view deep into the Crum Woods. The building is also home to the *Underhill Music and Dance Library*, classrooms, practice and rehearsal rooms, and an exhibition area in the two-story lobby.

Just east of Parrish Hall sits *McCabe Library*, the main library on campus and the focus of research and intellectual inquiry. The Library also houses the *Friends Historical Library*, the national repository of the Society of Friends (the Quakers) in America. The *Peace Collection* focuses on non-governmental efforts for nonviolent social change, disarmament and conflict resolution between peoples and nations.

Facing McCabe Library across Parrish Lawn is *Clothier Hall*, with a snack bar, a student-run coffeehouse, and a large multipurpose space framed by exposed wood trusses and tracery windows. The cloister at Clothier Hall is the home of the *Intercultural Center*, with both private organization space and a large meeting room for collective events.

The Lang Center for Civic and Social Responsibility, on Whittier Place, fosters the role of students seeking leadership in shaping a more just and humane world. The Center serves as the central organizational and administrative hub for student, staff and faculty initiatives related to activism, advocacy, community service, and social entrepreneurship.

The newest academic building on campus is *Whittier Hall*, near the Lang Center. The building's flexible design serves two purposes--as a temporary home for the Department of Psychology and shops associated with the Department of Engineering, while a larger academic building is under construction; and as a permanent location for studios for the Department of Art.

#### 2.5.2 Athletic Facilities

Lamb-Miller Field House contains basketball practice courts, an indoor track, locker and equipment rooms, and administrative offices for the Department of Physical Education and Athletics. The adjacent Tarble Pavilion provides competition courts for basketball. Just east of the field house are the baseball and softball fields. Matchbox, a wellness/fitness center with state of the art fitness equipment, houses a multi-purpose space with a sprung wood floor for aerobics, Zumba and other fitness activities, the administrative office of the College's Wellness program, and a Theater practice space. Ware Pool is a 10-lane by 10-lane competition pool under a distinctive peaked roof. The Cunningham Courts and Faulkner Courts each provide six competition tennis courts, supplemented by three indoor courts at the Mullan Tennis Center. Cunningham Fields provides four turf fields, supported by the Delmuth-Rath Field House. Clothier Field, adjacent to the Field House, is an all-weather

surface for year-round field sports. It is circumscribed by a state of the art eight-lane outdoor track. Ample open lawn areas throughout campus accommodate and inspire a range of informal and spontaneous physical activity from Frisbee throwing to water sliding.

#### 2.5.3 Residential Life

The College provides a variety of residential experiences, from single to quad occupancy, in traditional residence halls like Alice Paul, Dwell and Wharton residence halls, and smaller settings like Woolman House and the Lodges. PPR Apartments is designed for suite-style living; each unit has a kitchen/dining/living area and individual bedrooms. All buildings have shared lounges and laundry facilities and wireless internet service; many have kitchens for student use. Sharples Dining Hall provides communal dining, ensuring that students have the opportunity to interact regularly at mealtimes. Private dining rooms at Sharples can be reserved by students and are frequently used by special-interest groups and clubs. Near the dining hall are Kitao Gallery, a student-run art gallery, Olde Club, a party/concert venue, and the Women's Resource Center. Two fraternity houses provide social space for Delta Upsilon, a national fraternity, and Phi Si, an independent fraternity. Brothers live in the residence halls. The Black Cultural Center at Robinson House provides social and educational facilities for students. Bond Hall is home to the Interfaith Center, providing programming to students of all faiths. The Worth Health Center tends to students' health and wellness through Student Health Services, Counseling and Psychological Services (CAPS), and wellness education.

#### 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 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, a large all-campus 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 advisors and religious organizations; the Kitao Gallery, a student-run art gallery; Olde Club, a party/concert venue; the Swarthmore Campus and

*Community Store*; 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 horticultural and botanical collections 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 to afford examples of the better kinds of trees and shrubs that are hardy in the climate of eastern Pennsylvania, are 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, conifers, crabapples, magnolias, tree peonies, lilacs, rhododendrons, azaleas, hydrangeas, and witch hazels. Specialty gardens include 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, the Metasequoia Allée, the Harry Wood Courtyard Garden, the Pollinators Garden, the Gold Medal Plant Garden, and the West House Garden. Many interested donors have contributed generously to the collections, and the arboretum is funded primarily by restricted endowment funds with a combined market value of \$34.5 million as of June 30, 2014. The mission of the Scott Arboretum is to delight and educate all visitors and inspire them to enjoy the many benefits of horticulture. Our "garden if ideas" features varieties that perform well in the region, encouraging wise stewardship as well as the cultivation of plants to sustain the body, enchant the eye, and soothe the spirit. 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 opened 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 financial support and 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 volunteer Arboretum Assistants aid in campus maintenance on a regular basis. 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 free brochures of the arboretum plant collections are available at the Scott offices, 610-328-8025, located in the Cunningham House, as well as online.

The arboretum conducts applied research on ornamental plants and holds three recognized North American Plant Collections: hollies, magnolias, and oaks.

The Scott Arboretum was accredited by the American Association of Museums in 1995 and reaccredited in 2006, signifying its professional standards of operation as a museum of living plants. For more information and a calendar of events, the "Garden Seeds" blog, membership information, and brochures, visit www.scottarboretum.org.

# 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 advisor 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 William J. Carter '47 Religious Harmony Fund was established in 2011 by a bequest from William J. Carter '47. The fund's purpose is to encourage and promote understanding, harmony and respect among the various religions of the world.

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 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 income, but not the principal, shall be used at the discretion of the Art Department faculty to support the photography program. The use may include, but not limited to the purchase of equipment and materials; exhibition support; student summer opportunities; visiting speakers; and other activities.

*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 Dean's Discretionary Board Endowment Fund was established in 2016 to help defray nontuition costs for students who are first generation and/or low-income and/or belong to traditionally underrepresented backgrounds in their pursuit of a Swarthmore College education. This fund is administered by the Dean's Office.

*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 Embedded Study Endowment Fund was established in 2016 by an anonymous donor. Administered by the Provost's Office, this fund is intended to provide enriching, global learning experiences for Swarthmore students by supporting travel and other expenditures related to courses with an embedded beyond-the-classroom study component.

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 Anne Ashbaugh Kamrin '51 Fund for Vocal Music was established in 2014 by Robert P. Kamrin and Anne Ashbaugh '51. This fund supports opportunities for students to participate in choral groups on campus sponsored by the Music Program, with preference for providing enhanced support for the Swarthmore College Chorus and chamber choir. This fund, under the direction of the Music Program of the Department of Music and Dance and the Provost's Office, may also support other opportunities to enhance the vocal arts on campus for the benefit of all students. The Kaori Kitao Cinema History Endowment. Established in 2013 by Kaori Kitao, Professor Emerita in Art History, to celebrate her 80th birthday, supports curricular, scholarly and public events that explore history of cinema, with a preference for silent cinema, such as the annual public screening of silent films from worldwide sources, in recognition of its historical, cultural and cross-cultural importance, but open to other topics and purposes. The fund will be administered by the coordinator of the Film and Media Studies

Department in consultation with other relevant departments.

The Kaori Kitao Endowment for Mathematics, established in 2012 by Kaori Kitao, Professor Emerita in Art History, to celebrate her 80th birthday, supports a visiting lecture or lecture series in the Mathematics and Statistics department colloquium with a preference for topics in geometry, topology, and the history of mathematics, at the discretion of the department. Creation of this fund was motivated by the donor's desire to fulfill her alternate ambition for a career in mathematics which never materialized. The Mathematics and Statistics Department will administer the fund.

The Kaori Kitao Endowment for the List Gallery, established in 2013 by Kaori Kitao, Professor Emerita in Art History, to celebrate her 80th birthday, supports a variety of educational initiatives to be organized and administered by the List Gallery director. Supported initiatives include a student fellowship in curatorial studies, the publication of exhibition catalogs for emerging artists, on-site sculpture and installation projects, and the hiring of technical and administrative assistants as needed in order for the director to pursue such additional programming. The Kaori Kitao Humanities Research Fellowship Endowment. Kaori Kitao, Professor Emerita in Art History, established this research fellowship in 2013 in celebration of her 80th birthday. The fund supports students in the humanities by providing grants to encourage and facilitate historical research, original scholarship, and professional development, with a preference for Italian Studies, Japanese Studies, and Performing Arts. The fund is administered by the Division of the Humanities and the Provost's Office.

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 Lucinda M. Lewis '70 and Sarah Reynolds '09 Mathematics Endowment was established in 2012 by Robert J. Reynolds. This fund supports visiting scholars to the department of mathematics and student participation in conferences. Recipient(s) will be chosen by the chair of the department of mathematics.

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 Lucinda M. Lewis '70 and Sarah E. Reynolds '09 Field Hockey Endowment was established in 2009 by Robert Reynolds P'09 in honor of his wife and daughter. Cindy was an avid field hockey player at Swarthmore from 1966-1970, and Sarah from 2006-2009. This fund will be administered by the Athletics Department and supports activities and expenses associated with the field hockey program at Swarthmore College including training trips and trips by field hockey coaching staff to high school field hockey games and tournaments.

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 Caro Elise Luhrs '56 Business and Leadership Endowment was established by Caro Elise Luhrs '56 in 2011. This fund better prepares students for assuming leadership positions in whatever liberal arts and science fields they may go into by giving them grounding in basic business skills. Activities supported by this fund will foster strong communication skills, inspire new ways to develop innovative solutions, and encourage entrepreneurship thought and action.

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 advisor and supporting staff of the Swarthmore Protestant Community. The Barbara W. Mather '65 Political Science Honors Endowment was established in 2012 in honor of Barbara W. Mather '65, an exceptional and agile leader who served as chair of the Swarthmore College Board of Managers from 2004-2012. As Barbara was a Political Science major as a student, this fund supports the Honors Program in Political Science, which includes visiting examiners, special lectures, thesis work, and other special projects of Political Science honors majors.

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 Men's Soccer Endowment was established in 2017 by David McElhinny '75 and Thomas Spock '78. This fund supports the athletics program at Swarthmore College and activities and expenses associated with the men's soccer program, including training trips, winter break trips, and other program enhancing projects.

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 advisor 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 Swarthmore College was created in 2005 to support ambitious, social change-oriented projects of groups of Swarthmore students. Eugene M. Lang '38 and the Board of Managers of the College contributed to the endowment, which is administered by the Lang Center for Civic and Social Responsibility. 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 Mary Herndon Ravdin '50 Endowment for Partners in Ministry was established in memory of Mary Herndon Ravdin in 2008 by her husband, William D. Ravdin '50. This fund supports the Partners in Ministry program at Swarthmore College.

The Lucinda M. Lewis '70 and Sarah Reynolds '09 Mathematics Endowment was established in 2012 by Robert J. Reynolds. This fund supports visiting scholars to the department of mathematics and student participation in conferences. Recipient(s) will be chosen by the chair of the department of mathematics.

*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 Schmelz Family Endowment was established in 2012 by John and Diane Schmelz. This fund supports the athletics program at Swarthmore College and activities and expenses associated with the women's basketball program, including training trips, winter break trips, and other program enhancing projects.

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 Summer Scholars Program Endowment Fund was established in 2016 by Mark M. '74 and Amanda Orr '73 Harmeling. This fund supports the Swarthmore Summer Scholars Program (S3P). The recipients will be chosen by program staff, in collaboration with the Provost's Office.

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 Swarthmore College community. Income from the Urban endowment is distributed to Partners in Ministry to help provide for the compensation of the religious advisor and supporting staff of the Swarthmore Protestant community.

The Waksman Fund for Summer Scholars was established in 2016 by the Board of Trustees of the Waksman Foundation for MIcrobiology. This fund supports one scholar annually, to be named the Waksman Scholar, taking part in the Swarthmore Summer Scholars Program (S3P). This fund, which supports the Swarthmore Summer Scholars Program budget, is administered by the Provost's Office.

*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.

# **3 Admissions**

Inquiries concerning admission and applications should be addressed to the Vice President and Dean of Admissions, 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 for either the SAT or the ACT. SAT Subject Tests are not required for admission, but will be considered if submitted. 4. Applicants considering a major in engineering are encouraged to take the SAT Math level 2 Subject Test.

5. A brief statement about why the student is applying to Swarthmore.

6 .Co-curricular 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 advisors. 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 Application Process

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

# **3 Admissions**

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 one 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-bycase 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, permanent residents, undocumented, or DACA-eligible students 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. Prospective first-year applicants should take the initiative in arranging for this interview. On-campus interviews are available to rising seniors from June through early 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 in late November each year. Applicants for transfer may interview with an alumni representative. Transfer interviews are optional, may be requested in the winter, and must be completed by the transfer application deadline of April 1.

Arrangements for on-campus interview appointments for prospective first-year applicants, off-campus alumni interviews, or for transfer interviews can be made through the admissions website.

### 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), however, credit is normally only available for high-scoring work in certain Advanced Placement (AP) examinations of the College Entrance Examination Board, certain higher-level examinations of the International Baccalaureate, or certain other foreign certifications (such as British A-Levels or the German Abitur). Sometimes placement or possibly credit might be awarded for courses taken at another college. Every effort is made to place students at the appropriate level, but no department is required to give placement or credit for special credentials. All placement or credit decisions are made on a subject-by-subject basis by the individual Swarthmore departments. Credit for examination credentials is available only for examinations taken before matriculation at Swarthmore. 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."

Departments may set additional requirements. For instance, matriculated students may be required to take a Swarthmore placement examination to validate their previous work.

# **3 Admissions**

Swarthmore normally does not grant degree credit for college work done prior to starting school at Swarthmore (including the summer before Swarthmore) but advanced placement into courses with prerequisites may be possible. Students who wish to have courses taken at another college considered for either advanced placement or credit must be prepared to provide as needed an official transcript from the institution attended as well as written work (papers, examinations); syllabi; and reading lists for the coursework to be evaluated by the department concerned. Transcripts are evaluated by the registrar; grades must be straight C or better for credit, but departments make the placement or credit decisions. Any such requests for placement or credit must be made within the first year at Swarthmore.

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.

### 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. While financial aid awards are loan free, admission is not need-blind. Students must submit additional financial documentation. 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, via an online platform, or with a College admissions representative overseas is considered to be very helpful.

3. Required standardized tests (SAT or ACT) 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, permanent residents, undocumented, or DACA-eligible students in the United States. Transfer applications are not accepted from foreign national students who require financial aid. Transfer applicants are notified of decisions by mid to late May. Students who have already completed a bachelor's degree, or higher, are not eligible for transfer admission to Swarthmore College.

### 4.1 Student Charges

Total charges for the 2017-2018 academic year (two semesters) are as follows:

Tuition	\$50,424
Room	\$7,670
Board	\$7,282
Student activities fee	<u>\$398</u>
	\$65,774

These are the annual charges billed by the College. Students and their parents, however, should plan for expenditures associated with books, travel, parking, 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 (\$6,300) or half-course (\$3,150), 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. After the first eight semesters of encolment, students are eligible to pay the unit charge for each course.

#### 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 sent in July and December. Payment for the first semester is due by July 24, 2017 and for the second semester by January 2, 2018. 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.

### 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	Room Reduced
Before start of classes	To \$0	To \$0	To \$500
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 Off-Campus Study abroad program, or is required by the College to withdraw from the program, either before the program begins, or after the program is underway, 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 Office of Student Engagement before 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 8th 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 before 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 8th 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 Office of Student Engagement before 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 before 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 \$42 million for Swarthmore scholarships for the coming year. About 53% of our student body receives scholarship assistance through Swarthmore on the basis of their families' financial situations. To meet the needs of our students, the average aid award for 2016-17 was \$48,720. A total of 70 percent of our students will share more than \$46 million in scholarships, loans, and campus job opportunities during the 2017-2018 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 completing a financial aid application 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 assets.

For 2017-2018, the College charges, which include tuition, room, board, and a student activity fee, will be \$65,774. This activity fee covers admission to all social, cultural, and athletic events on campus. The total budget figure against which aid is computed is \$68,426. This allows for an estimated \$1,336 for books and supplies and \$1,316 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. Financial Aid eligibility may change from year-to-year. Assistance is available only during a normallength 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.

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 2017-2018, the College will award more than \$42 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. Rather, the College decides who is to receive restricted endowed scholarships or support 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 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 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. Parents who wish to borrow might consider the federal Direct PLUS Loan. Up to \$68,426 per year and repayment may be made over a 10-year period. Students must complete the Free Application for Federal Student Aid (FAFSA) for the Direct Stafford or Direct PLUS loans. For more information about these loan programs or other financing options, 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 \$9.50 to \$10.19. Students receiving financial aid are usually offered the opportunity to earn up to \$2,040 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 our 1,620 students choose to work.

### 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 McCabe Scholarships. No separate application is required to apply for the following :)

*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 Karim Abdel-Motaal '90 Egypt Scholarship was established in 2012. The scholarship shall be awarded to students on the basis of academic merit and financial need and is renewable. Preference will be given first to students from Egypt, secondarily to Arab or Arab American students and thence to international students or students from the United States. For each of the preceding preferences, additional preference will be given to women candidates.

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 Anadarko Endowed Scholarship was established by Mike Nelson '81 and Michelle Murray in 2012. This renewable scholarship is awarded on the basis of academic merit and financial need, with preference given to students who come from the states of Oklahoma, New Mexico, Nebraska, Kansas or Arkansas.

*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 first-year 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 Robert A. Barr, Jr. '56 Scholarship was established by a group of alumni in 2011 in honor of Robert A. Barr, Jr., who served Swarthmore College as Dean of Men from 1962-1970, and as Dean of Admissions from 1977-1994. This scholarship was created to honor Dean Barr for his contributions to the lives of Swarthmore students; as an unfailingly supportive advisor to so many he admitted to the College, and as a role model who taught us how to treat and respect one another. This renewable scholarship will be awarded to a first year student with strong academic credentials who also shows promise of making substantial contributions to the co-curricular life of the campus. When appropriate, preference will be given to sons and daughters of Swarthmore alumni.

*The Peter B. Bart '54 Scholarship*, established in 2005, is awarded to deserving students.

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 H. Albert Beekhuis Scholarship in engineering is awarded on the basis of academic merit and financial need to a first-year 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. Established 2005.

*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 brothersin-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 Thompson Bradley Scholarship was established in 2016 in honor of Thompson Bradley, Professor Emeritus of Russian. 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 with a demonstrated passion for social justice.

*The Carol Passon 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 Richard N. Chambers '48 Scholarship was established by the bequest of Clyde Chambers, father of Richard, in 2012 in memory of Richard N. Chambers '48. The scholarship shall be awarded to students on the basis of academic merit and financial need and is renewable.

The Peggy Chan Endowed Scholarship was established in 2017 by Winston Zee '07 in honor of his wife. The scholarship shall be awarded to students on the basis of academic merit and financial need and is renewable. Preference shall be given to international students. *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. Established 1941.

*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 50th reunion, is awarded to a student who has demonstrated financial need. The Class of 1914 Scholarship, established in here we do here we show here in the second data of the second da

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 65th 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 25th 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 1965 Scholarship* was established in 2015 in honor of the class's 50th reunion. The scholarship shall be awarded to students on the basis of academic merit and financial need and is renewable.

*The Class of 1967 Scholarship* was established in 2012 on the occasion of the Class's 45th reunion. The renewable scholarship is 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 turnoil 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 Class of 1976 Scholarship* was established in 2013 in honor of the class's upcoming 40th reunion in 2016. The scholarship shall be awarded to students on the basis of academic merit and financial need and is renewable.

*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 Gehan Talwatte '87 and Keara Connolly '87 Endowed Scholarship was established in 2011. The scholarship shall be awarded to students on the basis of academic merit and financial need and is renewable. Preference will be given first to students from Sri Lanka, secondarily to other international students, and thence to students from the United States.

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 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. Established 1920.

*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 to Swarthmore College students who are United States citizens whose legal residence is in Maine, Vermont, Rhode Island, or Massachusetts and 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. Established 1953.

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. Established 1958.

The Philip Evans Scholarship was established in 1986 by Jerome Kohlberg '46 in memory of his longtime friend and classmate, Dr. Phillip Evans '48. Dr. Evans was a highly admired physician, faithfully serving patients from all walks of life. Evans Scholars are expected to develop themselves as critical thinkers, compassionate citizens, and engaged participants in local and world affairs. They are awarded to students who in their high school years have demonstrated leadership, integrity, intelligence and a commitment to the larger community. The Scholarships are awarded to members of the first year class, are renewable annually, and provide summer opportunity grants that are awarded on the recommendation of the dean of students.

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. Preference is given to residents of Martha's Vineyard.

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. Preference is given to residents of Martha's Vineyard.

*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 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 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. Established 2000.

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. Established 1907.

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 and Stephen L. Bloom '62 Scholarship recognizes two dedicated alumni, both members of the Class of 1962. It was created by an anonymous donor in 2007 in recognition of Cynthia Norris Graae, an alumna whose service to the College included serving on Alumni Council and the Board of Managers, and expanded in 2011 in recognition of her late husband Stephen L. Bloom, an alumnus who was a gifted clarinetist who was a member of both the orchestra and the wind ensemble while a student at Swarthmore. The renewable scholarship is awarded on the basis of financial need, with preference given to a student who plays a musical instrument.

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. Established 1925.

*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 art 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 need-based, 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. Established 1979.

*The Holland Family Scholarship* was established in 2002 by Jim Holland '71 and Nancy Holland '72, and is awarded on the basis of academic merit and financial need. The scholarship is renewable.

*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 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 first-year student who shows great promise.

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. Established 1985.

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. Established 1935.

*The Kappa Kappa Gamma Scholarship*, created by the sorority, is awarded to a first-year student and is renewable. Established 1955.

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 allaround 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 first-year 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 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 Paul Kuenstner '80 Endowed Scholarship* was established in 2013. The scholarship shall be awarded to students on the basis of academic merit and financial need and is renewable.

*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 Kyle Endowed Scholarship for Latin America was established in 2016. 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 are citizens and residents of Latin America.

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. Established 1995.

*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. Established 1888.

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 Levine Family Scholarship* was established by Jay H. Levine '55 and Michael A. Levine '87 in 2012. The scholarship shall be awarded to students on the basis of academic merit and financial need and is renewable.

*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 Lloyd-Jones 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 Lui and Wan Scholarship was established in 2016. It shall be awarded to students in the sophomore year on the basis of academic merit and financial need and is renewable. Preference will be given to female students pursuing majors in Engineering, Mathematics and/or the Physical Sciences, any student pursuing a major in Chinese or Interdisciplinary Chinese Studies, or any student pursuing a special major in Education Studies and another discipline.

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 Philadelphia-area 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. Established 1977.

The Richard G. Mason Fund, an endowed scholarship, was established in 2012 by the estate of Richard G. Mason '50 and is awarded on the basis of academic merit and financial need with a preference for students studying theater or art history. The scholarship is renewable.

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. Established 1996.

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. Established 1999.

The Dorothy Shoemaker '29 and Hugh '30 McDiarmid Scholarship is awarded to a first-year 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. Established 1992.

The Frank Milewski Endowed Scholarship was established in 2014 in honor of Frank Milewski, who was the recipient of the Suzanne P. Welsh Award. The scholarship will be awarded on the basis of financial need to a Swarthmore student without further restrictions or preferences.

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 Annette Newman Endowed Scholarship was established in 2016 in honor of Annette Newman, who was the recipient of the Suzanne P. Welsh Award. The scholarship will be awarded on the basis of financial need to a Swarthmore student without further restrictions or preferences.

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. Established 2007.

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 Jean A. '49 and Edward B. '49 Perkins Scholarship was established by Jean A. Perkins '49 in 2002 in memory of her late husband Edward B. '49 Perkins and in honor of their long Matchbox marriage. The scholarship shall be awarded to students on the basis of academic merit and financial need and is renewable.

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 first-year 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 Reichelderfer-Blair Endowed Scholarship was established in 2014 by Douglas H. Blair '70 and

Ann Reichelderfer '72 to recognize the important role of Swarthmore College in their lives, and the lives of their children Graeme Blair and Susannah Blair '08. The scholarship shall be awarded to students on the basis of academic merit and financial need and is renewable.

*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 first-year 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. Established 1988.

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 Margaret Hardy Sachter '35 Scholarship, established in 1995, is awarded to a student on the basis of merit and need and is renewable through the senior year. Peference is given to a student in the junior year, who has shown distinguished academic achievement and demonstrated interest in community service.

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 Dick Senn '56 Scholarship was established in 2012 in loving memory by his wife Barbara Sachs Senn and their children in recognition of Dick's devotion to Swarthmore. He brought his entrepreneurial spirit, his constant quest for knowledge, his involvement in the political process, his value of education, and love of life and humanity to his everyday life and to each interview he did with prospective Swarthmore students. This renewable scholarship is awarded on the basis of financial need and academic merit, with preference for African American or Latino students, preferably majoring in political science.

*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 Barbara L. Klock '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 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 Nancy Baxter Skallerup Scholarship was established in 1982 by her husband and children. The renewable scholarship is awarded to a firstyear 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 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 firstyear student on the basis of merit and need.

The Southern California Endowed Scholarship Fund was established in 2014 by California First National Bank and Leslie Jewett '77. 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 from Los Angeles or Orange Counties, with a second preference being the state of California.

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. Established 1974.

*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, III.

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 Ravi Thackurdeen '14 Memorial Scholarship was established in 2012 by the Thackurdeen family and friends in memory of a young man who not only embraced life with every fiber of his being, but touched others' lives so profoundly. Filled with boundless energy and enthusiasm, Ravi

cherished his time at Swarthmore-a place he said "felt like home"-as well as his many dynamic learning experiences and the opportunities afforded to him as a student. His greatest wish was to "make a difference in the world." This scholarship shall be awarded to students on the basis of academic merit and financial need and is renewable.

*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. Established 1966.

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 largerthan-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 Joseph Leon Turner '73 and Lana Everett Turner '74 Endowed Scholarship was established in 2015 by Joseph Leon Turner '73 and Lana Everett Turner '74 to recognize the important role of Swarthmore College in their lives. The scholarship shall be awarded to students on the basis of academic merit and financial need and is renewable.

*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. Established 1962.

*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. Established 2008.

*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 firstyear 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. Established 2000.

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 Larry E. and Myrt C. Westphal Scholarship was established by Karan Madan '91, Suzanne Buckley '89, and Jason Cummins '90, with additional gifts from other appreciative students, friends and colleagues. The scholarship honors Professor Westphal's teaching excellence and the impact he had through his microeconomics, economic development, Asian economies and environmental studies classes, and Dean Westphal's dedication and work in housing, disabilities, the Lang Scholar program and personal advising. The scholarship is awarded each year on the basis of academic merit and financial need and is renewable. Established 2011.

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 Phyllis M. Wang Wise '67 Endowed Scholarship* was established in 2009. The renewable scholarship is awarded on the basis of academic merit and financial need, with preference given to students of color majoring in biology.

*The Bryan '84 and Elisabeth Wolf Scholarship* was established in 2014 in honor of Bryan's 30th reunion. The scholarship shall be awarded to students on the basis of academic merit and financial need and is renewable.

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. Established 1998.

*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 full 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 or behavioral misconduct is suspected.

## 6.2 Residential Life

Swarthmore is a primarily 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 all four years. New students are required to live in the residence halls during their first two semesters. After their first year at the College, students are permitted to live in non-College housing.

#### 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 15minute 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 class years live in most residence halls. About 90 percent of residence hall areas are designated as non-gendered housing either by floor, section, or building. The remaining areas are gender specific housing.

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 a housing lottery. There is also the opportunity to reside at neighboring Bryn Mawr and Haverford colleges in a cross-campus housing exchange that proceeds on a matched one-for-one basis. Firstand second-year students typically reside with roommates, whereas juniors and seniors may select single rooms (as available). 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.

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 advisors to their hallmates, and help enforce College rules for the comfort and safety of the residents.

Residence halls remain open during fall break, Thanksgiving, and spring break, but are closed to student occupancy during winter vacation. Specific winter vacation dates are set each year, but generally include a 4-5 week period from mid-December through mid-January. Limited meal options are available during fall 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, the guest must be registered with the Office of Student Engagement, 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, non-college aged individuals, parents, and other adults should not be overnight guests. A guest is never permitted to sleep or reside in any public location (such as a dorm lounge, basement, or other public space). Requests for exceptions must be made to the Assistant Dean for Residential Communities. The Dean's Office reserves the right to require a guest to leave campus if their behavior begins to have an impact on the campus community or is otherwise disruptive.

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

A limited amount of College storage is available for international students and those students with extenuating circumstances. Students should plan in advance to secure private storage if they are not able to transport their items home during the summer semester. Students will move between residence halls a minimum of four times while at Swarthmore; we encourage students to pack lightly and only come with essential items.

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 which include 3 guests' meals a semester. Students living off campus may subscribe to the meal plans, or they may add points to their card or 7 Anytime Meals a week for the semester from the Dining Services office in Sharples Dining Hall room 204. 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 and a weekday Grab-N-Go lunch program.

Sharples Dining Hall is open Monday through Friday, 7:30 a.m. to 8:00 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 take-out 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 but not at the coffee bars. The two coffee bars as well as the snack bar accept points but the coffee bars are not set up as meal replacement options. 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 from the Checkers at Sharples Dining Hall. See the Dining website for additional services - catering, cakes, barbeques and meals to go or ask a staff member.

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 should not plan on being approved for parking for more than one year during their time at Swarthmore. Students must have the permission of the Car Authorization Committee to park on campus and should apply in the spring term for the following academic year. Students who live offcampus in the Swarthmore Borough can secure street parking through Borough Hall, and are not generally eligible for campus parking spots. Firstyear students are not permitted to bring cars to campus.

### 6.3 Health & Wellness

#### 6.3.1 Student Health and Wellness Services (SHWS)

The health and wellness team supports the needs of our diverse student body by providing individualized holistic care and campus-wide education. The Health & Wellness Center offers myriad wellness promotion, counseling, education, and prevention services.

Students may walk-in for a health evaluation by a registered nurse. Nurse practitioners, physicians, dietitian, alcohol and other drug counselor, and violence prevention advocate are available by appointment. Our physicians are members of the Crozer Health System, a full-service teaching hospital and trauma center. The Health & Wellness Center provides acute care, allergy injections, alcohol and other drug counseling, first aid treatment, interpersonal relationship education, nutrition counseling, referral services, reproductive health services, simple diagnostic screenings, travel health consultations, vaccinations, and wellness visits. Our operational hours are based on when the need is highest, and are supplemented by an after-hours on call system that provides students with access to a registered nurse.

All visits to the Health & Wellness Center are free of cost. A nominal fee is applied for simple diagnostic tests and most medications dispensed at the Health & Wellness Center. Laboratory specimens are sent to LabCorp or Quest Diagnostics and are billed by the lab to the student's health insurance. A small dispensary of commonly used prescription medications is maintained. Students who need prescription medication may purchase them through their insurance with a pharmacy or through the Health & Wellness Center for a fee. A delivery service from a local pharmacy is available to students. The Swarthmore College Student Health Portal is available for managing your on-campus health needs and forms. You can access your Student Health Portal through your mySwarthmore

account. Click on Worth Health Center, then, click on Student Health Portal.

More information on the Student Health & Wellness Center is available at www.swarthmore.edu/health.

#### 6.3.2 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 is staffed by 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 a.m. and 4:30 p.m., Monday through Friday.

For more detailed information about CAPS, visit the website at www.swarthmore.edu/caps.xml.

#### 6.3.3 Health Insurance

Health insurance is required for all Swarthmore students. If you are insured by another plan, please be certain that your private health insurance plan will adequately cover a student away from home. Services away from home, such as blood tests, MRI's, x-rays, and care from specialists are often not covered under a private insurance plan.

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. For further information, please consult the College health plan Insurance Coordinator (health@swarthmore.edu). The College provides supplemental health insurance for students who are actively participating in intercollegiate and club sports. All athletes with questions related to insurance coverage with 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, visit www.swarthmore.edu/publicsafety/clery-crime-statistics.xml.

### 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 that 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. Lodge 6 is a media incubator for journalism. 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, and many student groups choose paths that engage issues and communities in multiple ways.

#### 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 the assistant dean, with the assistance of a committee of black students, faculty, and administrators.

#### 6.6.2 Greek Life

There are currently two fraternities and one sorority at Swarthmore: Delta Upsilon and Theta, both affiliated with a national organizations, and Phi Omicron Psi, a local association. Although they receive no College or student activity funds, Greek life organizations 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. The sorority was founded in fall of 2013.

#### 6.6.3 Intercultural Center

The Intercultural Center (IC) provides programs, advocacy, and support for Asian/Pacific Islander American, Latino@, multiracial, Native American, LGBTQIA (lesbian, gay, bi/pansexual, trans\*, queer/questioning, intersex, and asexual), lowincome, international, and first-generation college students at Swarthmore College. In addition, the IC promotes systemic change toward intersectional perspectives across the institution and fosters collaboration and coalition building among communities both within and outside the IC and the College. Resources and programs include faculty-student-staff events, lectures, concerts, films, poetry slams, workshops and dialogues that explore race, class, gender, sexuality, citizenship, intersectional identities, and equity with a particular emphasis on social justice education and leadership. More information is available at www.swarthmore.edu/ic.

#### 6.6.4 Interfaith Center

Religious advisors are located in the Interfaith Center in Bond Hall and currently consist of Jewish, Catholic, and Protestant professionals. The advisors 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 Lang Center supports the College's commitment to social responsibility in the context of academic excellence 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 staff works with individual students, student groups, faculty, staff, and community partners. The Lang Center offers extensive information about opportunities for service, advocacy, activism, social entrepreneurship, policy, and research. Its key programs are: Community-Based Learning-The Lang Center supports faculty and encourages students to take courses that connect academic content to communities outside the College. Students may, for examples, spend time outside the classroom working with an organization, or may devote assignments to research need by a community group.

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.

Lang Opportunity Scholarship Program-Up to six students during the first semester of their sophomore year are selected to participate in this program, which includes a paid summer internship, the opportunity to apply for a substantial grant that supports the implementation of a major project with significant social value, and other benefits. Lang Center staff work closely with Lang Scholars as they develop and carry out their projects. Student-led service and activist groups-Many student-led groups use Lang Center facilities and also receive guidance from Lang Center staff. These groups include Blueprints Mentors; Chester Youth Court Volunteers; College Access Center of Delaware County; Chester Garden Youth Collaborative; Dare to Soar; Education for Empowerment; Green Advisors; Learning 4 Life; Let's Get Ready; Peace Innovation Lab; PowerPush; Saturdays of Service; Taller de Paz (Workshops for Peace); Volunteer Income Tax Assistance; Trash 2 Treasure; War News Radio; and Student Run Emergency Housing Unit of Philadelphia.

Summer Social Action Awards (S2A2)-For fulltime, 10-week summer internships with non-profit organizations, grassroots advocacy groups, and public service agencies, these grants provide living expenses and summer earnings. Lang Center staff and Career Services provide guidance as students find internship placement sites that are congruent with their interests.

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, staff, and faculty involvement in community service and social action. Applications for grants are accepted twice during the academic year.

The Project Pericles Fund of Swarthmore College-Eugene M. Lang '38 and the Board of Managers of Swarthmore College created the Project Pericles Fund of Swarthmore College in 2005 to support groups of Swarthmore students who propose and implement social and civic action projects that are substantial in scope.

#### 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, a lounge space, Paces (a student-run café and party space), an all-campus space, meeting rooms, the Swarthmore College Computer Society media lounge and the offices of 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 Office of the Dean for Academic Affairs oversees the advising system. The deans are available to all students for advice on any academic or personal matter. A dean is assigned to each class in order to specialize in advising matters that are particular to that year. Students, however, may approach any dean for advising, support, or to learn about College resources.

#### 6.7.2 Academic Advising

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

#### 6.7.3 Academic Support

Academic support can be accessed through the Office of the Associate Dean for Academic Affairs, through the Office of Student 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.

#### Academic Programming

Throughout each year, the Office of Academic Affairs coordinates programming designed to support all students' academic success. Examples of this programming include workshops on time management, procrastination, effective class participation, and study strategies across various academic disciplines.

Student Academic Mentors (SAMs) are 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. SAMs also hold weekly office hours at the McCabe and Cornell Libraries, and at the Black Cultural Center. They sponsor "Drop-In Hours" at locations throughout campus during advising and registration periods.

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 or appointment 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 Advisor counsels students throughout their undergraduate years and beyond, and assists them in the process of application for graduate training.

Swarthmore graduates are represented at 72 medical, dental and veterinary schools in 28 states in the U.S., including such top schools as Harvard, Yale, Columbia, Penn, Stanford, Johns Hopkins, and many fine state universities. 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:

BIOL 001 Cellular and Molecular Biology BIOL 002 Organismal and Population Biology General Chemistry CHEM 022 Organic Chemistry I CHEM 032 Organic Chemistry II CHEM 038 Biological Chemistry English Calculus I STAT 011 Statistical Methods I PHYS 003 General Physics I PHYS 004 General Physics II Psychology and Sociology

As veterinary and dental schools have more variable requirements, in addition to those listed above, pre-vet and pre-dental students should meet with Gigi Simeone, the Health Sciences Advisor, 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 Advisor, 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 Advisors 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 Conduct System

Swarthmore places great value on freedom of expression, but it also recognizes the responsibility to protect the values and structures of an academic community. It is important, therefore, that 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. Community members also have a responsibility to protect the possessions, property, and integrity of the institution as well as of individuals. The aim of the College's Student Code of Conduct is to balance all these rights, responsibilities, and community values fairly. The student conduct system is overseen by the dean of the senior class & director of student conduct, and all questions should be directed to this office.

The formal student conduct system at Swarthmore College has two main components: (1) Minor Misconduct: Allegation(s) in which possible sanctions do not include suspension or expulsion from the College if the student were found responsible and are typically conducted by the dean of the senior class & director of student conduct; and (2) Major Misconduct: Allegation(s) subject to College policy in which possible sanctions could result in suspension or expulsion from the College if the student were found responsible, and are typically addressed by the College Judiciary Committee (CJC) or an Administrative hearing with the dean of the senior class & director of student conduct, including all allegations of academic misconduct. The CJC is composed of faculty, students, and administrators who have undergone training for their role.

All allegations of sexual and gender based harassment, sexual misconduct, sexual violence, stalking, and intimate-partner violence are addressed through the College's Sexual Assault and Harassment Policy.

Violation of the laws of any jurisdiction, whether local, state, federal, or (when studying abroad) foreign, may 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, open-mindedness, 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 advisor.

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 advisors of first-year and sophomore students normally are members of the faculty appointed by the dean. For juniors and seniors, the advisors are the chairs of their major departments or their representatives.

Although faculty advisors 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 advisors, department chairs, other faculty members, the deans, and the registrar are available for information and advice.

# 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 engineering majors 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:

 Complete at least three courses in each of the three divisions of the College (listed). 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.
 Complete at least two courses in each division on the campus at Swarthmore; these courses must be at least 1 credit each.

3. 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.

4. Complete at least three Swarthmore 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.

5. Complete a natural sciences and engineering practicum.

6. Courses that have been excluded from counting toward the degree do not count toward the distribution requirements.

7. Take courses in a variety of departments, keeping in mind that before graduation, 20 credits outside of one major subject must be completed.

#### Distribution Requirement Divisions: For

purposes of the distribution requirements, the three divisions of the College are as follows:

**Humanities:** art (art history and art), classics (literature), English literature, film and media studies, Greek, Latin, 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.

Several interdisciplinary 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. Approved Writing courses are only offered on the campus at Swarthmore.

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 cross-listed 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 20course-credit rule, cross-listed 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) first-year 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 and 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.

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-at-Swarthmore 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 Plan: 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 advisor, 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 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.

# 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.

Before graduation, students are required to complete at least 20 credits outside of one major subject.

### 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 art, comparative literature, economics, political science, and sociology and anthropology. (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 doublecounting 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 double-counting 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:

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.

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.

The deadline for seniors to propose any changes to their plan for major(s) or minor(s) is the third week of the spring semester of the senior year. Proposed changes are subject to departmental approval. Majors or minors may not be applied for or approved after graduation.

#### 7.4.1 Special majors

Individualized and regularized special majors are available. With permission of the departments and/or programs 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 and neuroscience, 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, 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.

Honors students who wish to complete a second major must pursue that field of study through the Course Program, and it must relate to the student's honors minor field of study. Normally, the student must complete the requirements for the Honors minor, as well as the course major in the department. If an Honors student pursues an honors special major, any second major must be taken in the Course Program, and must be either a regular major or regularized special major. In such cases, the student's academic program is subject to the overlap constraints for majoring.

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 crossdisciplinary 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 degree with a level of honors is made by 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 completing a Sophomore Plan 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 art 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.

#### 7.6.1 Senior year rule

Normally the senior year rule is met by the last two semesters being done on the campus at Swarthmore, with the approved exception that seniors during the first semester of their senior year, who have obtained the approval of the chair(s) of their major department(s), may participate in the Swarthmore Semester/Year Abroad Program. Senior year rule compliance is calculated retrospectively with the last two fulltime semesters of degree work, regardless if the semesters are separated in time. If students have studied elsewhere in the time between their two senior semesters, no more than 2.0 Swarthmore credits for work done elsewhere (regardless of how many courses were taken during the intervening time) may be applied to the Swarthmore degree without being out of compliance with the senior year rule. There are two circumstances where a senior can use credit for work done elsewhere to complete the Swarthmore degree without re-enrolling at Swarthmore: (a) after the eighth semester if the major department confirms that the major is done or approves that the major can be completed remotely, or (b) after earning at least 30.0 credits toward the degree if the major department confirms that the major is done or approves that the major can be completed remotely. In either case, the senior year rule is fulfilled by the last two semesters done on the campus at Swarthmore (or with the first semester by approved study abroad), regardless of the number of subsequent credits to be earned.

## 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). Course credit earned by examination does not count in registration load.

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, studentrun 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. In this way, attachments typically extend the subject matter of a course. 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 first-year students and sophomores, it is a way of developing capacities for independent work. For honors candidates, it is an alternative to a seminar as a preparation for an honors examination. 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. With the directed reading format, faculty often provide students with a syllabus for a course not currently offered and allow the student to do the work independently. The independent study format typically requires faculty supervision of a student on a topic that has not yet been taught. In many cases, this requires the faculty member to develop a syllabus and to allow the student to do the work independently. 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 the instructor but normally with no further involvement of faculty. In organizing such a course, students must obtain from a faculty member approval and agreement to serve as course supervisor, and approval of a department chair or program coordinator to provide a course subject and number of record, and finally approval of the provost. The full approval process must be complete prior to the beginning of the course; after that time, the course cannot receive degree credit. Students must provide 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 supervisor reviews the course outline, bibliography, qualifications and general eligibility of students proposing to participate in the course. 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. After a student-run course has been found acceptable by the appropriate department (or departments) and the provost, the revised reading list is given to the librarian, and the course subject, number, 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 mid-semester) 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.

Student-run courses are only offered on the credit/no-credit basis.

### 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, comparative literature, and medieval studies, and formal interdisciplinary minors in black studies, cognitive science, environmental studies, gender and sexuality studies, German studies, interpretation theory, Islamic studies, Latin American studies, peace and conflict studies, and through the 2016 graduating class, 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 cross-listed 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, and in chemical physics). Students are encouraged to seek the advice of faculty members on such possibilities with respect to their particular interests.

#### 7.10 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 the intercollegiate 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 advisors. 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. 7. 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 p.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. 8. 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.

#### 7.11 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, BIOL 002; CHEM 010, CHEM 022, CHEM 032, CHEM 038; PHYS 003, PHYS 004; MATH 015 and STAT 011; an introductory psychology course; an introductory sociology course; and two semester-long courses in English literature. 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 advisor 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 advisor meets periodically with students interested in health careers and is available to assist students in planning their programs in cooperation with students' own academic advisors. 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 advisor and from the Health Sciences Office's pages on the Swarthmore College website at www.swarthmore.edu/premed.

## 7.12 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.

#### 7.13 Cooperation with Neighboring Institutions

With the approval of their faculty advisors 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.

## 7.14 Student Exchange Programs

To provide variety and a broadened outlook for interested students, the College has student exchange arrangements with 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.

## 7.15 Off-Campus Study

The Off-Campus Study Office supports the international education activities of the College as well as approved credit-bearing domestic off-campus study programs. 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 Off-Campus Study Office is the on-campus clearinghouse for information on study abroad, and normally is the starting place for exploration and planning. The Off-Campus Study Office will help all interested students at every stage of the process: planning, study abroad, and return. 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.

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 may study abroad up to two semesters, beginning spring of the sophomore year, and during the junior year. Fall semester seniors may participate in study abroad with the permission of their major department as long as they meet all other eligibility requirements.

To be accepted for credit toward the Swarthmore degree, courses taken abroad must meet Swarthmore academic standards, and be preapproved through the Off-Campus Study Office's procedures. 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 immediately following participation in a semester or year abroad as part of the Swarthmore College Semester/Year Abroad program.

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 participate in the Swarthmore College Semester/Year Abroad program students must be in good standing concerning both their academic program and conduct. The Off-Campus Study Office and the Dean's Office meet to review student standing and to determine eligibility.

Students must also meet the eligibility requirements of the programs to which they apply. Eligible students must have completed on average four credits per semester. Students will jeopardize their ability to participate with incompletes as part of their academic record. The deadline for completion of incompletes will reflect the need to meet deadlines relating to acceptance to programs and/or to the submission of forms, deposits, the purchase of airfares, etc. Normally students will have been accepted into a major, or in the case of sophomores, have a plan for applying to a major. Students must also have a zero balance on their student accounts.

Participants in the College's Semester/Year Abroad Program must 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

# 7 Educational Program

and board costs, health and travel insurance, and the round-trip travel of participating students (with Philadelphia as the gateway city). Normally, financial aid is automatically applied to study abroad.

There are more than three hundred approved offcampus study programs listed on the Off-Campus Study website.

The following are Swarthmore-administered Programs, reciprocal exchanges, and special affiliations:

Administered Programs:

Swarthmore's Central European Program in conjunction with ISEP at Masaryk University, for Environmental Sustainability Studies (agriculture, economics, sociology), Brno, Czech Republic (see Environmental Studies) Swarthmore's Central European Program at the Jagellonian University and Cracow University of Technology (environmental science, engineering and technology), Krakow, Poland (see Engineering and Environmental Studies) Swarthmore/Macalester/Pomona Globalization, the Environment and Society, Cape Town, South Africa (see Environmental Studies)

Reciprocal Exchanges:

Ashesi University College Exchange Program, Ghana

University of Tokyo Exchange Program, Japan Yale/NUS, Singapore

Special Affiliations:

Cloud Forest School Program, Costa Rica (see Educational Studies) Danish Institute for Study Abroad, Denmark Hamilton College Academic Year In Spain HECUA (Higher Education Consortium for Urban Affairs), Ecuador, New Zealand, Norway Intercollegiate Center for Classical Studies, Rome, Italy (see Classics) Intercollegiate Sri Lanka Education, Sri Lanka (see Religion) Semester in Environmental Studies, Marine Biological Lab, Woods Hole, MA Siena School for Liberal Arts, Italy Swedish Program, Sweden University of Ghana, ISEP Direct Partner

The Off-Campus Study Office maintains direct enrollment agreements with many universities around the world.

In addition to these programs, Swarthmore students attend a number of excellent approved study abroad programs throughout provided by other institutions. The Off-Campus Study Office, along with the academic departments and programs of the College, will advise students on these opportunities.

## 7.16 Student Right to Know

Swarthmore College's graduation rate is 94 percent. This is the percentage graduating within six 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:

 The student must signify intent to do so at the time of registration, having obtained the instructor's approval in advance.
 If, after such registration, the student wishes to resume normal class attendance, the instructor's approval must be obtained.
 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. S signifies a requirement satisfactorily fulfilled. 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. 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 CR will be straight C.

Instructors are asked to provide the student and the faculty advisor with an evaluation of the student's CR/NC work. The evaluation for first-semester first-year students includes a letter-grade 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 first-semester 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 (A+, A = 4.0, A- = 3.67, B+ = 3.33, B = 3.0, B- = 2.67, C+ = 2.33, C = 2.0, C-= 1.67, D+ = 1.33, D = 1.0, and D- = 0.67). Grades of CR/NC and grades on the record for courses not taken at Swarthmore College are not included in computing this average. Swarthmore College does not release GPA or rank in class outside the college.

### 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 advisors. 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 eightsemester enrollment. If more than 5 or fewer than 4 credits seem desirable, the faculty advisor should be consulted and a petition filed with the registrar (programs of fewer than 3 credits are not allowed in the normal eight-semester enrollment). Students are expected to select classes that do not pose scheduling conflicts.

Course registration adds and drops must be finalized within the first 2 weeks of the semester. To add a course, the instructor's permission is required. Withdrawal from a course after the first two weeks of the semester is indicated with the permanent grade notation W. To withdraw from a course, students must file an application to withdraw, and it must be received by the Registrar 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.

Enrolled students may audit an additional class or classes depending on the permission of the instructor(s). Successfully completed audits are recorded with the grade 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). Students on leaves of absence are normally not allowed to audit courses. 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 or planning to return following a leave of absence should consult with a dean and complete the necessary form before the deadline published each semester (usually Nov. 15 and April 1). The form asks students to specify the date of expected return.

#### 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 safety of others, the College may require the student to withdraw. The Evaluation Committee- comprising two deans-makes the decision to require withdrawal for health-related 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 the assistant dean for academic affairs. 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 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 college life and so that followup 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 Swarthmore department or program concerned, or for participants in the Semester/Year Abroad program, the Swarthmore Off-Campus Study Office. 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 except when automatic credit is approved as part of the Semester/Year Off-Campus Study Program. Final

validation of the work for credit will depend on evaluation of the materials of the course, such as syllabus, transcript, written work, examinations, indication of class hours, and so forth unless the course has been pre-estimated to receive automatic credit as part of the Semester/Year Off-Campus Study Program. In all cases, transfer of credit is subject to successful completion of the course, i.e., receipt of a straight US equivalent grade of "C" or higher. 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-bycase basis. Credit for AP and similar work is discussed in section 3.5. To receive Swarthmore credit for study abroad during the academic year, students must participate in the College's Semester/Year Abroad Program and comply with its payment plan (study abroad is discussed in section 7.14).

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.

The normal deadline for seniors to submit official documentation originating from off-campus sources for credit toward their degree is the end of classes in the spring of the senior year. The absolute deadline for the registrar to receive such documentation is six (6) days before graduation; after that, no new documents from off-campus sources will be applied to graduation in that year. Students needing such documents to graduate will have to defer graduation to the following year.

## 8.7 Finality of Transcripts

After graduation, the student's academic record is final and closed to change. The only exception to this is that in the weeks immediately following graduation clerical errors can be corrected.

## 8.8 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. In addition, all students must pass a survival swimming test or take up to one unit of swimming instruction by the end of their sophomore year. For complete requirements, see Physical Education and Athletics.

## 8.9 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 by faculty vote upon students who have met the following requirements for graduation:

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 subject (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 requirement in the major field or met the standards set by visiting examiners in the Honors Program.

 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. (For more information regarding the senior year rule, see section 7.6.1).
 Completed the physical education requirement set forth in the Physical Education and Athletics Department statements.
 Paid all outstanding bills and returned all

equipment and library books.

# 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:

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).

## **10 The Corporation**

May 6, 2017 to May 5, 2018

Thomas E. Spock '78, Chair Rhonda Cohen '76, Vice Chair Nancy N. Nicely, Secretary Swarthmore College

## 11 Board of Managers

#### **Board of Managers**

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#### Chair, Emeriti

Barbara W. Mather '65

#### Emeriti

Samuel L. Hayes III '57 James C. Hormel '55 Elizabeth J. McCormack Marge Pearlman Scheuer '48 J. Lawrence "Larry" Shane '56

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Gustavo Schwed, Chair Joseph Turner, Vice Chair Sohail Bengali\*\* William Boulding Elizabeth Economy Thomas W. T Hartnett Leslie Jewett Koof Kalkstein Gil Kemp Cindi Leive Barbara Mather\* David McElhinny Robin Shapiro Salem Shuchman David Singleton

#### Investment

Salem Shuchman, Chair Thomas W. T. Hartnett, Vice Chair Ephraim Greenwall \*\* Corey Mulloy \*\* Chris Niemczewski\*\* Gustavo Schwed Gaurav Seth\*\* Suzanne Welsh\*\*

#### Nominating and Governance

Robin Shapiro, Chair William Boulding, Vice Chair Janet Erlick\*\*\* David Ko\*\* Sabrina Martinez Barbara Mather\* Gustavo Schwed Davia Temin

#### Property

Harold (Koof) Kalkstein, Chair Jaky Joseph, Vice Chair John Pierce Chen Janet Smith Dickerson Elizabeth Economy James Gregory Thomas Hartnett Samuel L. Hayes III\* Jane Lang David McElhinny Nicole O'Dell Odim Sibella Pedder H. Vincent Poor June Scott David Singleton

#### Social Responsibility

David Singleton, Chair Janet Smith Dickerson, Vice Chair William Boulding John Pierce Chen Janet Erlick James Hormel\* Vincent Jones Lucy Lang Bennett Lorder Lourdes Rosado Students, faculty and staff to be named in September.

#### **Student Affairs**

Cathryn Polinsky, Chair Janet Smith Dickerson, Vice Chair Elizabeth Economy Janet Erlick Vincent Jones Cindi Leivi Bennett Lorber James Lovelace H. Vincent Poor Lourdes Rosado Sujatha Srinivasan Davia Temin

\*Emeriti manager \*\*Non-board member \*\*\*Past and present Alumni Council Presidents attend Nominating portion only

## 12 Alumni Association Officers and Alumni Council

The Alumni Relations Office is the primary communication link between the College and its alumni, 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 various cities, worldwide. There are 20,168 alumni: 10,026 men, 10,028 women, and 5 unreported, with 2,580 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

Janet Erlick '88, president Kwaku Sefa-Dedeh '02, vice president Lucy Jane Lang '03, vice president Martha Marrazza '09, vice president Barbara Cochran '67, secretary

#### Zone A

Delaware, Pennsylvania Jillian Waldman '06<sup>1</sup> Philadelphia, Pa. Sarah Bryan Fask '05<sup>2,4</sup> Philadelphia, Pa. Lourdes M. Rosado '85<sup>1</sup> Havertown, Pa. Tuan-Linh Nguyen '02<sup>3</sup> Carlisle, Pa. Robert Mueller '68<sup>2</sup> Philadelphia, Pa.

#### Zone B

New Jersey, New York Christopher Davis '75<sup>1</sup> New York, N.Y. Emmanuel Afrifa '11 1 Bronx N.Y. Julian Harper '08 3 New York, N.Y. Lucy Jane Lang '03<sup>2</sup> New York, N.Y. Peter Jacquette '74 3 Summit, N.J. Sandra Balaban '94<sup>1</sup> Bronx, N.Y. Sarah Vogelman '13<sup>2</sup> Forest Hills, N.Y. Thomas Stoddard '87<sup>2</sup> Monteclair, N.J.

#### Zone C

Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont

Anne Richards '97<sup>1</sup> Chelmsford, Mass. Bruce Maxwell '91 3 Pittsfield. Me. David Kidder '62<sup>2</sup> Watertown, Mass. Emily Anne Nolte '07<sup>2</sup> Cambridge, Ma. Ila Deshmukh Towery '99<sup>2</sup> Jamaica Plain, Mass. John Bowe '83<sup>1</sup> Belmont, Mass. Kattherine Buttolph '74 2 Wilmington, Vt. Susan Corcoran '72 3 Cambridge, Mass.

#### Zone D

District of Columbia, Maryland, and Virginia Antoinette M. Sayeh '79<sup>2</sup> Washington, D.C. Barbara Stubbs Cochran '67<sup>3</sup> Washington, D.C. Charles Mayer '98 3 Washington, D.C. Ethan Landis '84<sup>2</sup> Washington, D.C. Giridhar Srinivasan '981 Washington, D.C. Joann Bodurtha '74 1 Baltimore, Md. Martha Marrazza '09<sup>3</sup> Bethesda, Md. Michele C. Martinez Gugerli '14 3 New York, N.Y. Tanyaporn Wansom '02 3 Columbia, Md.

#### Zone E

Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, Oklahoma, South Dakota, Texas, West Virginia, and Wisconsin

## 12 Alumni Association Officers and Alumni Council

Anna Tischler '99<sup>2</sup> Golden Valley, Minn. Jeffrey Gordon '81<sup>1</sup> Chicago, Ill. Laura McKee '88<sup>1</sup> Chicago, Ill. Vanessa Askot '03<sup>3</sup> Chicago, Ill. William K. Wanjohi '05<sup>2</sup> Chicago, Ill.

#### Zone F

Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, South Carolina, Tennessee, territories, dependencies, and foreign countries Brian Sean Heaney '83<sup>2</sup> Durham, N.C. Eileen Meredith '651 Atlanta, Ga Emily Nolte '07 3 Atlanta. Ga. Janet Erlick '881 Fort Lauderdale, Fla. Sebastian Bravo '13<sup>2</sup> Ouito, Ecuador Susan Morrison Walcott '71<sup>2</sup> Greensboro, N.C.

#### Zone G

Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, and Wyoming Alison Campbell '87<sup>2</sup> Mill Valley, Calif. Charles Bailey '67 1 Lummi Island, Wa. Chirag Chotalia '04 3 Los Angeles, Calif. David Ko '92<sup>1</sup> San Mateo, Calif. Diana Smith '68 1 Boulder, Co. Kwaku Sefa-Dedeh '02 3 Seattle, Wash. Nicholas Burnett '14<sup>3</sup> Anaheim, Ca. Way-Ting Chen '94 3 Playa del Rey, Calif.

#### Nominating Committee Chair David Ko '92

International Connection Chair Deborah How '89

#### Connection Representatives

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<sup>1</sup> Term ends 2018.

<sup>2</sup> Term ends 2016. <sup>3</sup> Term ends 2017.

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Ph.D., Indiana University, Professor of Computer Science.

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Hansjakob Werlen, M.A., University of Notre Dame; Ph.D., Stanford University, Professor of German.

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# 13.3 Divisions, Departments, and Programs

Below are the divisions of the college for administrative purposes; for the purposes of the distribution graduation requirement see section 7.2.

#### 13.3.1 Division of the Humanities

Nathalie Anderson, Chair Art Constance Hungerford, Chair Classics Grace Ledbetter, Chair **English Literature** Peter Schmidt, Chair Film and Media Studies Bob Rehak, Chair Modern Languages and Literatures María Luisa Guardiola, Chair Music and Dance Thomas Whitman, Chair Philosophy Tamsin Lorraine, Chair Religion Tariq al-Jamil, Chair Theater Elizabeth Stevens, Chair

#### 13.3.2 Division of the Natural Sciences and Engineering

Deborah Bergstrand, Chair Biology Elizabeth Vallen, Chair **Chemistry and Biochemistry** Stephen T. Miller, Chair **Computer Science** Richard Wicentowski, Chair Engineering Carr Everbach, Chair Mathematics and Statistics Philip Everson, Chair Physics and Astronomy David Cohen, Chair Psychology Jane E. Gilham, Chair Andrew Ward, Acting Chair 2017-2018

#### 13.3.3 Division of the Social Sciences

Stephen O'Connell, Chair Classics Grace Ledbetter, Chair Economics Philip Jefferson, Chair Educational Studies Ann Renninger, Chair History Tim Burke, Chair Linguistics K. David Harrison, Chair Political Science Keith Reeves, Chair Psychology Jane E. Gilham, Chair Andrew H. Ward, Acting Chair 2017-2018 Sociology and Anthropology Sarah Willie-LeBreton, Chair Rose Maio, Administrative Coordinator for the Divisions of Humanities, Social Sciences, and Natural Sciences and Engineering

#### 13.3.4 Interdisciplinary Programs

Gwynn Kessler, Chair Asian Studies William Gardner, Coordinator Black Studies Sydney Carpenter, Coordinator **Cognitive Science** Dan Grodner, Coordinator **Comparative Literature** Sibelan Forrester, Coordinator **Environmental Studies** Eric Jensen, Coordinator **Gender and Sexuality Studies** Gwynn Kessler, Coordinator Interpretation Theory Maya Nadkarni, Coordinator **Islamic Studies** Tariq al-Jamil, Coordinator Latin American and Latino Studies Christopher Fraga, Coordinator Medieval Studies Craig Williamson, Coordinator Peace and Conflict Studies Lee Smithey, Coordinator

# 13.4 Standing Committees of the Faculty

Academic Assessment Committee Academic Requirements Avdelotte Foundation Steering Committee Advisory Committee on Faculty Diversity and Excellence Faculty Advisory Council to Dean of Admissions Council on Educational Policy Committee on Faculty Procedures Curriculum Committee Fellowships and Prizes Health Sciences Advisory Honors Program Advisory Committee **ITS** Committee Lang Center Advisory Board Library Mellon Mays Advisory Committee Physical Education and Athletics Advisory Committee Promotion and Tenure Research Ethics Teacher Education Committee Writing Program Advisory Committee

#### 13.5 Other Committees with Faculty Representation

Advisory Council to the Dean College Budget Committee College Judiciary Committee Cooper Foundation Committee Crum Woods Stewardship Committee Equal Opportunity Advisory Committee Faculty and Staff Benefits Honorary Degrees Howard Hughes Medical Institute Institutional Animal Care and Use Committee

Off Campus Study Public Safety Advisory Committee Sager Social Responsibility Sustainability Committee Swarthmore Foundation Transportation and Parking Committee Work Life Initiatives Committee

#### 14.1 Administrative Structure President President Eugene M. Lang Center for Civic and Social Responsibility Sustainability Title IX Vice President and Dean of Admissions Admissions Secretary of the College and Vice President for Communications Communications Office Vice President for Advancement Advancement Services Advancement Systems Alumni and Gift Records Alumni Relations Development Alumni and Parent Engagement Individual Giving Donor Relations Advancement Research Sponsored Programs Institutional Relations Vice President for Finance and Administration Associate Vice President for Finance and Treasurer Controller **Business Office** Office Services Financial Aid Office Director Auxiliary Services Dining Services Office Services Post Office Summer Programs and Scheduling Campus and Community Store Institutional Research Institutional Risk Management, Legal Affairs, and Equal Opportunity Office Investment Office Public Safety Vice President for Facilities and Capital Projects ADA Program Coordinator Environmental Services Grounds Lang Performing Arts Center Occupational and Environmental Safety Maintenance

Planning and Construction

Scott Arboretum Space Reservation/Materials Handling/Event Support Summer Programs Vice President for Human Resources Human Resources Payroll Provost Associate Provost for Educational Programs and Curriculum Support Associate Provost for Faculty Development and Outreach Executive Assistant to the Provost Program on Urban Inequality and Incarceration 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 of Diversity, Inclusion, and Community Development 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 Office of Student Engagement Registrar's Office Student Conduct

### 14.2 Admissions Office

James L. Bock III, B.A., Swarthmore College; M.Ed., University of Virginia, Vice President and Dean of Admissions.

**Yvetta Moat**, Administrative Coordinator. **JT Duck**, B.A., Haverford College; M.Ed., Harvard University, Director of Admissions.

Martha Allen, B.A., Smith College, Associate Dean of Admissions.

Zarinah James, B.A., Brown University; M.S.Ed., University of Pennsylvania, Associate Dean of Admissions.

**Andrew Moe**, B.A., Arizona State University; M.Ed, Vanderbilt University, Senior Assistant Dean of Admissions.

**Emily Almas**, A.B., Duke University; Ed.M., Harvard University, Assistant Dean of Admissions.

Windsor Jordan Jr., B.A., Swarthmore College; M.A., Lehigh University, Assistant Dean of Admissions.

**Daniel Wittels**, B.A., Tufts University; M.S.Ed., University of Pennsylvania, Assistant Dean of Admissions.

Alejandra Barajas, B.A., Swarthmore College, Admissions Counselor.

Margaret T. Kingham, B.A., Mary Washington College, Admissions Officer.

Margaret Ralph, Systems Support Analyst.

Carolyn Moir, Operations Coordinator.

Anthony Weed, B.S., Oakland University Rochester, Administrative Assistant/Technical Support Specialist.

**Demetria Hamilton; Sharon Hartley**, A.A., Neumann College; **Stacy Jordan; Susan Wigo**, Administrative Assistants.

### 14.3 Advancement

Karl W. Clauss, B.A., Colgate University, Vice President, Advancement.

Megan Salladino, B.S., Widener University, Administrative Coordinator.

#### 14.3.1 Development

**Donald R. Cooney,** B.A., Gettysburg College, Associate Vice President.

Mary Carr, A.B.A., Keystone School of Business, Administrative Assistant.

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Florence Ann Roberts, B.A., Gettysburg College; M.S., University of Pennsylvania, Director.

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Trish Tancredi, Senior Gift Information Specialist.

Marianne Kennedy, Gift Recorder.

Catherine Powell, B.S., Rosemont College, Alumni Recorder.

Theresa Rodriguez, Administrative Assistant.

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Liam McAlpine, B.A., Wesleyan University, Senior Associate Director, Individual Giving.

**Brian T. Myers,** B.A. Gettysburg College; M.A. University of Maryland, College Park, Associate Director, Individual Giving.

Anne O'Donnell, B.M., Bucknell University, M.M., University of Wisconsin-Madison, Associate Director, Individual Giving.

Melissa M. Pizarro, A.B., Lafayette College, Director, Donor Relations.

**Erica Seaborne**, A.B., Bryn Mawr College, M.P.A., University of Pennsylvania, Fels School of Government, Associate Director, Individual Giving.

Nikki Senecal, A.B., Bryn Mawr College; Ph.D., University of Southern California, Associate Director, Donor Relations.

**Kozue Tsunoda**, B.A., Tokyo University of Foreign Studies; M.A., Hiroshima University; Ph.D., University of Maryland, College Park, Senior Associate Director, Individual Giving.

Julie DiPietro, Administrative Assistant, Individual Giving and Donor Relations.

#### Institutional Relations

David M. Foreman, B.A., M.A., West Virginia University, Director.

#### Sponsored Programs

**Tania Johnson,** B.A., M.A., University of Pennsylvania, Director.

Joseph Watson, B.S. West Chester University; M.S. Neumann University, Associate Director.

### 14.4 Auxiliary Services

Anthony Coschignano, B.S., The Florida State University; MBA, Valparaiso University, Executive Director, Auxiliary Services

Linda McDougall, B.A., Temple University, Director, Dining Services Cheryl Robinson, A.A.S., Delaware County Community College, Manager, Office Services Vincent J. Vagnozzi, B.S., West Chester University, Supervisor, Post Office

**Patricia Maloney**, B.A., Pennsylvania State University, Director, Summer Programs and Scheduling

# 14.5 Campus and Community Store (Swarthmore)

**Paula Dale,** B.A., Wake Forest University; M.A., University of North Carolina-Chapel Hill, Director.

Daniel D. Darkow, B.S., Elizabethtown College, Assistant Director.

Michael Harper, Operations Manager.

### 14.6 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, Career Education (job share).

Kristie Beucler, B.A., Gettysburg College; M.S., West Chester University, Assistant Director, Career Education (job share).

Lisa Maginnis, Administrative Assistant.

Jarett Haley, B.A., West Chester University, Program Assistant

### 14.7 Communications Office

Nancy Nicely, B.A., College of William and Mary; M.S., University of Pennsylvania, Secretary of the College and Vice President for Communications.

**Mark Anskis**, B.A., Susquehanna University; M.J., Temple University, Associate Director of Communications.

Kate Campbell, B.A., Temple University, Managing Editor of the *Swarthmore College Bulletin*.

Michelle Crumsho, A.A.S., A.A., Delaware County Comm. College; B.S., Clarion University, Administrative/Editorial Assistant.

**Ryan Dougherty**, B.A., Pennsylvania State University; M.S., Chestnut Hill College, Senior Writer/Editor.

**Tara Eames,** B.A., LaSalle University, Director of Admissions Communications.

Alisa Giardinelli, B.A., Pennsylvania State University; M.A., Temple University, Director of Communications.

**Mike Kappeler**, B.A., Stockton University, Front End Web Developer.

Laurence Kesterson, U.S. Army/Air Force Still Photographic Specialist School, Photographer/Videographer.

Steven Lin, B.A., University of Maryland, Web Designer.

**Gina Myers,** B.A., Central Michigan University; M.F.A., The New School, Assistant Director of Media Communications.

Jennifer Piddington, B.A., Long Island University, Administrative Coordinator.

Jonathan Riggs, B.A., University of Kentucky; M.F.A., University of Southern California, Editor of the *Swarthmore College Bulletin*.

**Elizabeth Slocum**, B.J., University of Texas at Austin, Writer/Editor and Class Notes Editor of the *Swarthmore College Bulletin*.

**Phillip Stern**, B.A., Swarthmore College; M.F.A., University of Pennsylvania, Associate Director for Design; Designer of the *Swarthmore College Bulletin*.

**Emily Weisgrau**, B.A., Vassar College; M.A., American University, Director of Advancement Communications.

Amanda Whitbred, B.A., Lafayette College, Associate Director of Advancement Communications.

John Word, B.A., San Francisco State University, Multimedia Editor.

### 14.8 Controller's Office

#### **Business** Office

Alice Turbiville, B.A., New School University; M.B.A., Drexel University; C.P.A., Controller.

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, Associate Controller.

Robert Lopresti, B.S., Rutgers; C.P.A., Manager of Financial Information Systems

**Cynthia Urick**, B.S., Albright College; M.A. Alvernia University, Contracts and Purchasing Manager

**Denise A. Risoli**, B.S., LaSalle University, Senior Accountant.

Christie Ashton, B.A., Linfield College, Staff Accountant.

Patricia Hearty, Buyer.

Barbara Turner, Accounts Payable Coordinator.

Deborah McGinnis, Accounts Payable Clerk. Student Accounts

Linda Weindel, Student Accounts Manager. Maria McBride, Student Accounts Assistant.

### 14.9 Counseling and Psychological Services (CAPS)

**David Eric Ramirez,** B.A., M.A., Ph.D., University of Texas, Director.

**Stacy Green,** B.A., Ithaca College; M.S.S, Ph.D., Bryn Mawr College Graduate School of Social Work and Social Research, Clinical Social Worker & Social Work Supervisor.

**Heejin Kim**, B.A., M.A., Chung-Ang University, Seoul, Korea; M.A., Ph.D., Bryn Mawr College, Clinical Psychologist and Assessment Supervisor.

**Diane C. Shaffer**, B.A., M.A., Trinity College; Psy.D., Immaculata University, Clinical Psychologist & Groups Coordinator.

**Joseph C. Hewitt**, B.A., University of Pennsylvania; D.O., University of Medicine and Dentistry, New Jersey School of Osteopathic Medicine, Consulting Psychiatrist.

Adam Gaubinger, B.A., Vassar College; M.S.W., Smith College; Social Work Fellow

Hilary Hla, B.A., Lehigh University; M.A., Doctoral Candidate, Widener University Institute for Graduate Clinical Psychology; Clinical Intern

Jacoba Johnson, B.A., Brown University; M.A., Bryn Mawr College; Doctoral Candidate, Bryn Mawr College; Clinical Intern

Dana Marcus, B.S., Bryant University; Masters Candidate, Bryn Mawr College Graduate School of Social Work and Social Research; Clinical Intern

Ari Pizer, B.M., Berklee College of Music; M.A., Psy.D., Widener University Institute for Graduate Clinical Psychology; Post-Doctoral Fellow Theresa D. McGrath, Administrative Assistant.

14.10 Dean's Office

H. Elizabeth Braun, B.A., Mary Washington College; M.A., Boston University; Ph.D., University of Massachusetts, Amherst, Dean of Students.

**Tomoko Sakomura**, B.A., Keio University; M.A., Ph.D., Columbia University, Associate Dean for Academic Affairs and Associate Professor of Art History.

Katherine Clark, B.A., Smith College, Coordinator for the Center for Innovation and Leadership.

**Elizabeth Derickson**, B.A., Swarthmore College; M.A., Princeton University, Assistant Dean for Academic Affairs.

**T. Shá Duncan Smith**, B.A., M.S.W., University of Michigan/Ph.D. candidate, University of Pennsylvania, Associate Dean of Diversity, Inclusion and Community Development.

Rachel Head, B.S.W., Florida State University; Ed.M., University of South Florida, Assistant Dean and Director of the Office of Student Engagement.

Leslie Hempling, B.A., Oberlin College; M.S.S., Bryn Mawr College, Director of Student Disability Services and Learning Resources.

**Karen M. Henry**, B.A., Swarthmore College; M.S.S., Bryn Mawr College Graduate School of Social Work; Ph.D., Temple University, Assistant Dean.

Asraa Jaber, B.A. Lewis & Clark University, M.A., Lewis & Clark University, Residential Communities Coordinator.

**Dion W. Lewis,** B.A., M.Ed., Rutgers University, Ph.D. University of Virginia, Assistant Dean and Director of the Black Cultural Center

Melissa Mandos, B.A., Wesleyan University; Master of City and Regional Planning, Rutgers University, Fellowships and Prizes Advisor.

**Jennifer Marks-Gold**, B.S., Drexel University; Ed.M., Cabrini College, Director of International Students and Scholars Services.

Nathan P. Miller, B.A., St. Olaf College; M.S., Minnesota State University, Mankato, Associate Dean of Students and Director of Student Conduct.

Michelle D. Ray, B.A., University of Pittsburgh-Johnstown; M.A., Indiana University Pennsylvania; Case Manager and Grievance Advisor.

Jason Rivera, B.A., Manhattanville College; M.S.Ed., College of Staten Island-City University of New York; Ph.D. University of Maryland, Assistant Dean and Director of the Intercultural Center.

Angela "Gigi" Simeone, A.B., Wellesley College; Ed.M., Boston University; Ph.D., University of Pennsylvania, Health Sciences Advisor and Prelaw Advisor.

**Isaiah J. Thomas**, B.A., The Colorado College; M.A. University of Maryland, Assistant Director of Residential Communities.

Susan K. Lewis, B.A., University of Illinois, Administrative Coordinator.

Betsy Durning; Stephanie Holznagel, B.A. Concordia College, M.Ed. Widener University; Jennifer Lenway, M.S.W. Portland State University; Devonia "Bonnie" Lytle; Diane E. Watson; Ben Wilson, Administrative Assistants.

### 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.

**Barbara Boswell,** Cash Operations Manager. **Therese Hopson,** Front-of-House Manager.

Lynn Grady, Office Manager.

Richard Plummer, A.S., Runaway Bay Heart Academy Jamaica W.I, Sous Chef/Catering

### 14.12 Facilities and Capital Projects

**C. Stuart Hain,** B.A., Roanoke College, Vice President for Facilities and Capital Projects.

Mary K. Hasbrouck, B.A., Oberlin College, Technology Coordinator.

**Christi A. Muller Ford**, B.S., St Joseph's University, Real Estate Administration and Administrative Coordinator.

**Jinny Schiffer**, A.B., Smith College; M.S., Temple University, Environmental Health & Safety Officer.

Susan Smythe, B.A., Wesleyan University, ADA Program Coordinator.

Environmental Services

Brian Vazquez, Manager, Day Shift Operations.

**Don Bankston,** Supervisor, Night Shift Operations.

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.

**Dwight Darkow**, A.S., Williamsport Area Community College, Gardener.

Maintenance

Ralph P. Thayer, Director of Maintenance.

Bill Maguire, Manager, Maintenance/Trades.

Carolyn Vance, Workbox Coordinator.

**Didi Beebe**, B.A. Gettysburg College, Information Specialist/Accounting.

Bernard Devlin, Supervisor.

Capital Planning and Project Management

Janet M. Semler, B.S., Pennsylvania State University; M.S., Drexel University, Director of Capital Planning and Project Management.

Michael Boyd, Senior Project Manager.

**Woodford Frazier**, A.S., Montgomery County Community College, Facilities Information Manager.

Space Reservation/Event Support/Summer Programs

**Patricia Maloney**, B.A., Pennsylvania State University, Director, Summer Programs and Scheduling

Claire Ennis, Facilities Management Coordinator.

### 14.13 Finance and Administration

**Gregory N. Brown,** B.A., Wesleyan University; M.P.A., University of New Haven, Vice President for Finance and Administration.

Alice Turbiville, B.A., New School University; M.B.A., Drexel University; C.P.A., Controller.

Mark C. Amstutz, B.A., College of William and Mary; M.A., University of Virginia, C.F.A., Chief Investment Officer.

Maurice G. Eldridge, B.A., Swarthmore College; M.Ed., University of Massachusetts, Vice President for College and Community Relations.

**C. Stuart Hain,** B.A., Roanoke College, Vice President for Facilities and Capital Projects.

Sharmaine B. LaMar, B.S., St. Joseph's University; J.D., University of Richmond, General Counsel and Assistant Secretary of the College.

Anthony P. Coschignano, B.A., Florida State University, MBA, Valparaiso University, Executive Director of Auxiliary Services

Jennifer Kennedy, B.A., Pennsylvania State University, Administrative Coordinator

## 14.14 Financial Aid Office

Varo L. Duffins, B.A., University of Delaware; M.S., Drexel University, Director of Financial Aid.

Judith A. Strauser, B.S., B.A., Gannon University, Director of Operations, Financial Aid.

**Kristin Moore,** B.S., St. Francis University; M.A., Indiana University of Pennsylvania, Director of Services, Financial Aid.

Laurie Heusner, B.A., M.A., University of Pennsylvania, Assistant Director of Financial Aid.

John P. Haggerty, B.A., Cabrini College, Assistant Director of Financial Aid

Catherine Custer, B.S., Lock Haven University and Gina Fitts, Administrative Assistants.

#### 14.15 Health Sciences/Prelaw Advisory Program

**Gigi Simeone**, A.B., Wellesley College; Ed.M., Boston University; Ph.D., University of Pennsylvania, Health Sciences Advisor.

**Jennifer Lenway**, M.S.W., Portland State University, Administrative Assistant.

## 14.16 Health & Wellness Services

Alice Holland, B.A., B.S.N., Cedar Crest College, C.R.N.P., M.S.N., Misericordia University, M.Ed., Widener University, Ph.D., Widener University, Nurse Practitioner. Director of Student Health and Wellness Service

**Casey Hoferica**, C.R.N.P., B.S., M.S., Desales University, Nurse Practitioner

Leah Orchowski, C.R.N.P., B.S. Villanova University, M.S. Thomas Jefferson University, Nurse Practitioner

Lauren Godfrey, C.R.N.P., B.S. Emory University, B.S. Columbia University, M.S. Columbia University, 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

**Eileen Stasiunas,** R.N., B.S.N., Villanova University, Nurse

**Nina Harris**, B.A., University of Pennsylvania, Violence Prevention Educator and Advocate

Joshua Ellow, M.S., Chestnut Hill College, Alcohol and Other Drug Counselor

**Brittany Pizio**, B.S., The Pennsylvania State University, M.A., R.D.N., L.D.N., Immaculata University, Nutritionist

Mary Jane Palma, Administrative Assistant/Insurance Coordinator.

### 14.17 Human Resources

**Pamela Prescod-Caesar**, B.S., Lesley College; M.B.A., Curry College, Vice President, Human Resources.

Michele Mocarsky, PHR., B.A. Arcadia University, Compensation and Benefits Director.

Chris Stack, B.S.B.A., Central Michigan University, Management Information Systems; M.B.A., Central Michigan University, Associate Director for Human Resources Information Systems and Project Management.

**Terri Maguire**, B.S. Widener University, Coordinator, Human Resources Manager.

Zenobia Hargust, B.A., West Chester University; PHR, M.S. Walden University; Director, Equal Opportunity and Engagement; Deputy Title IX Coordinator.

Amanda Puchon, B.B.A., Temple University; M.S., Temple University; Talent Management & Retention Manager.

John Cline, B.S., Gannon University, Associate Director of Benefits.

**Diane Echternach**, B.S., York College of Pennsylvania, Benefits Specialist.

Janis Leone, Human Resources Coordinator.

Brieann Sheldon, Human Resources Associate. Payroll

Karen Phillips, Payroll Director. Susan Watts, Payroll Coordinator.

#### 14.18 Information Technology Services

**Joel P. Cooper**, B.A., Calvin College; M.A., University of Texas-Austin, Chief Information Technology Officer.

Nicholas Hannon, B.S., Worcester Polytechnic Institute; M.S., Syracuse University, Information Security Analyst.

Kelly A. Fitzpatrick, IT Coordinator.

#### Academic Technologies

Michael Bednarz, B.A., Pennsylvania State University, Classroom and Media Technologist.

Michael Jones, B.A., State University of New York, Buffalo, Director of Language and Media Centers.

Michael Kappeler., B.A., Stockton University, Front End Web Developer.

**Leslie Leach**, B.S., University of Maine, Web Developer.

**David T. Neal Jr.,** B.A., Temple University, Classroom and Media Technologist.

Jeffrey Oaster., B.A Temple University; Postbaccalaureate Certificate (Educational Technology), Penn State University; Classroom and Media Technologist.

Michael Patterson, B.A., Temple University, Media Services Manager.

**Jeremy Polk**, B.A., University of Delaware; M.A., American University, Media Center Coordinator.

Andrew Ruether, B.A., Swarthmore College; M.Eng., Cornell University, Head of Academic Technology Support.

**Karen ''Corrine'' Schoeb,** B.A., Goddard College, Technology Accessibility Coordinator.

Ashley Turner, B.A., University of Missouri-Kansas City, Academic Technologist.

**Doug Willen**, B.A., Princeton University; Ph.D., University of California, Academic Technologist.

John Word., B.A., San Francisco State University, Language Media Center Technologist/

Administrative Information Systems

Frank Milewski, B.S., St. John's University, Director, Administrative Information Systems.

Rolf Mikkelson., B.S., Delaware State University, System Analyst.

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**

Mark CJ Davis Jr., A.S., CLC, B.S., Delaware Valley College, Technical Support Specialist. Heather Dumigan, Technical Support Specialist. **Seth Frisbie-Fulton,** B.A., Antioch College, Technical Support Specialist.

**Oliver Ryan Hollocher-Small**, A.A., Community College of Philadelphia, Technical Support Specialist.

Aixa I. Pomales, B.A., Temple University, Director, Client Services.

**Joel F. W. Price**, B.A., Swarthmore College, Technology Education Coordinator.

Michael Rapp, Hardware Support Technician.

Jessica Stockett., B.A., Albright College, Technical Support Coordinator.

**Christina Webster,** B.A., Temple University, Technical Support Specialist.

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.

Jason Rotunno, B.S., Drexel University, System and Security 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.

Michael Hushen., B.S., West Chester University of PA, Network Engineer.

Albert "Denny" Moore, B.S., Temple University, Network Engineer.

### 14.19 Institutional Research Office

**Robin H. Shores**, B.A., M.A., Ph.D., University of Delaware, Director of Institutional Research and Assessment.

**Pamela Borkowski-Valentin**, B.A., University of Delaware; M.S.S., M.L.S.P., Bryn Mawr Graduate School of Social Work and Social Research, Data and Reporting Officer.

**Jason Martin**, B.A., Trinity Christian College; M.A., Ph.D., Temple University, Institutional Research Associate.

### 14.20 Investment Office

Mark C. Amstutz, B.A., College of William and Mary; M.A., University of Virginia, C.F.A., Chief Investment Officer.

**Frank C. Grunseich**, B.A., Bucknell University; M.S., Temple University: Fox School of Business, Director of Investments.

Chelsea A. Hicks, B.A., Swarthmore College, Investment Analyst.

Lori Ann Johnson, B.A., Rutgers University; M.B.A., Villanova University, Director of Investment Operations and Assistant Treasurer. Carmen Duffy, Investment Associate.

# 14.21 Lang Center for Civic and Social Responsibility

**Benjamin Berger**, B.A. Princeton University; M.A., Ph.D., Harvard University; Executive Director of the Lang Center and Associate Professor of Political Science.

**Denise A. Crossan, Ph.D.**, University of Ulster Magee, Northern Ireland, The Eugene M. Lang '38 Visiting Professor for Issues of Social Change.

Jennifer Magee, B.A., M.A., Washington College; Post Graduate Diploma, University of Ulster (Magee College); Ph.D., George Mason University, Associate Director for Student Programs.

Katie Price, B.A. University of Utah; M.A., University of Pennsylvania; Ph.D. University of Pennsylvania. Assistant Director for Co-Curricular Programs.

Delores Robinson, Administrative Assistant.

Heitor Santos, B.A. Swarthmore College. Civic Education and Engagement Fellow.

#### 14.22 Lang Performing Arts Center

James P. Murphy, B.F.A., State University of New York, Albany, Managing Director.

J. Scott Burgess, Sound Designer, Audio/Video Engineer.

Allison Emmerich, B.A., DeSales University, Stage Manager.

Jose Antonio Dominic Chacon, M.F.A. Temple University, Lighting Design. Master Electrician

**Thomas Snyder**, B.S., Pennsylvania State University, Manager of Operations.

Jean R. Tierno, B.A., J.D., Widener University, Administrative Assistant.

## 14.23 Libraries

#### 14.23.1 College Libraries-McCabe, Cornell and Underhill

**Peggy Ann Seiden**, B.A., Colby College; M.A., University of Toronto; M.L.I.S., Rutgers University, College Librarian.

Maria Aghazarian, B.A., Bryn Mawr College, Digital Resources and Scholarly Communications Specialist.

Andrea Baruzzi, B.A., University of North Carolina-Greensboro; M.S., Drexel University, Head of Cornell Library of Science and Engineering and Science Librarian. Jessica Brangiel, B.A., The George Washington University; M.L.I.S., Drexel University, Electronic Resources Management Librarian.

Kate Carter, B.F.A., New York University; M.L.S., University of Pittsburgh, Head of Digital Initiatives & Strategies.

Susan Dreher, B.A., Wesleyan University; M.L.I.S., Drexel University, Visual Resources and Initiatives Librarian.

Sarah Elichko, A.B., Bryn Mawr College; M.L.I.S., Rutgers University, Social Sciences & Data Librarian.

**Donna Fournier**, B.A., Connecticut College; M.L.S., Southern Connecticut State University; M.A., West Chester University, Performing Arts Librarian.

**Kimberly Gormley**, B.A., Cabrini College; M.S.L.S. Drexel University, Late Night Access and Lending Services Supervisor.

Anna Goslen, B.S., M.S.L.S., University of North Carolina-Chapel Hill, Metadata Librarian.

Jason Hamilton, B.A., Temple University, User Technology Support Specialist

**Pam Harris,** B.A., Mary Washington College; M.L.S., Drexel University, Associate College Librarian Research & Instruction.

Teresa E. Heinrichs, B.A., Waynesburg College, Cornell Access and Lending Services Supervisor.

Linda Hunt, B.A., West Chester University, Access and Lending Services Specialist.

**Tom Hutchinson**, B.A., University of California-San Diego, TriCollege Libraries Web Developer.

**So-Young Jones,** B.A., Euha Women's University, Korea; M.L.S., Simmons College, Technical Services Specialist.

Nabil Kashyap, B.A. Prescott College; M.F.A., University of Montana; M.I.S., University of Michigan, Librarian for Digital Initiatives and Scholarship.

Melinda Kleppinger, B.S., Lebanon Valley College, Government Documents and Digital Archives Specialist.

**Chelsea Lobdell**, B.S., Muhlenberg College; M.S., University of Pennsylvania, TriCollege Libraries Web Developer.

**Roxanne Lucchesi**, B.A., Cabrini College, Technical Services Specialist.

**Mary Marissen,** B.A., Calvin College; M.M., Catholic University of America; M.L.I.S., Drexel University, Librarian for Assessment, User Experience and Assistant Head of Collections.

**Danie Martin**, B.A., B.S., Ohio State University; M.L.S., Kent State University, Technical Services Specialist.

Alison J. Masterpasqua, B.S., Millersville State College, Access and Lending Services Supervisor.

**Amy McColl,** B.A., University of Delaware; M.L.S., Drexel University, Assistant Director for

Collections and TriCollege Consortium Licensing Librarian.

Kerry McElrone, B.A., Saint Joseph's University, Interlibrary Loan Specialist.

Annette Newman, B.A., The Evergreen State College, Assistant to the College Librarian.

**Sara Powell**, A.B., Brown University; M.A. University of York; M.S. Simmons College, Reference and Instruction Resident.

**Roberto Vargas,** B.A., Knox College; M.L.I.S, Drexel University, Research Librarian for Humanities & Interdisciplinary Studies.

**Stefanie Ramsay**, B.A. Occidental College; M.L.I.S, University of Washington, Digital Collections Librarian

Sandra M. Vermeychuk, B.A., Swarthmore College; M.S. in Ed., University of Pennsylvania, Interlibrary Loan Services Coordinator.

Ken Watts, Book Van Driver.

**Barbara J. Weir**, B.S., Pennsylvania State University; M.L.S., Drexel University, Associate College Librarian for Technical Services & Digital Initiatives.

#### 14.23.2 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.

Susanna K. Morikawa, B.A., Dickinson College; M.F.A., Ph.D., Syracuse University, Archival Specialist.

Julie Swierczek, B.A., Rosemont College; M.A., Miami University of Ohio; M.S.L.I.S., University of Illinois-Urbana-Champaign, Primary Resource Collections and Metadata Services Librarian.

Celia Caust-Ellenbogen, B.A., Swarthmore College; M.L.I.S., University of Pittsburgh, Archive Associate.

**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.

## Honorary Curators of the Friends Historical Library

Lynne Calamia, Esther Leeds Cooperman (emerita), Maurice Eldridge, Philip L. Gilbert, James E. Hazard (emeritus), Thomas C. Hill, Emma Lapsansky-Werner, Lisa Samson, Ann Upton, Nancy V. Webster, Signe Wilkinson, and Harrison M. Wright.

# 14.23.3 Swarthmore College Peace Collection

Wendy E. Chmielewski, B.A., Goucher College; M.A., Ph.D., State University of New York, Binghamton, George R. Cooley Curator. Mary Beth Sigado, B.M., Temple University; M.S.W., Widener University, Technical Services Specialist.

Julie Swierczek, B.A., Rosemont College; M.A., Miami University of Ohio; M.S.L.I.S., University of Illinois-Urbana-Champaign, Primary Resource Collections and Metadata Services Librarian.

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, John Dear, Donald B. Lippincott.

### 14.24 List Gallery

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

### 14.25 Off-Campus Study Office

**Carina Yervasi,** B.A, Hofstra University; M.Phil., Ph.D., Graduate Center of the City of New York, Faculty Advisor 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 University, Administrative Assistant for Off-Campus Study.

#### 14.26 Office of the General Counsel

Sharmaine B. LaMar, B.S., St. Joseph's University; J.D., University of Richmond, General Counsel and Assistant Secretary of the College. Christopher J. Kelly, B.S., Drexel University, Paralegal.

### 14.27 President's Office

Valerie A. Smith, B.A., Bates College; M.A., Ph.D., University of Virginia, President of the College.

**Susan Eagar,** B.A., West Chester University; M.S., University of Pennsylvania, Special Assistant to the President.

Jenny Gifford, Administrative Coordinator.

**Bruce Easop**, M.A., University College of London; A.B. Princeton University, Special Assistant for Presidential Initiatives.

#### 14.28 Program on Urban Inequality and Incarceration (Formerly Center for Social and Policy Studies)

Keith W. Reeves, B.A., Swarthmore College; Ph.D., University of Michigan, Faculty Director.

Margaret O'Neil, B.A., Swarthmore College, UII Engagement Fellow and Teaching Assistant.

Nina Johnson, B.A., University of Pennsylvania; M.A., New York University; Ph.D., Northwestern University, Inside-Out Course Instructor.

**Ellen Ross,** B.A., Princeton University; M.A., Ph.D., University of Chicago, Inside-Out Course Instructor.

### 14.29 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.

Sunka Simon, M.A., Universitadt Hamburg; Ph.D., Johns Hopkins University, Associate Provost for Faculty Development and Professor of German.

**K. David Harrison**, B.A., American University; Magister, Jagiellonian University, Poland; M.A., Ph.D., Yale University, Associate Provost for Educational Programs and Curriculum Support and Professor of Linguistics.

Marcia C. Brown, B.A., Villanova University; M.Ed., University of Pennsylvania, Executive Assistant to the Provost.

**Kim Fremont**, B.S., St. Joseph's University; M.A., George Washington University; Ph.D., Temple University, Assistant to the Provost for Administration.

Shawn Lehmann, B.S. York College of Pennsylvania; M.S. Central Michigan University, Institutional Review Board and Research Compliance Manager.

Robin H. Shores, B.A., M.A., Ph.D., University of Delaware, Director of Institutional Research.

Cathy Pescatore, Administrative Coordinator.

Joanne Kimpel, Administrative Coordinator. Debbie Thompson, Administrative Coordinator.

## 14.30 Public Safety

Michael J. Hill, B.A., University of Pennsylvania, CPP, Director of Public Safety.

**Elizabeth B. Pitts,** B.F.A., Philadelphia College of Art; J.D., Widener University School of Law, Associate Director of Investigations

Sam Smemo, B.S., Florida State University; M.S., Long Island University, Director of Operations,

Andrew Dunn, Joe Forgacic, Joseph Theveny, Robert Warren, Patrol Corporals.

Kathy Agostinelli, Jim Ellis, Drew Frescoln, Tony Green, Gina Goodwin, Greg Hartley, George Iredale, Thomas Kincade, John McNamee, Desmond McNeil, Mariel Peart, Marcella Pringle, Montea Roundtree, Bob Stephano, Public Safety Officers.

George Darbes, Security Systems & Training Administrator

Sandra Briggs-Edwards, Allisa Dyitt, Brandi Jones, John McCans, Jackie Prather, Michelle Wollman, Communications Center.

Robert Bennett, Joseph Cardella, Paul Estock, Troy Mayo, Joe McSwiggan, Joseph Phillips, Mark Swaney, Mark Tansey, Zach Witman Shuttle Drivers

Meghan Browne, Mary Lou Lawless, Administrative Assistants.

## 14.31 Registrar's Office

Martin O. Warner, B.A., University of North Carolina at Chapel Hill; M.A., Duke University, Registrar.

Lesa Shieber, B.S., Tuskegee University; M.A., Virginia Polytechnic Institute and State University, Associate Registrar.

**Stacey Hogge**, B.S., West Chester University, Assistant Registrar.

Jana Judge, Assistant Registrar.

### 14.32 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.

**Rebecca Robert**, B.S., M.S., Pennsylvania State University, Member and Visitor Programs Coordinator.

Jacqui West, Administrative Coordinator.

## 14.33 Secretary of the College

Nancy Nicely, B.A., College of William and Mary; M.S., University of Pennsylvania, Secretary of the College and Vice President for Communications

Jennifer Piddington, B.A., Long Island University, Administrative Coordinator

## 14.34 Sustainability

Aurora Winslade, B.A. University of California Santa Cruz; M.B.A. Fuqua School of Business, Duke University, Director of Sustainability.

Melissa Tier, B.A., Swarthmore College, Sustainability Program Manager.

Nathan Graf, B.A., Swarthmore College, Climate Action Senior Fellow.

## 14.35 Title IX Office

Kaaren M. Williamsen, B.A. Gustavus Adolphus College; M.S. Minnesota State University; M.A. and PhD, University of Minnesota, Title IX Coordinator.

**Becca Bernstein**, B.A., Grinnell College; M.Ed. University of Maryland, College Park, Title IX Program Assistant.

Kathleen Withington, B.A., St. Joseph's University, Administrative Assistant.

#### 14.36 Academic Administrative Assistants and Technicians

Art: Stacy Bomento, B.A., LaSalle University, Slide Curator; Meg Gebhard, B.S., Kutztown University, Administrative Assistant; Doug 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 Kannapel, B.S., Denison University; M.E., Widener University, Laboratory Coordinator; Tami Gura, B.A., Western Maryland College, Animal Facilities Manager.

**Black Studies:** Rose Maio, Administrative Coordinator.

**Chemistry and Biochemistry:** Catherine Cinquina, Administrative Assistant; Ian P. McGarvey, B.S., Temple University, Scientific Instrumentation Specialist.

Classics: Deborah Sloman, Administrative Assistant.

**Cognitive Science:** Anna Everetts, 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. Lauri Courtenay, Academic Coordinator.

**Economics:** Nancy Carroll, B.A., Barat College, Program Coordinator and Administrative Assistant.

**Educational Studies:** Ruthanne Krauss; Administrative Assistant.

**English Literature:** TBD, Administrative Assistant

Engineering: Cassy Burnett, Administrative Coordinator; Edmond Jaoudi, B.S., Fairleigh Dickinson University; M.Arch., Virginia Polytechnic Institute and State University, Electronics, Instrumentation, and Computer Specialist; James Johnson, Machinist; Ann Ruether, B.S., Swarthmore College, Academic Support Coordinator; Grant Smith, Mechanician.

**Environmental Studies:** Cassy Burnett, Administrative Coordinator.

Film and Media Studies: Logan Tiberi-Warner, B.A., Swarthmore College, Administrative Assistant.

Gender and Sexuality Studies: Anna Everetts, 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 and Latino Studies: Anna Everetts, Administrative Assistant.

Linguistics: Jeremy Fahringer, B.A., Swarthmore College, Phonetics Lab Coordinator; Dorothy Kunzig, Administrative Assistant.

Mathematics and Statistics: Stephanie J. Specht, Administrative Assistant; TBD, Academic Support Coordinator.

Modern Languages and Literatures: Suzanne McCarthy, Administrative Assistant; Bethanne Seufert, B.A., Penn State University, Administrative Assistant; Michael Jones, B.A., State University of New York, Buffalo, Director, Language and Media Centers; John Word, B.A., San Francisco State University, Language Media Center Technologist/Multi-Media Editor.

Music and Dance: Hans Boman, B.M., Philadelphia College of Performing Arts, Dance Program Accompanist; Bernadette Dunning, Administrative Coordinator; Susan Grossi, Administrative Assistant; Jeannette Honig, Concert and Production Manager (Music); Tara Nova Webb, B.A., Swarthmore College; M.A., New York University, Arts Publicity and Costume Shop Supervisor.

**Peace and Conflict Studies:** Anna Everetts, Administrative Assistant.

**Philosophy:** Donna Mucha, Administrative Assistant.

Physical Education and Athletics: Nnenna Akotaobi, B.S./B.A., University of Denver, Associate Director of Athletics, Senior Woman Administrator, Deputy Title IX Coordinator; Marian Fahy, A.S., Delaware County Community College, Sharon J. Green, Administrative Assistants; Roy Greim, Assistant Director Athletics Communications; Brandon Hodnett, M.A. Villanova University, B.A. Bob Jones University, Director Athletic Communications; Marie Mancini, A.T.C., B.S., C.C.C.S., West Chester University; Allison Hudak, A.T.C., West Chester University; B.S., Rutgers, the State University of New Jersey, Assistant Director of Athletics for Recreation & Wellness; Chris McPherson. B.S., Temple University,Sports Performance and Matchbox Fitness Center Coordinator; Erika Moyer, B.S. Mansfield University of Pennsylvania, Assistant Strength and Conditioning Coach; Larry Yannelli, B.A., Widener University, Equipment/Facilities Manager.

Physics and Astronomy: Carolyn Warfel, A.S., Widener University, Administrative Assistant; Paul Jacobs, B.S., Georgia Institute of Technology; M.S., Ph.D., University of Michigan, Instrumentation Technician; Steven Palmer, Machine Shop Supervisor; Manjit Kaur, B.S., M.S., Himachal Pradesh University, Shimla, India; Ph.D., Institute for Plasma Research, Gandhinagar, India, Post-Doctoral Researcher for SSX.

**Political Science:** Gina Ingiosi, Deborah Sloman, Administrative Assistants.

**Psychology:** Kathryn Timmons, Administrative Coordinator; Abigail Dean, B.S. Ursinus College, Research Coordinator & Academic Assistant; Amanda L. Elam, B.A., Temple University; M.S., The Pennsylvania State University; Ph.D., The Pennsylvania State University; Post-Doctoral Research Fellow, Psychology Department. **Religion:** Anita Pace, Administrative Assistant.

**Sociology and Anthropology:** Rose Maio, Administrative Coordinator.

**Theater:** Jean Tierno, B.A., J.D., Widener University, Administrative Assistant; Tara Nova Webb, B.A., Swarthmore College; M.A., New York University, Arts Publicity and Costume Shop Supervisor.

Writing Program: TBD, Administrative Assistant.

#### 2017 Visiting Examiners

#### Art

Jill Allen, Temple University Anne Byrd, Whitney Museum Ward Davenny, Dickinson College Susan Fenton, Saint Joseph's University Janice Merendino, Rosemont College Lei Xue, Oregon State University

#### Biology

Sarah Ades, Pennsylvania State University Morgan Benowitz-Fredericks, Bucknell University Sabrina Burmeister, University of North Carolina Gregory Brian, University of Pennsylvania Amy Johnson, Bowdoin College Sean McBride, Rowan University Anna Mitchell, Center for Human Genetics Patricia Moore, University of Georgia John Murray, University of Pennsylvania Michael Sukhdeo, Rutgers University Jessica Sullivan-Brown, West Chester University Robert Zeller, San Diego State University

#### **Chemistry and Biochemistry**

Jana Kondev, Brandeis University Michael Krout, Bucknell University Yan Kung, Bryn Mawr College Gary Lorigan, Miami University Alexander Sidorenko, University of the Sciences

#### **Classical Studies**

Kevin Brownlee, University of Pennsylvania Carolyn Dewald, Bard College James Porter, University of California, Berkeley Bret Mulligan, Haverford College Emily Wilson, University of Pennsylvania

#### **Computer Science**

Amit Chakrabarti, Dartmouth College Mark Craven, University of Wisconsin, Madison James Marshall, Sarah Lawrence College Scott Smith, Johns Hopkins University

#### Economics

Ryan Chahrour, Boston College James Devault, Lafayette College Ira Gana, Rutgers University Paul Goldsmith-Pinkham, Federal Reserve Bank of New York Emiliano Huet-Vaughn, Middlebury College Thomas Jeitschko, Michigan State University Elizabeth Linos, Behavioral Insights Team Andrew Sfekas, Bryn Mawr College

#### **Educational Studies**

Maia Cucchiara, Temple University Karly Sarita Ford, Pennsylvania State University David Johnson, University of Iowa Demie Kurz, University of Pennsylvania Micahel Reichert, University of Pennsylvania Wesley Shumar, Drexel University

#### Engineering

Ahmad Hoorfar, Villanova University Ryan Zurakowski, University of Delaware

#### **English Literature**

Sari Altschuler, Emory University Eric Gary Anderson, George Mason University Anthony Cuda, University of North Carolina, Greensboro Julius Fleming, University of Maryland Maud McInerney, Haverford College Elizabeth Mosier, Bryn Mawr College Jill Richards, Yale University Andrea Stevens, University of Illinois at Urbana-Champaign Megan Ward, Oregon State University

**Environmental Studies** 

Joni Adamson, Arizona State University

#### Film and Media Studies

Bastian Heinsohn, Bucknell University Meta Mazaj, University of Pennsylvania Louisa Stein, Middlebury College

#### History

Abigail Agresta, Queen's University Erica Armstrong Dunbar, University of Delaware Emily Callaci, University of Wisconsin-Madison Konstantin Dierks, Indiana University Siyen Fei, University of Pennsylvania Joshua Freeman, City University of New York Matthew Kadane, Hobart and William Smith Colleges

Louise McReynolds, University of North Carolina

#### Linguistics

Joshua Katz, Princeton University Carl Rubino Margaret Speas, University of Massachusetts, Amherst

#### Mathematics and Statistics

Joe Blitzstein, Harvard University John Mccleary, Vassar College David Pollack, Wesleyan University Jim Wiseman, Agnes Scott College

#### Medieval Studies

Michael Tomko, Villanova University

#### Modern Languages and Literatures

Margaret Litvin, Boston University James Hargett, The University at Albany-SUNY Carla Calarge, Florida Atlantic University Jarrod Hayes, University of Michigan Eileen Julien, Indiana University-Bloomington Jeffrey Peters, University of Kentucky Jane Costlow, Bates College Olga Partan, College of the Holy Cross Manuel Delgado, Bucknell University

#### **Music and Dance**

Madeline Cantor, Bryn Mawr College Sally Hess, Swarthmore College

## **15 Visiting Examiners**

#### Peace and Conflict Studies

Richard Thurber, Northern Illinois University Robert Vitalis, University of Pennsylvania

#### Philosophy

Alexander Guerrero, Rutgers University Steven James, West Chester University Ian McCready-Flora, University of Virginia Lydia Moland, Colby College Mark Okrent, Bates College Laura Papish, George Washington University

#### Physics and Astronomy

Kathryn Daniel, Bryn Mawr College Joel Franklin, Reed College Brian Utter, Bucknell University Philip Voss, Albion College

#### **Political Science**

Marc Blecher, Oberlin College Philip Brendese, Johns Hopkins University Michaele Ferguson, University of Colorado, Boulder Mark Graber, University of Maryland Robert Lieberman, Johns Hopkins University Jason Neidleman, University of LaVerne Chad Rector, Marymount University Arthur Schmidt, Temple University Janet Titus, Jacob Center for Neighborhood Innovation

#### Psychology

Steven Brunswasser, Vanderbilt University Ellen Evers, University of California, Berkeley Elizabeth Fein, Duquesne University John Freeman, New York University Dedre Genter, Northwestern University Hyowon Gweon, Stanford University Kathy Hirsh-Pasek, Temple University Lynn Kirby, Temple University School of Medicine Traci Mann, University of Minnesota Anna Papafragou, University of Delaware Florian Schwartz, University of Pennsylvania

#### Religion

Jason Bivins, North Carolina State University Rachel Havrelock, University of Illinois at Chicago Jennifer Koosed, Albright College

#### Sociology and Anthropology

Caran Freeman, University of Virginia Charles Gallagher, LaSalle University Mary Jo Delvecchio Good, Harvard University Ramah McKay, University of Pennsylvania Anne Meneley, Trent University Anand Nikhil, University of Pennsylvania Damien Stankiewcz, Temple University Derron Wallace, Brandeis University

#### May 21, 2017

#### 16.1 Bachelor of Arts

Robert Mathew Abishek, Special Major in Neuroscience and Psychology George Anthony Abraham, Mathematics and (Engineering) Brian Ivan Acosta, Comparative Literature Bronimir Stanislaw Robert Adler-Ivanbrook, Special Major in Astrophysics Rachael Caelie Aikens, Mathematics and Biology Justine Brooke Albers, Biology Allison Jeanne Alcena, English Literature Tyler Davis Alexander, Special Major in Astrophysics Audrey Jean Allen, Chemistry Luella Rose Allen-Waller, Biology Luiza Almeida Santos, Psychology and Art ShaKea Keanni Alston, Special Major in Peace and Conflict Studies Aziz Kelechi Anderson, Psychology Meiri Anto, Economics and Computer Science Douglas Stuart Arbuckle, Jr., Chemistry Zachary William Kalani Arestad, Sociology & Anthropology Noelle Santagada Arroyo, Special Major in Neuroscience Daniel Mark Asplin, Biology Rebecca Hailu Astatke, Biology Matthew Sagawa Baer, Physics Beatriz Grace Baker, Special Major in Peace, Conflict and Gender Studies Daniel Joseph Banko-Ferran, Economics Eden Elizabeth Barnett, Philosophy and Economics Kathleen Marie Baryenbruch, Linguistics Isabel Lois Baskin, Computer Science and Sociology & Anthropology Brandon Lee Bastien, Special Major in Neuroscience Nora Hirsch Battelle, English Literature Jordyn Cierra Bell, Special Major in Political Science and Educational Studies Raven Bennett, Psychology Anna Rita Bigney, Biology Elias Palmer Blinkoff, Special Major in Psychology and Educational Studies Simon Jupiter Bloch, Computer Science Christopher Garrett Bolin, Film & Media Studies and English Literature Rachel Anna Boone, Biology Margaret Hannah Bost, Physics Christopher Michael Bourne, Biology and Spanish Marissa Marie Bradley, Psychology Corey McGarthy Branch, English Literature Sarah Elizabeth Branch, Special Major in Sociology and Anthropology and Educational Studies and Theater Leela Sivie Breitman, Biology and Art Carlo Tomas Bruno, Political Science Thomas Ryan Burnett, Special Major in Spanish Literature and Educational Studies

Delfin Gerard Griengo Buyco, Chemistry and Linguistics Kendell Hadiya Byrd, Computer Science and Economics Abigail Elizabeth Byrne, Biology Corinne Mary Candilis, Economics Kimberly Marie Canzoneri, Special Major in Mathematics and Educational Studies Henry Fielding Cappel, Psychology Jacob Race Carstenson, Computer Science Jesse Lawrence Cason II, Psychology Christopher Kai-Wing Chan, Psychology Iris Tinyan Chan, Biology Chi Yuan Chang, Computer Science and Theater Anise Veronique Charles, Economics James Ching Chen, Psychology Michael Chen, Computer Science and (Engineering) Shuangle Chen, Computer Science Xiaoxuan Chen, Psychology Yiming Chen, Chemistry Olivia Yu-ting Cheng, Economics Ojas Chinchwadkar, Economics Sooyun Choi, Chemistry Brandon Tse Wei Chow, Mathematics and Computer Science Margaret Portia Goodman Christ, History and Economics William Dong Hyuk Chung, Economics Isabel Marie Clay, Economics and Special Major in English Literature and Educational Studies Eliana Bethany Cohen, Special Major in Organizational Behavior Marissa Diamond Cohen, Political Science and Special Major in Peace and Conflict Studies Andrew Wells Conant, Computer Science Madeline Gemma Conca, Special Major in Neuroscience Brandon Lee Conner, Political Science Ari Steven Coopersmith, Special Major in Medical Anthropology Kemmer Keswani Cope, Film & Media Studies Thomas John Corbani, French and Francophone Studies and Special Major in Gender and Sexuality Studies Martina Costagliola, Computer Science Briana Nicole-Lynn Cox, Special Major in Cognitive Science Alexander Louis Crane, Mathematics and Computer Science Cesar Armando Cruz Benitez, Special Major in Linguistics and Educational Studies Peter Orville Daniels, Sociology & Anthropology Vinita Reshmi Davey, Political Science Charles Christopher Davis, Sociology & Anthropology Spriha Dhanuka, Film & Media Studies and History Aaliyah Jhaneil Dillion, Psychology Stephen Alexander Ducey, Jr., Economics Medgine Garcienne Elie, Special Major in Political Science and Educational Studies Emma Carothers Eppley, Biology

Luke Matthew Eppley, Biology and English Literature Amelia Forbes Erskine, History Mosea Lee Esaias, Special Major in Global Peace and Justice Amelia Rose Estrada, Dance and Classical Studies William Clifford Evers, Computer Science and Economics Bolutife Olurotimi Fakoya, Sociology & Anthropology and Biology Grace Mitsuye Farley, Biology and Art Madeleine Jane Feldman, Special Major in Sociology and Anthropology and Educational Studies Ditiya Ferdous, Sociology & Anthropology and Art Wesley Randolph Fishburn, Economics John Liam Fitzstevens, Special Major in Neuroscience Erica Megan Flor, Economics and Special Major in Neuroscience Joshua Rodney Foster, History and Economics Gareth Martin Fowler, Political Science Chase Madden Fuller, Philosophy John Ryan Gagnon, History Katherine Galvis Rodriguez, Sociology & Anthropology Gustavo Garibay, History Francis Melissa Ge, Biology Gillian Hayley Geffen, Special Major in Psychology and Educational Studies Rebekah Alexandra Gelpi, Special Major in Cognitive Science Haley Lynn Gerardi, Special Major in Biology and Educational Studies Dylan Jeremy Gerstel, Political Science David Joshua Geschwind, Economics and Computer Science Brian Steven Gibbs, Special Major in Biochemistry and Economics Joshua Nathan Goldstein, Mathematics Victor Almeida Rodrigues Gomes, Special Major in Cognitive Science and Psychology Benjamin Peters Goodman, Mathematics Cole Muscatine Graham, Mathematics and Biology Sam K. Gray, Linguistics Clara Elizabeth Habermeier, Economics Amy Shuang Han, Computer Science and (Engineering) Jeremy Han, Physics and Computer Science Katherine Lacey Hannah, Psychology and Spanish Cooper Edward Harrington-Fei, Theater Julie Elizabeth Harris, Art and (Engineering) Lincoln Jeffery Harris, Biology Hazlett Lucy Henderson, French and Francophone Studies Ariel Briana Henig, Special Major in Neuroscience Max Nathaniel Hernandez-Webster, Art Alice Lydia Herneisen, Chemistry and Biology Timothy Nicholas Hirschel-Burns, Political Science

Patrick Offutt Holland, Political Science Ian Forrest Holloway, Linguistics and Special Major in Interdisciplinary Chinese Studies Ashley Hong, Sociology & Anthropology Victoria Hou, Art History Patrick Alexander Houston, Special Major in Political Science and Environmental Policy Emily Rose Hudson, Physics Margaret Cardon Hughes, English Literature Katherine Marie Ianni, Economics Zhazira Irgebay, Biology Jamie Isaac Irwin, Psychology Shantanu Jain, Mathematics and Computer Science Erica Chaya Janko, Sociology & Anthropology Stephen Vincent Jaoudi, Computer Science Anna Elizabeth Jensen, Computer Science Raehoon Jeong, Mathematics and Computer Science Maneepunnarai Jiwjinda, Special Major in Neuroscience Mele Okihiro Johnson, Chemistry Summer Bianca Johnson, Special Major in Sociology and Anthropology and Educational Studies Tessa Kirby Jones, Computer Science Christine Seohee Jung, Art and Economics Zoe Elaine Junghans, Computer Science Charles Irving Kacir, Mathematics Sidharth Kakkar, English Literature Adam Scott Kapilow, Mathematics Meghann Rebecca Kasal, Special Major in Biochemistry and Spanish Charles Weisgurt Kazer, Computer Science and Mathematics Emma Kerry Keefe, Psychology and Chinese Heidi Maria Kern, Special Major in Spanish Literature and Educational Studies Caroline Bennett Khanna, Biology Murtaza Khomusi, Special Major in Islamic Studies Christine Yeji Kim, Political Science Grace Kim, Chemistry Min-Soo Kim, Chemistry Jacob Michael Kirsh, Chemistry and Mathematics Zora Raine Kosoff, Biology Michaela June Krauser, English Literature Chiara Kruger, Film & Media Studies Aditi Subodh Kulkarni, Chemistry Sona Christina Kumar, Psychology Tushar Kundu, Economics and Mathematics Teruya Russell Kusunoki-Martin, Computer Science Irene Kwon, Sociology & Anthropology Daniel Cheong Kit Lai, Biology Tanner Lai, Computer Science and Mathematics Nathan Robert Lamb, Classical Studies and Psychology Eric Andrew (Drew) Langan, History Stefan Emile Laos, Special Major in Astrophysics Samuel Chao Lebryk, Political Science Anna Caterina Lee, Special Major in Sociology and Anthropology and Educational Studies

## **16 Degrees Conferred**

Jace Jongseok Lee, Special Major in Music and Educational Studies Joo Hyun (June) Lee, Biology Justin Kwangmin Lee, Chemistry Phyllis Lee, Economics Xavier Gerard Lee, Comparative Literature G. Graham Lesko, Economics and (Engineering) Eric Matthew Levin, Economics and Political Science Rebecca Luisa Levine, Biology Tobias Benjamin Levy, Political Science Natania Levy Stein, Philosophy Seth Nathaniel Liebert, Economics Bryan Lin, Biology Feng Lin, Political Science and Economics Isaac Wintermute Little, Mathematics and (Engineering) Weite Liu, Computer Science and Economics Davis Ogima Logan, Political Science Kathryn Grant Phillips Longley, Greek and (Engineering) Lamoni Monaee Lucas, Psychology Nikhita Luthra, Economics and Mathematics Raffaella Liv Luzi Stoutland, Film & Media Studies Gurrein Kaur Madan, Special Major in Neuroscience Gavriela Maia Mallory, Biology and Art Mary Rose Mannion, English Literature Daniel North Manson, Political Science Agustin Tomas Marty, Economics Rebecca Cruz Mayeda, Special Major in Neuroscience Lucas Dolan McCartin, Economics and Special Major in Interdisciplinary Chinese Studies Cody Howard McElhinny, Film & Media Studies Conor Donal McEneaney, Economics and Political Science Thomas Warren Beaudry McGovern, Sociology & Anthropology Brandon Arram McKenzie, Psychology Natalie West McLaughlin, Sociology & Anthropology Sabrina Skye Merold, Sociology & Anthropology Michael Ryan Meuth, Political Science William Edelman Meyer, Political Science Katrina Margaret Midgley, Computer Science Aidan Gregory Miller, Economics and Psychology Nikkia Felicia Miller, Psychology Joseph Marion Millman, Philosophy Jake Keeyeon Moon, Economics and Political Science Noah Emanuel Morrison, Special Major in Middle Eastern Studies Christian Alexander Morrow, Physics and (Engineering) Drew Dalton Mullins, Biology Briana Marie Narzikul, Psychology and Economics Moeko Noda, Comparative Literature Asma Begum Noray, Special Major in Arabic Studies and Political Science

Alessandra Hopfenberg Occhiolini, English Literature John Taylor O'Connor, Economics and Special Major in Interdisciplinary Chinese Studies Chinyere Anna Wrenn Odim, Special Major in Sociology and Anthropology and Educational Studies Stephen O'Hanlon, Jr., Political Science and Sociology & Anthropology Mark Johnston Olson, Chemistry Sophia O'Malley-Krohn, Mathematics and Computer Science Taha Konuralp Onal, Political Science Margaret Elizabeth O'Neil, Psychology and Political Science Karl Hilding Palmquist, Biology Aidan Paul Pantoja, Political Science Joon Sung Park, Computer Science Sabrina Rand Pascoe, Special Major in Philosophy and Political Science Alexandra Master Paul, Psychology Daniel Hernan Paz, Political Science Jacklyn Marie Pezzato, Special Major in Astrophysics and (Engineering) Michael Fineman Piazza, Computer Science Reid Worthy Pickett, Special Major in Bioethics Sara Elizabeth Planthaber, Political Science and Psychology Desta Mar Pulley, Biology Jerry Yu Qin, Psychology Tahmid A. Rahman, Mathematics and Computer Science Kaitlyn Hennessey Ramirez, Psychology Alejandro Martin Ramos, Economics and Mathematics Aditya Nirvaan Ranganathan, Music Meghana Ilsa Ranganathan, Mathematics Persis Lucille Atossa Ratouis, Computer Science Erik Palmer Rauterkus, Economics and Political Science Amanda Courtney Reed, Chemistry and Economics Indiana Reid-Shaw, Special Major in Environmental Anthropology Emma Alice Remsberg, Greek Sarah Nicole Miriam Been Revesz, Special Major in Developing Identity: Education, Literature and Spirituality Tessa Alise Rhinehart, Mathematics and Biology Maddox Benjamin Burns Riley, German Studies and Computer Science Jasmin Sophia Rodriguez-Schroeder, Art History Benjamin Roebuck, Political Science Claudia Elizabeth Romano, Sociology & Anthropology Alondra Ivette Rosales, Special Major in Linguistics and Educational Studies Noah Spencer Rosenberg, Special Major in Neuroscience Daniel Evan Rovner, Computer Science and (Engineering) Michael Joseph Rubayo, Computer Science and Political Science

## **16 Degrees Conferred**

Allison Nicole Ryder, Computer Science Katarina Wagner Rydlizky, Psychology Eduard Saakashvili, Film & Media Studies Miranda Rose Saldivar, Psychology Jonathan Meir Saltzman, Economics Heitor Geraldo da Cruz Santos, Special Major in Political Science and Educational Studies Peter Farhat Sayde, Special Major in Neuroscience Sassicaia Jacquelyn Schick, Biology Nicholas Bernard Schmidt, Biology and Sociology & Anthropology Amit Landau Schwalb, Special Major in Biology and Educational Studies Jordan Taylor Sciascia, Special Major in Linguistics and Language Julian Andrew Segert, Biology Stephen Mark Sekula, Art Ashlen Marie Sepulveda, Psychology and Special Major in Gender and Sexuality Studies Christina Isabelle Shincovich, Special Major in Neuroscience Zeluleko Sibanda, Special Major in Neuroscience Cynthia Veronica Siego, Psychology Aaron Joshua Slepoi, Music Rhiannon Marjorie Smith, Linguistics and Special Major in Astrophysics Isabella Alexandra Smull, Political Science Maria Elena Solano, Computer Science Xiyue Song, Economics and Mathematics Adina Spertus-Melhus, Special Major in Environmental Theory and Action Andrew Lee Steele, Computer Science Matthew Ken Sueda, Special Major in Japanese Language, Literature and Culture Will Dexter Sullivan, Mathematics John Sun, Biology Adella Claire Sundmark, Special Major in Psychology and Educational Studies Michael Joseph Swantek, Mathematics and Special Major in Neuroscience Wenting Tao, Art Lee Andrew Tarlin, Computer Science and Linguistics Elizabeth Dorthea Craig Teerlink, Economics and Sociology & Anthropology Meyer August Thalheimer, Political Science and Economics David Tian, Biology Jigme Tobgyel, Economics and Mathematics Grant Christian Torre, Film & Media Studies Tony Trung Trinh, Mathematics and Economics Aaron Webster True, Sociology & Anthropology and Spanish Sarah Anne Tupchong, Biology Lily Stephanie Tyson, Russian and Special Major in Peace and Conflict Studies Austen Claire Van Burns, Classical Studies Catherine Jessica Velez-Perry, Special Major in Intersectional Representation Thomas Claude Vernier, Economics Brionna Pari Verse, Special Major in History and Educational Studies Richard Tan Vu, Special Major in Neuroscience

Aaron Joseph Wagener, Mathematics James Jin Wallace-Lee, History and Computer Science Daniel Wang, Mathematics Haoyu Wang, Art Helen Tang Wang, Economics Stephanie Be-Wen Wang, History Yikai Wang, Computer Science Rock Anthony Ward, Political Science Cara Wattanodom, Physics Tess Wei, Art Zane Alexander Weinberger, Art and Biology Erika Nicole Weiskopf, Biology Owen Michael Weitzman, Sociology & Anthropology and Spanish Zoey Rayne Werbin, Biology Daniela del Rosario Wertheimer, Sociology & Anthropology Ian Craig Westley, Linguistics and Economics Abigail Claire Wild, Psychology Mollie Rothstein Wild, Linguistics and (Engineering) Tessa English Williams, Art Tom Hendrik Wilmots, Economics and (Engineering) Macrae Ross Wimer, Economics Rachel Teresa Winchester, Art History Joshuah Aaron Wolper, Computer Science and (Engineering) Allison Grace Wong, Psychology and English Literature Sedinam Nana Ama Worlanyo, Special Major in Computer Science and Economic Development Emily Jin Wu, Psychology Fangling Wu, Economics and Mathematics David Eliezer Wurtele, Computer Science Yuhao Xu, Special Major in Neuroscience and Economics Weixin Yang, Political Science and Economics Yili Eric Yao, History Jianyi Ye, Mathematics and Computer Science David Aaron Yelsey, Computer Science Yang Yi, Economics and Computer Science Dong Shin You, Biology and Political Science Mason Li Yu, Chemistry and Mathematics Asif Zaarur, Psychology Katherine Michelle Zavez, Mathematics Anne Zhang, Special Major in Neuroscience Henry Haorui Zhang, Mathematics and Economics Xiangwei Zhong, Mathematics and Economics George Zhu, Mathematics and Philosophy Tina Olympia Zhu, Special Major in Cognitive Science

Adina Zucker, Computer Science

## 16.2 Bachelor of Science

George Anthony Abraham, Engineering and (Mathematics) Henry Du Chen, Engineering Matthew C. Chen, Engineering Michael Chen, Engineering and (Computer Science) Jonathan Scott Cohen, Engineering Samuel Elliot Evans, Engineering Michael Cole Fox, Engineering Christopher S. Grasberger, Engineering Evan Violante Greene, Engineering Amy Shuang Han, Engineering and (Computer Science) Julie Elizabeth Harris, Engineering and (Art) Helen Abigail Hawver, Engineering John James Larkin, III, Engineering G. Graham Lesko, Engineering and (Economics) William Shiwei Li, Engineering Isaac Wintermute Little, Engineering and (Mathematics) Kathryn Grant Phillips Longley, Engineering and (Greek) Steven Louis Matos-Torres, Engineering Ursula Mililani Monaghan, Engineering Christian Alexander Morrow, Engineering and (Physics) Atousa Nourmahnad, Engineering Darbus Oldham, Engineering Andrew Kazuo Oye, Engineering Jacklyn Marie Pezzato, Engineering and (Special Major in Astrophysics) Alexandra Nicole Philyaw, Engineering Vincent Michael Potenza, Engineering David Joseph Ranshous, Engineering Daniel Evan Rovner, Engineering and (Computer Science) Rachel Katherine Sassella, Engineering Anthony James Sigman-Lowery, Engineering Mollie Rothstein Wild, Engineering and (Linguistics) Tom Hendrik Wilmots, Engineering and (Economics) Joshuah Aaron Wolper, Engineering and (Computer Science) Cooper Ramsey Woolston, Engineering Terry William Yu, Engineering

#### 17.1 Honors Awarded by the Visiting Examiners

#### **Highest Honors**

Nora Hirsch Battelle, Thomas John Corbani, Amelia Rose Estrada, Madeleine Jane Feldman, Alice Lydia Herneisen, Adam Scott Kapilow, Nikhita Luthra, Christian Alexander Morrow, Eduard Saakashvili, Isabella Alexandra Smull, Henry Haorui Zhang

#### **High Honors**

George Anthony Abraham, Luiza Almeida Santos, Brandon Lee Bastien, Raven Bennett, Elias Palmer Blinkoff, Christopher Michael Bourne, Corey McGarthy Branch, Xiaoxuan Chen, Margaret Portia Goodman Christ, Brandon Lee Conner, Ari Steven Coopersmith, Spriha Dhanuka, Bolutife Olurotimi Fakoya, Gareth Martin Fowler, John Ryan Gagnon, Victor Almeida Rodrigues Gomes, Benjamin Peters Goodman, Sam K. Gray, Timothy Nicholas Hirschel-Burns, Patrick Offutt Holland, Ashley Hong, Erica Chaya Janko, Murtaza Khomusi, Jacob Michael Kirsh, Irene Kwon, Daniel Cheong Kit Lai, Xavier Gerard Lee, Tobias Benjamin Levy, Feng Lin, Raffaella Liv Luzi Stoutland, Gurrein Kaur Madan, Thomas Warren Beaudry McGovern, Sabrina Skye Merold, William Edelman Meyer, Joseph Marion Millman, Alessandra Hopfenberg Occhiolini, Karl Hilding Palmquist, Jacklyn Marie Pezzato, Alejandro Martin Ramos, Emma Alice Remsberg, Sarah Nicole Miriam Been Revesz. Heitor Geraldo da Cruz Santos, Julian Andrew Segert, Meyer August Thalheimer, James Jin Wallace-Lee, Stephanie Be-Wen Wang, Tess Wei, Asif Zaarur, Tina Olympia Zhu

#### Honors

Meiri Anto, Douglas Stuart Arbuckle, Jr., Daniel Joseph Banko-Ferran, Eden Elizabeth Barnett, Anna Rita Bigney, Carlo Tomas Bruno, Corinne Mary Candilis, Alexander Louis Crane, Chase Madden Fuller, Joshua Nathan Goldstein, Jeremy Han, Emily Rose Hudson, Charles Irving Kacir, Tushar Kundu, Natania Levy Stein, Mary Rose Mannion, Sophia O'Malley-Krohn, Jerry Yu Qin, Cynthia Veronica Siego, Xiyue Song, Wenting Tao, Austen Claire Van Burns, Aaron Joseph Wagener, Daniel Wang, Helen Tang Wang, Tessa English Williams, Yuhao Xu, Yili Eric Yao

# 17.2 Elections to Honorary Societies

#### Phi Beta Kappa

Rachael Caelie Aikens, Luella Rose Allen-Waller, Luiza Almeida Santos, Raven Bennett, Margaret Hannah Bost, Leela Sivie Breitman, Carlo Tomas Bruno, Xiaoxuan Chen, Brandon Tse Wei Chow, Margaret Portia Goodman Christ, Eliana Bethany Cohen, Amelia Forbes Erskine, Grace Mitsuye Farley, Madeleine Jane Feldman, Gareth Martin Fowler, John Ryan Gagnon, Francis Melissa Ge, Dylan Jeremy Gerstel, Benjamin Peters Goodman, Sam K. Gray, Hazlett Lucy Henderson, Alice Lydia Herneisen, Raehoon Jeong, Zoe Elaine Junghans, Adam Scott Kapilow, Heidi Maria Kern, Michaela June Krauser, Daniel Cheong Kit Lai, Jace Jongseok Lee, Feng Lin, Weite Liu, Gurrein Kaur Madan, Sabrina Skye Merold, Joseph Marion Millman, Christian Alexander Morrow, Atousa Nourmahnad, Alessandra Hopfenberg Occhiolini, Alexandra Master Paul, Tahmid A. Rahman, Emma Alice Remsberg, Sarah Nicole Miriam Been Revesz, Benjamin Roebuck, Sassicaia Jacquelyn Schick, Amit Landau Schwalb, Rhiannon Marjorie Smith, Adella Claire Sundmark, Wenting Tao, Grant Christian Torre, Austen Claire Van Burns, Yikai Wang, Tess Wei, Owen Michael Weitzman, Macrae Ross Wimer, Joshuah Aaron Wolper, Henry Haorui Zhang, Tina Olympia Zhu

#### Sigma Xi

Robert Mathew Abishek, Rachael Caelie Aikens, Justine Brooke Albers, Audrey Jean Allen, Douglas Stuart Arbuckle, Jr., Noelle Santagada Arroyo, Brandon Lee Bastien, Anna Rita Bigney, Rachel Anna Boone, Christopher Michael Bourne, Leela Sivie Breitman, Delfin Gerard Griengo Buyco, Christopher Kai-Wing Chan, Iris Tinyan Chan, Yiming Chen, Sooyun Choi, Jonathan Scott Cohen, Madeline Gemma Conca, Martina Costagliola, Luke Matthew Eppley, Bolutife Olurotimi Fakoya, Grace Mitsuye Farley, John Liam Fitzstevens, Francis Melissa Ge, Haley Lynn Gerardi, Joshua Nathan Goldstein, Victor Almeida Rodrigues Gomes, Amy Shuang Han, Lincoln Jeffery Harris, Alice Lydia Herneisen, Emily Rose Hudson, Zhazira Irgebay, Raehoon Jeong, Maneepunnarai Jiwjinda, Charles Irving Kacir, Meghann Rebecca Kasal, Charles Weisgurt Kazer, Grace Kim, Jacob Michael Kirsh, Sona Christina Kumar, Daniel Cheong Kit Lai, John James Larkin, III, Joo Hyun (June) Lee, Justin Kwangmin Lee, Atousa Nourmahnad, Karl Hilding Palmquist, Jacklyn Marie Pezzato, Alexandra Nicole Philyaw, Meghana Ilsa Ranganathan, David Joseph Ranshous, Indiana Reid-Shaw, Tessa Alise Rhinehart, Noah Spencer Rosenberg, Daniel Evan Rovner, Peter Farhat Sayde, Sassicaia Jacquelyn Schick, Jordan Taylor Sciascia, Julian Andrew Segert, Christina Isabelle Shincovich, Rhiannon Marjorie Smith, David Tian, Sarah Anne Tupchong, Richard Tan Vu, Erika Nicole Weiskopf, Joshuah Aaron Wolper, Emily Jin Wu, Yuhao Xu, Dong Shin You, Terry William Yu, Anne Zhang, George Zhu

#### Tau Beta Pi

George Anthony Abraham, John James Larkin III, Atousa Nourmahnad, Christian Alexander Morrow, Jacklyn Marie Pezzato, Tom Hendrik Wilmots, Joshuah Aaron Wolper

#### 17.3 Pennsylvania Teacher Certification

Jordyn Cierra Bell, Cesar Armando Cruz Benitez, Medgine Garcienne Elie, Haley Lynn Gerardi, Heidi Maria Kern, Alondra Ivette Rosales, Amit Landau Schwalb, Adella Claire Sundmark, Brionna Pari Verse

## 17.4 Awards and Prizes

The Bruce Abernethy Community Service Award was created by Bruce Abernethy '85 to support Swarthmore students, faculty, and staff involved in community service. Not awarded this year.

The Adams Prize is awarded each year by the Economics Department for the best paper submitted in quantitative economics. Awarded to Xiyue (Iris) Song '17.

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 Hayley Raymond '18.

#### 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 Alice Herneisen '17.

#### 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 Inorganic Chemistry** is awarded annually to the student whom the Chemistry and Biochemistry Department judges to have the best academic performance in inorganic chemistry. Awarded to Barrett Powell '18.

#### 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 Sooyun Choi '17.

**Undergraduate Award in Organic Chemistry** is awarded annually to a sophomore whom the

Chemistry and Biochemistry Department judges to have the best academic performance in the sophomore year sequence of organic chemistry and biochemistry. Awarded to Benjamin Hejna '19.

#### The American Chemical Society

**Undergraduate Award in Physical Chemistry** is awarded to the student whom the Chemistry and Biochemistry Department judges to have the best performance in physical chemistry. Awarded to Nathan Dow '18.

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 Jacob Kirsh '17.

The Solomon Asch Award recognizes the most outstanding independent work in psychology, usually a senior course or honors thesis. Awarded to Elias Palmer Blinkoff '17 and Tina Olympia Zhu '17.

**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 J.Andrew Kim '18, Joshua Mundinger '18, and Asher Wolf '18.

**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 Lydia George-Koku '18.

**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 James Wallace-Lee '17.

The Believe Endowed Social Action Award was established in 2006 to enable students to spend the summer in a developing country working on a global social action project. The Mission of the Believe Award is "To support inspired global citizens who believe in the reality of a better world, and who believe that the key to peace and progress in the world is to develop personal connections in other cultures through social action and direct community engagement." The Believe award is administered through the Lang Center for Social Responsibility. Awarded to Liliana Frankel '16.

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 Jacklyn Pezzato '17 and Margaret Bost '17.

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 Chris Bourne '17.

**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 Maxine Annoh '18 and Tyrone Clay '18.

The Black Cultural Center Director's Special Recognition Award is awarded for significant contributions to the Black community and campus-wide. Awarded to Allison Alcena '17, Bolutife Fakoya '17, Aaliyah Dillon '17, Summer Johnson '17, and Davis Logan '17.

The Black Cultural Center Highest Academic Achievement Award recognizes the minority students from the graduating class who earned one of the highest grade point averages and contributed to the larger college community. Awarded to Medgine Elie '17 and Xavier Lee '17.

The Black Cultural Center Freshman of the Year Award recognizes the First Year student(s) who have been exceptional leaders and have made significant contributions to the Swarthmore black community. Awarded to Rasheed Bryan '20, Brandon Ekweonu '20 and Coleman Powell '20. The Black Cultural Center Leadership Award recognizes the graduating senior(s) who continues

the legacy of Black student leadership and activism by constructively and proactively contributing to the Black Cultural Center and advocating for and acting on issues of concern to the larger campus community. Awarded to Mosea Esaias '17.

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 Joseph Millman '17.

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 Nicholas Schmidt '17 and Natalie McLaughlin '17.

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 has demonstrated exemplary service to the Department of Mathematics and Statistics. Awarded to Meghana Ranganathan '17 and Tessa Rhinehart '17. The William J. Carter '47 Grant is funded by the William J. Carter '47 Religious Harmony Fund, administered by the Religion Department, and supports a student summer research project or internship in keeping with William J. Carter's goal of "encouraging and promoting understanding, harmony, and respect among the various religions of the world." Awarded to Fae Montgomery '18. 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 Nicholas Petty '18 and Yiming Chen '17.

**The Susan P. Cobbs Scholarship** is awarded to the most outstanding student(s) of classics in the junior 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 Austen Van Burns '17.

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 Margaret Christ '17.

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 Rajiv Potluri '20 and Ming Ray Xu '20.

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. First prize awarded to Irene Kwon '17 and Matthew Sueda '17. Second prize awarded to Spriha Dhanuka

'17. Honorable mention to David Morrill 18. **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 Cam Wiley '19.

**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 John Gagnon '17.

The Maurice G. Eldridge '61 Community Service Award is awarded to a graduating Senior that has served the Black Cultural Center Community, as well as the Swarthmore Community-at-large with a commitment to academic excellence linked to socially responsible and civic engagement. Awarded to Louis Laine '16

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 Christian Morrow '17 and Rhiannon Smith '17. 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 Liam Fitzstevens '17.

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. Not awarded this year.

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. First Prize awarded to Philip K. Decker '18, Second Prize awarded to Xavier Lee '17, Third Prize awarded to Austen Van Burns '17.

**The John Russell Hayes Poetry Prizes** are offered for the best original poem or for a translation from any language. Awarded to Noel Quinones '15 and Yumi Shiroma '16. **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 Marin McCoy '19.

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 Yumi Shiroma '16. **The Jesse H. Holmes Prize in Religion** was donated by Eleanor S. Clarke, Class of 1918, and

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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 Caroline Khanna '17.

**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.

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 graduating class.

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. Not awarded this year.

**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 John Gagnon '17.

**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 Rhiannon Marjorie Smith '17.

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 Rachael Aikens '17, Luella Allen-Waller '17, Brandon Bastien '17, Leela Breitman '17, Bolutife Fakoya '17, Alice Herneisen '17, Daniel Lai '17, Karl Palmquist '17, Sassicaia Schick '17, Tessa Rhinehart '17.

The Linguistics Prizes were established in 1989 by contributions from alumni interested in linguistics. Awards are presented annually, for linguistic theory, applied and descriptive linguistics, to the 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 Miki Gilmore '17 (Bryn Mawr College) and Jordan Sciascia '17 (Swarthmore College). The Linguistics Prize in Linguistic Theory was awarded to Emily Drummond '17 (Bryn Mawr College). The Linguistics Prize in Descriptive Linguistics was awarded to Claire Benham '17 (Bryn Mawr College).

**The McCabe Engineering Award**, founded by Thomas B. McCabe, Class of 1915, 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 Christian Alexander Morrow '17 and Atousa Nourmahnad '17

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 Aqil Tarzan MacMood '20 and Daniel Wallick '20.

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 Professor Micheline Rice-Maximin 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 Annie Tvetenstrand '15.

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 Diane Lee '18 and Catherine Paulson '18.

The Music 48 Special Awards (Freeman

Scholars). Endowed by Boyd T. Barnard, Class of 1917, and Ruth Cross Barnard, Class of 1919, and named for James D. Freeman, professor emeritus of music, grants are given by the music faculty to students who show unusual promise as instrumentalists or vocalists. Awarded to Rachael Aikens '17; Iris Chan '17; Berlin Chen '19; Alice Dong '20; Amelia Erskine '17; Joshua Mundinger '18; Natasha Nogueiro '18; Elliott Nguyen '17; Elizabeth Stant '19.

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 Elena Schlessinger '16 and Hazlett Henderson '17.

**The Oak and Ivy Award** is given by the faculty to students in the graduating class who are outstanding in scholarship, contributions to community, and leadership. Awarded to Raven Bennett '17 and Madeleine Jane Feldman '17.

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 Maggie O'Neil '17.

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. Not awarded this year.

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 Bilige Yang '19. 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 Briana Cox '17, Juliette Rose Wunrow '16, and Omar Chowdhury '15. 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 Billy Evers'17, Briana Narziukul '17 and Amanda Reed '17.

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 Indy Reid-Shaw '17.

The Jeanette Streit Rohatyn '46 Fund is used to grant the "Baudelaire Award" to a Swarthmore student 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 Madeleine Pattis '18.

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

# 17 Distinctions, Awards, and Fellowships

merit based on originality, power of analysis and written exposition, and depth of understanding of goals as well as technique. Awarded to Heitor Geraldo Santos '17.

The Frank Solomon Jr. Student Art Purchase Fund permits the Art Department to purchase outstanding student art from the senior major exhibitions. Awarded to Jeremy Chang '16, Jena Gilbert-Merrill '16, Emma Kates-Shaw '16 and Elizabeth Upton '16.

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 Lydia Roe '20, Lillian Fornof '20, Karl Palmquist '17.

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 Estrada '17 and Erica Janko '17.

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 Amy Amuquandoh '16, Jesse Bossingham '16, Christine Pham '15, and Margaret Bost' 17.

The Pan American Award is administered by Latin American and Latino 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 Aaron Slepoi '17.

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 Rachel Hottle '18 (Music); Bo Lim Lee '18 (Dance); Molly Murphy '18 (Dance) and Aditya Nirvaan Ranganathan '17 (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 Helen Hawver '17.

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 Caleb Shapiro '19. **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 Alexander Brooks '16, A'Dorian Murray-Thomas '16.

# 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.

## 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. Awarded to Barrett Powell '18.

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 art. It provides support for purposeful work during the summer between junior and senior year. Awarded to Julia Mizrahi '18.

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. **The Lotte Lazarsfeld Bailyn '51 Research Endowment** established by Bernard Bailyn in 2005, 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 Letitia Ho '19.

**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 Jacob Brady '20, Han Huang '19, Rebekah Katz '19, Timothy Ogolla '18.

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 Ana Curtis '19, Yang Ding '19, Irene Elias '18, Jasmyne Kim '18, Vanessa Meng '19, Blake Oetting '18, Bret Serbin '18, and Elizabeth Whipple '18. The William Carter '47 Religious Harmony Fund was established in 2011. The fund's purpose is to encourage and promote understanding, harmony and respect among the various religions of the world. Awarded to Sadie Rittman '16. The Class of 1961 Fund for the Arts and Social Change was established by the Class of 1961 in honor of its 50th Reunion. This fund provides a Summer Social Action Award to one or more students each summer with a preference for projects in which the arts and social change are joined. This reflects the distinctive interests of the Class of 1961 in the art, theater, music and dance of their time and their commitment to making a difference in the world. The recipient(s) will be chosen by the Lang Center for Civic and Social Responsibility. Summer Social Action Awards are granted to students on a competitive basis so that they may spend a summer engaging meaningfully with non-profit organizations, grass-roots advocacy groups, or public service agencies. Awarded to Julia Rose Wunrow '16 and Abigail Holtzman '16.

The Class of 1962 Student Summer Fellowship was established in 2012 by contributions from class members, on the occasion of their 50th Reunion celebration. The fund is intended to provide enriching learning experiences for students by supporting work, study or research during the summer. Awarded to Anna Abruzzo '20 and Amalia Gelpi '20.

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 Gabriel Meyer-Lee '19.

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 Rebecca Regan '19 and Nathaniel Stern '20.

#### 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 Austen Van Burns '17, and Yang Ding '19. 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 Philip Decker '18, Laura Geary '18, Eleanor Ghanbari '19, Dayna Horsey '18, Max Kassan '18, Kate Musen '18, Chalita Promrat '19, Kazuatsu Shimizu '19, Zicheng Wang '18, and George Woodliff-Stanley '18.

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 Chongmo Ding '19 and Tamara Matheson '18. The Robert W. Edgar Endowed Fund for Internships was created in 2013 by contributions from Robin M. Shapiro. The fund, named for the late Bob Edgar, who represented the Seventh District, including Swarthmore, in the United States House of Representatives, is intended to provide enriching learning experiences for Swarthmore students by supporting work experience in any field during the summer months, with preference given to those whose internship opportunities stem from previously held externships. Two fellowships will be administered by the Career Services Office each summer.

**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 Hriju Adhikari '20, Alexis Davis '20, Maria Ingersoll '20, and Elizabeth Wainwright '19.

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. Awarded to Simona Dwass '19 and So Jeong Lim '19.

The Haskin Fernald Student Summer Fellowship was established in 2007 by Guy Haskin Fernald '94 and Lia Haskin Fernald '94 and is intended to broaden and enrich the experience of a student by supporting a work or study experience dealing with public health issues of global significance, within a public or nonprofit setting, in a lower or middle-income country. A student who has identified an opportunity to do research or volunteer work abroad can submit a proposal for support for travel and/or living expenses. Awarded to Naomi Caldwell '19, Sarah Hancock '18, and Gursimran Pannu '20.

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 Rinpoche Price-Huish '18 and Elijah Reische '19.

The Dorothy Ditter Gondos Summer Research Fellowship in Comparative Literature is chosen by the Program in Comparative Literature to support a fellowship for summer research in Comparative Literature. The fellowship may be used for research undertaken in the US or abroad, and preference will be given to juniors who will be preparing to write a comparative literature thesis in their senior year. Awarded to Evan Grennon '18. 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 Allan Gao '19 and Elijah Kissman '18.

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. Awarded to Yixuan Luo '19.

**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. Awarded to Andrei Boiko '19 and David Xu '18.

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. Awarded to Carlo Bruno '17 and Andreas Cordero '17. 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 Seethalakshmi Davis '19, Priya Dieterich '18 and Kevin Murphy '19.

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 Mark Gee '18 and Yosuke Higashi '18.

The Interdisciplinary Biology Fellowship, established in 2014, is intended to provide enriching learning experiences for Swarthmore students by supporting on- or off-campus summer research in Biology, with a primary focus on supporting students performing interdisciplinary work that integrates subjects or research methods from biology with those of other natural sciences, social sciences, or humanities. The fund will also make grants available for expenses related to offcampus travel associated with the student's research project. The recipient(s) will be chosen by the Biology Department and the Provost's Office. Awarded to Alexa Clark '19.

The Islamic Studies Summer Fellowship was established in 2015 by Inger Larsen '88' and is intended to provide enriching summer research fellowships and/or internships for Swarthmore students in the area of Islamic Studies. These fellowships are administered by the Provost's Office in consultation with the Islamic Studies Program Coordinator. Not awarded this year. The Janney Fellowship, established through the bequest of Anna Jannev 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 Anita Castillo-Halvorssen '15, Camila Ryder '13 and Lucille Whitacre '14.

The Japanese Summer Language Fellowship provides opportunities for students to study at intensive summer language programs recommended by the Japanese Studies Department. Awarded to Shiqiao Yin '20. The Peter and Aleck Karis Fellowship in Environmental Studies shall be used to support summer research fellowships for students in the natural and social sciences studying the effects of environmental changes on ecosystems, biodiversity, and human populations, societies, and cultures, with a preference for investigations into climate change and the impact of climate change, at Swarthmore College beginning in 2014 in accordance with College policies and procedures. The Fund will be administered by the Provost's office upon the recommendation of the Environmental Studies Program Committee. Awarded to Guillermo Barreto Corona '19 and Henry Wilson '18.

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 Maximillian Barry '19, Nathaniel Stern '20, and Nhu Vu '18.

The Kaori Kitao Humanities Research Fellowship. Kaori Kitao, Professor Emerita in Art History, established this research fellowship in 2013 in celebration of her 80th birthday. The fund supports students in the humanities by providing grants to encourage and facilitate historical research, original scholarship, and professional development, with a preference for Italian Studies, Japanese Studies, and Performing Arts. The fund is administered by the Division of the Humanities and the Provost's Office. Awarded to Wesley Han '18.

Howard G. Kurtz, Jr. and Harriet B. Kurtz Memorial Fund was established to honor their lifelong dedication to ensuring a world at peace through the systematic prevention of war including the use of outer space technologies to assist in the design and implementation of war prevention systems. Not awarded this year.

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. Awarded to Guadalupe Barrientos '16.

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. 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 Nicholas Ambiel '19, Julia Barbano '19, Calla Bush St George '20, Moniher Deb '19, Lillian Fornof '20, and David Morrill '18.

The Eugene M. Lang Summer Initiative Awards are made each spring to 20 students who are selected by the provost in consultation with the appropriate division heads to support facultystudent research, independent student research, and student social service activity specifically related to research objectives and tied to the curriculum, under the supervision of faculty members. Awarded to Tristan Beiter '19, Shelby Billups '20, Esteban Cabrera Duran '18, Kyle Campbell '19, Laura Chen '19, John Cote '20, Elise Cummings '19, Sonja Dahl '18, Jacob Deutsch '19, Maral Gaeeni '18, Abigail Gomez '18, Benjamin Hejna '19, Heidi Kalloo '18, Amanda Lee '18, Rongzhi Liu '18, Jacob Malin '18, Ashley Mbah '19, Julius Miller '19, Tobias Philip '20, Rebecca Regan '19, Jun Rendich-Millis '19, Îbrahim Tamale '20, Yijia Tang '18, Jonathan Tostado-Marquez '19, Susan Whaley '18, and Gun Min Youn '20.

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. Awarded to Josephine Hung '19.

**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 Leanna Browne '15, Julia Melin '13, Zachary Postone '11, Alan Smith '05 and Harrison Tasoff '14.

**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 Yixuan Luo '19, Fengjun Yang '18, and Alexandra Ye '19.

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. Awarded to Efua Kumea Asibon '16, Matthew Armstead '08, Griffin Dowdy '13, Aaron Austin Jackson '16, Katia Lom '06, Laura Michelle Thompson-Martin '16. Nicole Lakesha Walker '16. 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. Not awarded this year.

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. Not awarded this year.

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 Nancy Awad '20 and Isabel Cristo '18.

The Penelope Mason '57 Memorial Fund was established to support student and faculty projects in Asian Studies. Students may apply for support for summer research projects in Asian Studies, as well as intensive summer language study in Asian languages contributing to the student's continuing course of studies, including but not limited to Asian Studies majors. Awarded to Shuang Guan '19, Hali Han '19, Abha Lal '18, and Gretchen Trupp '18.

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. Awarded to Michael Giannangeli '12, Gary Herzberg '10 and Ann Murray '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. Not awarded this year.

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 advisor 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 Matthew Dreier '18 and Saadiq Garba '19.

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 Charles Aprile '18, Maria Castaneda Soria '18, Lydia George-Koku '18, Gabriela Key '18, Christopher Malafronti '18, Xavier Lee '17 and Cat Velez-Perry '17. 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. Awarded to Stephen O'Hanlon '17.

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 Ruby Bhattacharya '11, Melanie Braithwaite-Jalloh '07, Christine Jane Emery '16, Anne Fredrickson '07, Paola Monseratt Mero '14, Lauren Mirzakhalili '15, Natalia Munoz-Cote' 12, Sabrina Singh '15 and Aikaterini Stampouloglou '14.

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. Awarded to Ethan Lee '16 and Shawn Pan '17.

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 Katherine Ham '18 and Gabriela Key '18.

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 Benjamin Termaat '18.

**The Martin Ostwald Fund in Classics**, established in 2012 by John Marincola '76 and

other friends and colleagues to memorialize the distinguished career of Martin Ostwald and his 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 Martin Ostwald 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 Classicsrelated areas by students; or study in Greece or Italy in Classics by a graduate of the department. Not awarded this year.

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 Bo Lim Lee '18.

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 Leo Elliot '18, Lauren Knudson '19, and Reed Orchinik '19.

**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 Sung Won Ma '16 and Joseph Landis '16.

The Petrucci Family Foundation Summer Research Grant in Black Studies is awarded to allow students to pursue research, praxis, and creative development in the arts, humanities, and social and natural sciences and the students must center their experiences of black populations in Africa and/or the Diaspora. Awarded to Bryton Fett '18 and Shua-Kym McLean '18.

**Phi Beta Kappa Felowship**. 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. Awarded to Sophia Libkind '14.

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 given to students pursuing internships and research fellowships related to genocide and other largescale violent conflicts, projects involving peaceful prevention or intervention, non-violent resistance, or local peacemaking, reconciliation, and healing initiatives. Awarded to Anna Weber '19.

The Project Japan Fund is used to support one student during the summer months to conduct research in Japan on contemporary issues. Awarded to Ye Linn Htun '18.

**The Ruth A. Rand '56 Summer Research Fellowship** was established in 2014 by William K. Wible, together with members of his family and friends, in memory of his wife. The fund is intended to provide enriching learning experiences for Swarthmore students by supporting work, study, or research in the sciences during the summer months. The recipient(s) will be chosen by the Provost's Office. Awarded to Paige Didier '20.

The Robert Reynolds and Lucinda Lewis '70 Endowed Fund for Summer Research was established in 2013. The fund is intended to provide enriching learning experiences for Swarthmore students by supporting work, study, or research in the biological sciences during the summer months. The fund will be administered by the Provost's Office and awards are made in consultation with faculty in the Biology and Chemistry departments. Awarded to Isabel Erickson '18 and Susan Fain '18.

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 Savage Fund**, created in 1996 in honor of Professor Emeritus of Biology Robert Savage, supports student research and other activities in cellular and molecular biology. Awarded to Emily Ferrari '19, Jonah Langlieb '20.

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 Elizabeth Flores '19, Jordan Reyes '19, Eriko Shrestha '19, Sierra Spencer '18, and Audra Woodside '19. The Robin M. Shapiro '78 Endowed Fund for Summer Research was established in 2013. The fund is intended to provide enriching learning

fund is intended to provide enriching learning experiences for Swarthmore students by supporting work, study, or research in any field during the summer months. Two fellowships will be administered by the Provost's Office each summer, and awards are made in consultation with the faculty. Awarded to Katherine Ham '18 and David Zuckerman '18.

**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. Awarded to Ashley Greaves '18.

**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. Awarded to Sahir Jha Nambiar '18.

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 Maxine Annoh '18, Colette Gerstmann '18, Kyungchan Min '18, Yusuf Qaddura '20, and Sophia Zaia '18.

**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 Kathleen Carmichael '19, WonJoon Choi '20, Keton Kakkar '19, Do June Min '18, Theodore Park '19, Rajiv Potluri '20, Morgan Purcell '18, and Yanghan Qi '19.

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 Katherine Kwok '18 and Jimmy Shah '18.

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 Samantha Stevens '15.

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 Emma Close '18.

## 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 chair 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 Álexander 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 Elizabeth and Sumner Hayward Professorship was established by Priscilla Hayward Crago '53 in 2013 in memory of her parents, Elizabeth and Sumner Hayward. This fund supports a full perofessorship awarded to c

fund supports a full professorship awarded to an existing professor with preference for, in order, psychology, sociology, anthropology, English, Romance languages, or linguistics.

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 '48; 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 2016)

Seniors and beyond Juniors Sophomores Other First Year Freshman Total Degree Seeking	Men 198 208 195 0 <u>195</u> 796	Women 185 204 211 1 <u>220</u> 821	Total 383 412 406 1 <u>415</u> 1617
Graduate students Special students TOTAL	0 <u>0</u> 796	$\begin{array}{c} 0\\ \frac{3}{824} \end{array}$	$0\\ \frac{3}{1620}$

Note: These counts include 77 students studying abroad.

# 19.2 Geographic Distribution of Students (Fall 2016)

Alabama	6	Duanto Dias	0
Alabama Alaska	6 3	Puerto Rico Rhode Island	0 7
Arizona	21	South Carolina	5
Arkansas	21	South Dakota	0
California	2 187	Tennessee	8
Colorado	20	Texas	8 55
Connecticut	20 46	Utah	33 7
Delaware	40 26	Vermont	5
District of Columbia	20 12	Virgin Islands	0
Florida	37	Virginia	51
	19		31
Georgia Guam	19	Washington West Vincinia	2
Hawaii	1 7	West Virginia Wisconsin	12
Idaho	1		2
Illinois	38	Wyoming Total United States	2
		Total United States,	-4
Indiana	5 5	Military PO, and U.S. Trus	
Iowa	3	Territories	<u>1404</u>
Kansas	3 4		
Kentucky	4 6	A. 6 - 1	1
Louisiana	6 7	Afghanistan Australia	1 1
Maine	/ 62		-
Maryland		Bangladesh	1
Massachusetts	82	Bhutan	1
Michigan	16	Brazil	3
Military PO's	1 18	Burma (Myanmar) Canada	4 7
Minnesota			
Mississippi	1	Chile	1
Missouri	8	Ecuador	1
Montana	1	Ethiopia	1
Nebraska	4	France	3
Nevada	3	Georgia	2 3
New Hampshire	7	Ghana	
New Jersey	130	Greece	1
New Mexico	5	Hong Kong	12
New York	181	Hungary	1
North Carolina	23	India	18
North Dakota	1	Indonesia	1
Ohio	24	Italy	4
Oklahoma	3	Jamaica	2
Oregon	18	Japan	9
Pennsylvania	175	Jordan	1

Kenya Lebanon	1 2 2
Malaysia	2
Morocco	1 5 2
Nepal	5
New Zealand	2
Nigeria	1
Pakistan	4
Paraguay	1
People's Republic of China	
Peru	1
Romania	1
Russia	1
Senegal	1
Singapore	7
South Africa	2
South Korea	21
Sri Lanka	1
Switzerland	1
Taiwan	1
Thailand	3
Tunisia	1
Turkey	2
Uganda	2 2 4
United Arab Emirates	4
United Kingdom	7
Vietnam	7
Zambia	1
Zimbabwe	1
Total from Abroad	216
GRAND TOTAL	1620

# 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:

Introductory courses
Other courses (Some of
these courses are not open
to first-year students or
sophomores.)
Seminars for upper-class
students and graduate
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/.

# **Credit Policy**

Academic Period: Swarthmore College uses the semester course credit system, and lists semester course credits on the official Swarthmore College transcript. Excluding holidays, Swarthmore College has two semesters of fourteen or fifteen weeks, thirteen or fourteen instructional weeks including a mid-semester break, and one week of final examinations.

**Recommended instructional time:** Our official normal student work load is four course credits per semester. One unit of Swarthmore College credit normally represents three to four hours of class or seminar time, with conference sessions and laboratory periods in addition. Conference sections, professor-lead additional study sessions, and laboratories are usually three hours or more in length, and are not reflected on the transcript, but occur in many courses.

**Recommended out of class time requirements:** We advise students to plan to spend two to three hours of work for every hour of class attended. Our research shows that Swarthmore College students typically work at least two hours outside of class preparing for every hour of class attended. The typical student attends class or seminar for 12 or more hours per week, and prepares for class or seminar at least 24 hours per week.

# Subject Code Key

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

# **Footnote Key**

- <sup>1</sup> Absent on leave, fall 2017.
- <sup> $^{2}$ </sup> Absent on leave, spring 2018.
- <sup>3</sup> Absent on leave, 2017-2018.
- <sup>4</sup> Absent on administrative leave, 2017-2018.
- <sup>5</sup> Fall 2017.
- <sup>6</sup> Spring 2018.
- <sup>7</sup> Affiliated faculty.
- <sup>8</sup> Ex-officio.

SYDNEY L. CARPENTER, Professor of Art RANDALL L. EXON, Professor of Art<sup>1</sup> CONSTANCE CAIN HUNGERFORD, Professor of Art History and Chair BRIAN A. MEUNIER. Professor of Art and Art Coordinator LOGAN GRIDER. Associate Professor of Art PATRICIA L. REILLY, Associate Professor of Art History TOMOKO SAKOMURA, Associate Professor of Art History BRIAN D. GOLDSTEIN, Assistant Professor of Art History RON TARVER, Instructor of Art (part time) CHRISTIE DENIZIO, Visiting Assistant Professor of Art (part time)<sup>4</sup> MATTHEW FELIZ, Visiting Assistant Professor of Art History (part time)<sup>5</sup> MARY PHELAN, Visiting Assistant Professor of Art (part time) 5 ANDREA PACKARD, List Gallery Director STACY BOMENTO, Visual Resources Curator DOUG HERREN, Studio Technician MEGHAN GEBHARD. Administrative Assistant

1 Absent on leave, fall 2017.

4 Fall 2017.

5 Spring 2018.

## The Academic Program

THE MAJORS: The Department of Art offers two majors: Art History and Art.

**The Art History Major** consists of eight credits in art history (ARTH) and one credit in studio art (ARTT).

**The Art Major** consists of three credits in art history (ARTH) and eight credits in studio art (ARTT).

## **Course Major**

#### REQUIREMENTS FOR ADMISSION TO THE MAJORS

#### ART HISTORY:

Overall average of C or better in all courses taken during the two semesters preceding the time of application.

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.

#### ART:

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.

Completion of at least one course in art history and one course in studio art at Swarthmore with grades of B or better.

A student may be asked to present a portfolio as evidence of ability to see, describe, and analyze visual phenomena critically.

## Art History

All Art History Majors, Course and Honors, are required to take nine credits to fulfill major

requirements. These credits must include one 2credit seminar and the following:

1. ARTH 002: The Western Tradition (students are encouraged to take this early in their major program)

2. One course or seminar on art in the western tradition post-1800

3. One course or seminar on art outside the western tradition

4. ARTH 095: Cracking Visual Codes (strongly recommended in the junior year)

5. One credit in studio art

The remaining four credits will consist of other 1credit art history courses and/or 2-credit art history seminars and/or a 2- credit thesis. For those majors considering graduate study in art history, it is strongly advisable to choose a series of courses that will provide geographical and historical breadth.

## The Comprehensive Requirement

During the senior year, Course Majors will complete a comprehensive project. The requirement can also be satisfied by a 2-credit thesis (ARTH 097).

## Art

All Art Majors, in both Course and Honors Programs, are required to take 11 courses to fulfill major requirements.

1. Eight credits of studio art and three credits of art history, which must include:

a. ARTH 002 The Western Tradition:
b. ARTT 001 Foundation Drawing, (Or, ARTT 001. First-Year Seminar: Drawing)
c. A level I 2-D and level I 3-D course (e.g. figure drawing, life modeling)
d. One studio art elective

e. Two level II courses or two advanced studies, in a medium taken previously

f. ARTT 090 Senior Workshop I

g. ARTT 091 Senior Workshop II

2. Art majors can complete an art history minor as well with the completion of four art history credits in addition to those required by their art major.

Six credits in studio art, including the distribution in 2D, 3D, and at least one Advanced Study must be completed before entry to ARTT 030 Senior Workshop I. The 2D, 3D, and advanced credit requirements must be taken at Swarthmore.

Students are encouraged to consult with professors and advisors about art history selections relevant to their interests.

The Senior Art Major is required to mount a one-person exhibition in the school 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 weeks of the spring semester each year.

There is no course minor in art.

## **Course Minor**

#### Art History Minor

The course minor in art history will consist of 5 credits in art history; four of the 5 credits must be taken at Swarthmore. Art majors can complete an art history minor with the completion of 4 art history credits in addition to those required by their art major.

# Honors

#### Honors in Art History

Requirements for admission to Honors 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 B+ or better in all courses in art history. **Major** 

An Honors Major in Art History requires three 2credit preparations, consisting of three 2-credit 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.

An Honors Major in Art History must fulfill the requirements for a 9-credit Course Major. **Minor** 

An Honors Minor in Art History will take one 2credit seminar, and must have done at least two other courses in Art History. Only one of those credits can be a transfer credit.

#### Honors in Art

Requirements for admission to Honors do not differ from those for admission to the Course Major. Students will be expected to maintain an average of B+ or better in all courses in studio art. **Major** 

An Honors Major in Art will present two preparations in studio art and 1 preparation in art history.

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.

1. One preparation pair will consist of ARTT 030 Senior Workshop I and ARTT 040 Senior Workshop II.

2. 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.

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. Any later changes to your program as it relates to 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 2 previous credits in art history, including ARTH 002.

b. All Majors in Art, whether Course or Honors, must do 3 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 ARTT 001. The distribution requirements for 2-D and 3-D for the Honors Major in Art are the same as those in course. 5. Honors study in Art is comprised of a culminating exhibition of the student's studio work, with an accompanying artist essay of 3750 to 5000 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. 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.

a. The SHS 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, ARTT 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 ARTT 040 but as Senior Honors Study.

c. If a student drops out of Honors after the drop/add period in the last semester, the SHS credit will receive a grade of NC. Senior Workshop II (ARTT 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 II 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 Art Majors should be especially careful to take enough credits outside the department if they contemplate withdrawing from Honors.

#### Minor

An Honors Minor in Art will present to the honors examiners one studio preparation consisting of ARTT 030 Senior Workshop I and ARTT 040 Senior Workshop II.

An Honors Minor in Art must fulfill the requirements for the Course Major in studio art (see Major in Art.)

During the Spring semester of the senior year a minor will write a 2500 word artist essay to be sent to the examiner, along with the relevant syllabi and slides for the two-credit preparation.

# Art Department Majors and the 20-Course 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.

For **Art History Majors**, the one required credit of studio art course work counts as within the Major, but additional credits of studio art count as outside. Thus, an Art History Major graduating with 32 credits could take no more than 3 additional art history credits beyond the 8 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**, the required 3 credits in art history count within the major, but additional credits in art history count outside the major.

## **Advanced Placement Credit**

Credit for an AP5 will be given upon completion of an art history course in the department. For majors this credit will cover the requirement for ARTH 002.

## Transfer Credit

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

## **Off-Campus Study**

The Art 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 foreign study 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 the Art Coordinator and/or the Art History Coordinator before leaving the campus. PLEASE NOTE: to receive transfer credits in art history, you must have taken at least one art history course at Swarthmore (normally before going abroad).

## Art History Courses

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

This course looks at the questions and arguments art historians have developed to address the multiple facets of Picasso's art, richly represented in the nearby Philadelphia Museum of Art and Barnes Foundation. Methods and perspectives explored include formal analysis, iconography, biography, social history, feminism, semiotics, and museum practice. Class sessions will focus on discussion of case studies and assignments will encourage critical skills and effective written and oral communication. Humanities.

Writing course. 1 credit. Fall 2017. Hungerford.

## ARTH 002. The Western Tradition

This course provides an introduction to Mediterranean and European art from prehistoric cave painting to the 18th 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. Humanities.

1 credit. Eligible for MDST Fall 2017. Reilly.

### ARTH 003. Asian Art: Past and Present

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. Humanities. 1 credit.

#### ARTH 005. Modern Art in Europe and the United States

This course surveys Western European and American art from the late 18th century to the 1960s. It introduces significant artists and art movements in their social and political contexts and also focuses attention on art historical approaches that have been developed to interpret this art, including socio-economic and feminist perspectives. Humanities.

1 credit. Eligible for GMST Spring 2018. Hungerford.

### **ARTH 006. 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. Humanities. 1 credit.

Eligible for GMST, DGHU Spring 2018. Feliz.

### 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. Humanities. l credit.

#### ARTH 013. Greek Art

This exploration of ancient Greek art and architecture 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. Humanities. Writing course. 1 credit.

#### 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. Humanities.

1 credit.

#### ARTH 016. Italian Renaissance Art

This course will provide a rich introduction to the art and architecture produced in Florence, Rome, Venice, Siena, Padua, Mantua, and other important cultural centers in Italy from the late 14th to the 16th century. In addition to learning about painting, sculpture, drawings, prints, and architecture, we will also study stage design, temporary festival decorations, banners and costumes. A full range of issues related to the production and reception of artworks will be addressed, including the representation of the individual, the state, and religion. We will also examine art and anatomy, art and gender, the critical responses these works elicited, and the theories of art developed by artists and non-artists alike.

Humanities.

#### 1 credit.

### ARTH 021. Art and Technology

This course examines the intersections of art and technology across a wide range of art and popular media. Beginning with an exploration of a set of aesthetic and cultural production that includes 16th century woodcuts, 17th century cabinets of curiosity, 18th century magic lantern shows, and 19th century stereoscopes and panoramas, the course will provide historical context for a consideration of the role that various forms of technology have played in shaping art and culture in the 20<sup>th</sup> and 21<sup>st</sup> century. Through class trips to local museums and galleries, classroom and online discussions, guest lectures, readings, screenings, and creative experiments in art and technology, this course will reflect on emerging technologies and their historical origins to understand the ways in which the relationships between humans and machines continue to evolve in our contemporary cultural context.

Humanities. 1 credit. Spring 2018. Feliz.

# ARTH 022. Art, Colonialism, and Decolonization

This class examines the relationship between art and colonialism. It begins by examining how the practices of artists and collectors reinforced European colonialism around the globe in the early-modern and modern periods (17th- 20th centuries). Rather than survey artists and artworks from a single place or time, we will employ paradigmatic case studies from around the globe to think about the role of art in colonization from a variety of methodological viewpoints. By pairing the study of historical artworks and cultural practices with seminal texts from the field of postcolonial studies, the course will provide students with the visual literacy and theoretical vocabulary necessary to understand artworks in light of their discreet religious, political and social contexts. In the second half of the semester, we will analyze art's role in decolonization, studying both historical and contemporary examples of artists, artworks, and cultural practices that have, either explicitly or implicitly, aided in the process of decolonization. Humanities.

1 credit.

# ARTH 024. Visualizing Africa and Renaissance Europe (c. 1440-1610)

In this course we will evaluate the complicated relationship between Europe and Africa-in particular sub-Saharan Africa-during the Renaissance, the period often described as the European "Age of Discovery." Specifically, we will analyze visual images as evidence of the varied perceptions that developed on account of increased trade and contact between the two continents during the fifteenth through early seventeenth centuries. Such sustained economic and cultural engagement profoundly impacted artistic production in certain centers on both continents, while also stimulating the development of ideas about racial identity and cultural difference that have persisted to this day. This dynamic subject matter only recently has received critical attention from scholars, especially those working within a western perspective. Therefore, in this class we will participate in the developing discourse by examining afresh both familiar and less familiar artists and objects produced in various contexts and locations. Humanities.

1 credit.

# ARTH 026. Colloquium: Art Chemistry and Conservation

This interdisciplinary course explores the intersection of chemistry with the visual arts. During the course of the semester we will learn about the materials available to artists, issues faced by museum curators and conservators, and some basic chemistry concepts related to these topics. Our exploration of the chemistry, and history, of art media will include labs that extend and enhance the lecture topics. Humanities.

1 credit. Fall 2017. Reilly.Heck.

## ARTH 027. Colloquium: Exhibiting Women

The course considers the history and practice of exhibiting art. Using Philadelphia's rich array of museums, galleries, and public art collections, we will examine past and present exhibition practices to ask: what educational, aesthetic, and political purposes do exhibitions serve? How have they done so and why? How do exhibition curators and designers use space, design, and technology to contribute to--and control--the experience of the visitor? As part of this course students will conceive, design, and execute a virtual exhibition. Humanities. l credit.

#### 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

12th century to the present and consider the various cultural forms-painting, 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. Humanities.

Writing course.

1 credit.

# ARTH 029. Colloquium: Architecture of Philadelphia

Swarthmore sits amidst a hall of fame of architectural and urban history. This course turns to this history not simply to understand the architecture of one important metropolitan area, but to understand how these examples can teach about broader themes including the history of city planning, the industrial and urban revolutions, the search for "American" architectural styles, metropolitan growth and urban renewal, the ascent of modernism, the emergence of postmodernism, and historic preservation, among others. Students will learn both foundational methods of architectural history as well as many of the major movements that have constituted it. Humanites.

1 credit.

## ARTH 034. Colloquium: Asian Calligraphy

This colloquium examines the major calligraphic traditions of China, Korea, and Japan from 1200 B.C.E. to the present. We will study the functions and contexts of calligraphic inscriptions among a rich range of material texts, such as animal bones, bronze vessels, stone stelae, mountain cliffs, and various paper-based formats. In addition to analyzing the development and circulation of calligraphic styles within East Asia and celebrated works of individual calligraphers, we will explore how calligraphy conveys meaning and how it has been used as a powerful tool for cultural and political commentary. Humanities.

Eligible for ASIA

# ARTH 036. Modern Architecture in Japan: Culture, Place, Tectonics

This course explores the diversity of forms and meanings that architecture took on in Japan since its industrialization in the 19th century. With that focus, it opens up more general questions on the capacity of construction, structure, materials and their assembly to express cultural, aesthetic, environmental and social concerns. It begins by introducing the context of traditional architecture that served as a foundation for the emergence of modern architecture, and continues to discuss the work and words of architects who demonstrated salient topics in architecture in the 20th and 21st centuries in Japan. Humanities.

1 credit. Eligible for ASIA Fall 2017. Genadt

## ARTH 038. Women and Art

This course examines women as makers of art, as subjects of art, and as interpreters of art. It explores how women as artists have engaged with issues of artistic identity and with the concepts of femininity, masculinity, and sexuality. It also explores how women as artists have represented the intersections of gender and power, race, class and nationality in their works. This course begins with a few case studies of early artists and then focuses on a series of key twentieth and twentyfirst century practitioners. Readings are drawn from feminist theory, postmodern theory, postcolonial theory, and cultural studies. This course also includes an exhibition design component.

Humanities. 1 credit. Eligible for GSST

#### 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 consider Japanese product and character designs that have achieved global recognition, such as MUJI and Hello Kitty. Humanities.

1 credit.

## 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.

Humanities. 1 credit.

#### ARTH 053. The Cross and the Crown: Arts of the Spanish Golden Age

The Spanish Golden Age, or "Siglo de Oro" (Golden Century), lasted roughly 150 years, from the discovery of the Americas in 1492 to the midseventeenth century. This period of political and cultural ascendance, which saw the Spanish empire blossom across the Atlantic and Asia, gave rise to many of Spain's greatest cultural achievements. This course examines the artworks and artists that made this period special, as well as the patrons and political realities underpinning the period's achievements. We will focus, in particular, on painters such as El Greco, Diego Velázquez, Francisco de Zurbarán, and Bartolomé Esteban Murillo, connecting their artistic production to artistic movements throughout Europe and to the broader trends of the baroque. We will also explore the remarkable corpus of polychrome sculpture produced by sculptors such as Juan Martínez Montañes during the period, examining their role in religious rituals and processions. Lastly, we will examine the major architectural trends and monuments from the period, including the Escorial and several baroque cathedrals. This survey of painting, sculpture, and architecture from the period will help students understand the ideas and values underpinning this singular moment in artistic history, as well as the place of Spanish golden age art within a broader European and global context. Humanities. 1 credit.

#### ARTH 054. Survey of Latin American Arts

This course provides an overview of the rich tradition of visual arts within Latin America, beginning with the Pre-Columbian period, moving through the arts of the Spanish Viceroyalties, and concluding with the contemporary artistic landscape both in Latin America and the United States. The course focuses on key artworks, artists, and artistic movements from the region, providing students with the visual literacy to understand and the vocabulary to analyze the region's cultural production from a variety of methodological perspectives. The course situates key artworks within distinct historical moments, allowing students to concentrate on the social and cultural influences that led to their production. We will address several themes central to Latin American history, including: the rise of the Aztec and Inca empires, the role of art in the conquest and colonization of the Americas, modernism in the global South, political art and activism in the face of dictatorship, and Latin America's place within the contemporary art world and an increasingly interconnected globe Humanities 1 credit.

#### ARTH 055. Trade, Temptation, and Travel: Dutch Art in the Age of Rembrandt

Europe and the world changed considerably during the seventeenth century as trade brought the European continent unprecedented wealth. This was especially true for the Netherlands, which broke away from Hapsburg Spain in the late sixteenth century and established a new independent government grounded in Protestant principles and capitalist expansion. The nascent nation quickly became an economic powerhouse in Europe, with the source for much of its wealth being the international trading companies, the Dutch East India Company (VOC) and the DutchWest India Company (WIC). By 1648, the year of the Treaty of Westphalia, Amsterdam had become the most prominent port of exchange in Europe, and travelers and migrants flooded the city to engage in trade and commerce. This course surveys the history of seventeenth century Dutch art through the lens of global exchange and migration, evaluating not only how the newly discovered world affected the artworks and everyday lives of Dutch artists and consumers, but also the impact of Netherlandish expansion, trade, and colonialism on the Americas, Africa, and Asia. The works of Rembrandt van Rijn, Frans Hals, Johannes Vermeer and others convey these changes and illuminate the fascinating contradictions of a culture caught between a strict Calvinist morality, lucrative (and illicit) commerce, and the potential for unmediated scientific learning, vanity, and fortune. 1 credit.

# ARTH 057. Leonardo, Raphael, Michelangelo

Leonardo, Raphael, and Michelangelo have come to stand for Renaissance art itself. This course will study these masters, their works, and their heated rivalries with one another in the context of the worlds in which they lived and worked. We will consider topics such as the construction of the artist as genius, the relationship between art and science, the role of art in the domestic sphere, the use of art as propaganda, and the education of the artist.

Humanities. 1 credit.

Spring 2018. 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. Humanities. 1 credit.

#### I credit.

#### ARTH 066. Colloquium: Race, Space, and Architecture

This colloquium considers how race and identity interact with architectural and urban spaces, especially in the United States in the twentieth century. By studying the historical and theoretical dimensions of topics including the meanings attached to public and private housing, the training and practice of designers, and the reconstruction and transformation of urban places, we will interpret how race has shaped buildings, landscapes, and plans. In turn, we will also examine how the built environment has shaped the formation and interpretation of racial categories. Humanities.

1 credit. Eligible for BLST Fall 2017. Goldstein.

#### ARTH 072. Global History of Architecture: Prehistory-1400

This survey will provide an introduction to the history of the global built environment from the earliest human settlements to the middle of the second millennium. Chronologically and geographically broad, we will examine selected works of architecture and urbanism from diverse cultures around the world, commencing ca. 10,000 B.C.E. and ending around 1400 C.E. In doing so, we will interpret the built environment as both a product of its social, political, and cultural contexts and a force that shapes those contexts. Despite a diversity of examples, common themes-such as cultural interaction and exchange, religion and belief, transmission of knowledge, architectural patronage, spatial and aesthetic innovation, and technological transformation--will emerge across the course. Humanities. 1 credit.

ARTH 073. Global History of Architecture: 1400-Present

This survey will visit some of the major structures, events, and innovations that defined the global built environment in the last six centuries, beginning with the Renaissance and its contemporaries and extending through Modernism. Our consideration will go beyond a history of style to examine the built environment as a product of and force acting on its broader social, political, and cultural contexts. We will pay attention to architecture and urbanism from the place of work to the place of leisure; from sites belonging to the very powerful to those belonging to the disenfranchised; and from those designed by well-known figures to those without known designers. Themes will include power, belief, technology, industrialization, trade, patronage,

professionalization, identity, empire, and urbanization. Humanities. 1 credit. Spring 2018. Goldstein.

## ARTH 074. History of Photography

This course will address the history of photography, from its invention in 1826 to the present, primarily through discussion of readings about particular processes (beginning with paper and glass plate negatives), practitioners, and theoretical approaches. Central themes will include landscape, war, social documentary, and photography's interventions in the arts, from the Victorian era through surrealism and recent conceptualists. Humanities. l credit.

ARTH 076. Colloquium: The History of Collecting and Museums (ca. 1476-2016)

This course examines the history of museums, from their origins in the private art collections and cabinets of curiosities amassed in early modern Europe to the globally conscious institutions of the early twenty first century. We will study the museum as a cultural monument that reflects the ideological concerns of the society in which it was created, and explore how the museum has adapted (or attempted to adapt) over time to meet the changing needs of its audience. Museums played a critical role in the construction of identity (local, regional, and national); they also helped shape western understandings of culture, society, power, and difference. We will analyze a variety of case studies to address such concepts and related issues, and trace the evolving objectives of museum theory and practices. An important focus of this course will be on the particular impact of art museums on the study, consumption, and production of art, such as the interpretive effects of organization and display. Humanities.

# ARTH 077. Photography, Race, and Identity in American Art

This course focuses on constructions, representations and interpretations of racial and social identities in 19th and 20th century American contexts, with an emphasis on the roles that photography and related media play in this process. We will engage critical writings on both photography and identity in order to better understand how photography has been deployed historically to shape and fix identity, as well as how it is used to interrogate the notion of identity as a fixed category. Humanities. L credit

# ARTH 078. Museum Matters: Practice, Theory, Controversy

This course investigates the art museum and its function for the preservation and interpretation of culture. We will consider how the art museum reflects the ideological concerns of the society in which it was created, and explore how the museum has adapted (or attempted to adapt) over time to meet the changing needs of its audience. Museums played a critical role in the construction of identity (local, regional, and national); they also helped shape western understandings of culture, society, power, and difference. We will analyze a variety of case studies to address such concepts and related issues, in order to trace the evolving objectives of museum theory and practices. An important focus of this course will be on current debates and museological discourse, as well as learning about museums from behind the scenes. Field trips to local and regional museums and collaboration with museum professionals will be an essential component of this course. Humanities.

1 credit.

### ARTH 095. Cracking Visual Codes

How do we understand the visual? What ways of seeing do we engage in and what kinds of questions do we ask when analyzing paintings, buildings, sculptures, ceramics, photographs, or prints? How do we crack the visual codes specific to images, objects, and structures of a given time and place? This colloquium will explore various approaches to the interpretation of the visual arts through the critical reading of important texts of the discipline and writings that propose or challenge a variety of analytic strategies. Students will directly engage in the interpretive process by researching, writing, and presenting on a work of art or architecture in the Philadelphia area, an exercise that will assist the exploration of questions central to their own interest in the study of visual culture. Through this course students will acquire the skills for interpreting images we encounter every day-such as advertisements, logos, icons, and other forms of visual culture. Humanities.

Writing course. 1 credit. Spring 2018. Reilly.

#### ARTH 096. Directed Reading

1 credit.

## ARTH 097. 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 Humanities.

2 credits

#### ARTH 164. Modernism in Paris and New York

This seminar focuses on "Modernism" in 19thand 20th-century art, addressing selected artists from Courbet and Manet through Degas, Gauguin, Cézanne, Picasso, Pollock, and Rothko. Artists and readings are also chosen to illuminate current scholarly approaches to "Modernism," including socio-economic, feminist, and post-colonialist perspectives. Prerequisite: two courses in art history or

Prerequisite: two courses in art history or permission of instructor. Humanities. 2 credits. Eligible for INTP Fall 2017. Hungerford.

## 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.

### 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, and fans.

Prerequisite: two courses in art history or permission of instructor. Humanities. 2 credits.

## 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.

Humanities.

2 credits. Eligible for MDST

### ARTH 149. The Classical in Art and Literature

(Cross-listed as INTP 091)

Layers of representation, interpretation, and theoretical frameworks filter our view of Greco-Roman 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 may 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). Humanities.

1 credit.

#### ARTH 155. Picturing Colonialism

This course examines how art and architecture helped to construct Spanish colonialism in the Americas, covering the roughly three hundred years of artistic production between 1492 and the Latin American independence movements of the early 1800's. The course is constructed around specific art historical case studies that allow us to think about the role of visual and material culture in the negotiation of colonial society. Although we will touch briefly upon the broader trends in visual and material culture from across Latin America, the majority of our attention will be directed toward the art and culture of what is today Mexico and Peru. In addition to studying seminal artworks from these regions, we will examine important methodological and theoretical approaches to understanding the relationship between art, society, and colonial politics during this period.

Humanities. 2 credits. Eligible for LALS

#### ARTH 164. Modernism in Paris and New York

This seminar focuses on "Modernism" in 19thand 20th-century art, addressing selected artists from Courbet and Manet through Degas, Gauguin, Cézanne, Picasso, Pollock, and Rothko. Artists and readings are also chosen to illuminate current scholarly approaches to "Modernism," including socio-economic, feminist, and post-colonialist perspectives. Prerequisite: two courses in art history or permission of instructor. Humanities. 2 credits. Eligible for INTP Fall 2017. Hungerford.

## Art Courses

### **ARTT 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. Humanities.

1 credit. Fall 2017. Carpenter.DeNizio.

Spring 2018. Grider.Staff.

#### ARTT 002. First-Year Seminar: Drawing to Find Out

This studio art experience is designed for first-year students who have demonstrated through a portfolio presentation their knowledge of the elements of design, composition, and visual thinking. This course is similar in content to the foundation drawing class ARTT 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 orientation week. This portfolio should include, in addition to whatever medium you choose to present, several drawing examples demonstrating proficiency in drawing. Contact the department for details. This course is a prerequisite for all other courses in studio art. Humanities.

1 credit. Fall 2017. Grider.

#### ARTT 010. Drawing II: 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: ARTT 001 or ARTT 002 Humanities.

1 credit. Fall 2017. DeNizio.

### ARTT 011. Drawing II - Drawing Architecture Turning Corners

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: ARTT 001 or ARTT 002 Humanities. 1 credit. Spring 2018. Exon.

## ARTT 020. Ceramics I

This introduction to ceramic process and aesthetics focuses on acquiring basic skills on the potter's wheel as well as an introduction to making and applying glazes both high and low temperature. Students will also learn to operate an electric kiln. Through image presentations and exposure to actual objects, students will learn to discuss and evaluate the aesthetic attributes of the handmade object.

Prerequisite: ARTT 001 or ARTT 002 Humanities. 1 credit. Fall 2017. Carpenter.

## ARTT 021. Ceramics II - 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: ARTT 020

Humanities. 1 credit.

Spring 2018. Carpenter.

#### ARTT 022. Ceramics II - 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 three-dimensional design using a broad range of architectural references. The experience will be complimented with slide presentations, demonstrations and guest artists. Prerequisite: ARTT 020 Humanities. 1 credit. Spring 2018. Carpenter.

## ARTT 030. Painting I

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: ARTT 001 or ARTT 002 Humanities. 1 credit. Fall 2017. Grider. Spring 2018. Exon.

### ARTT 031. Painting I - The Landscape

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: ARTT 001 or ARTT 002 Humanities. 1 credit.

## ARTT 032. Painting II - 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: ARTT 030 and/or ARTT 010. Humanities. 1 credit.

#### ARTT 033. Painting II - Color

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: ARTT 030 Corequisite: ARTT 002 Humanities. 1 credit. Spring 2018. Grider.

## ARTT 040. Photography I

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 time-honored 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: ARTT 001 Humanities.

1 credit. Fall 2017. Tarver.

## ARTT 041. Photography II - Color

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 required that students take ARTT 040 Photography I first. Prerequisite: ARTT 040 Humanities. 1 credit. Spring 2018. Tarver.

# ARTT 042. Photography III: Alternative Processes

Photography is ever changing. This course is designed to introduce students to various ways of thinking beyond the limitations of the two dimensional photograph. Eighteenth century processes, investigations into collage, involving elements of painting and mark making, along with 3-D will be explored. Emphasis will be placed on class discussions of masters in the field, invited artists workshops, and a visit to a local artist studio or gallery. During class experimentation will be encouraged and failure may be sometimes rewarded.

Prerequisite: ARTT 040 and ARTT 041 Humanities. 1 credit.

Spring 2018. Tarver.

#### ARTT 050. Sculpture I: Materials and Processes

This course is an introduction to 3-D design, through the study of the basic elements, techniques, materials and history of sculpture. We cover both additive and reductive processes. Working primarily with non-powered hand tools, materials will include clay, wire, cardboard, wood, paper, Plaster Craft, Cellu Clay, and the use of found objects. There is an emphasis on the development of form and stucture paticular to each material and process, in regards to the concepts of space, form, volume, weight, mass and design in sculpture. The teaching method includes slide lectures, demonstrations of techniques and individual guidance on studio projects. Prerequisite: ARTT 001 or ARTT 002 Humanities.

Fall 2017. Meunier.

### ARTT 051. Sculpture II - Clay Modeling

Working from the perceptual observation and study of life forms, we will explore the principles and practice of modeling in clay. Students will explore this subject in a broad range of historical styles - from the study of aspects of the human anatomy, to the more contemporary use of various other life forms as a source material. The earlier projects are centered on the study of the human figure, primarily through portraiture. The later projects will encourage the explorations of other life forms, such as plants and animals. The teaching method includes slide lectures, demonstrations of techniques, and individual guidance on studio projects. Prerequisite: ARTT 050 Humanities. 1 credit. Spring 2018. Meunier.

#### ARTT 052. Sculpture II - Woodworking

This course is designed to introduce students to general woodworking practices. Students will expand their knowledge and experience through various projects, lessons and vocabulary. Students will be expected to learn about and safely use hand tools, power tools, and woodworking machinery. The projects are designed to give students as much experience as possible by using many different machines and tools. Emphasis is on a variety of design approaches, including non-fuctional and fuctional forms, through the execution of working drawings, and completing wood projects. The teaching method includes slide lectures, demonstrations of techniques and individual guidance on studio projects. Prerequisite: ARTT 050 Corequisite: ARTT 002 ARTT 050 Humanities. 1 credit.

#### ARTT 060. 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: ARTT 001 or ARTT 002 Humanities. 1 credit. Spring 2018. Phelan.

### Advanced Studies

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 offered for full credit, a student may petition the studio faculty for 0.5 credit. Prerequisite: ARTT 001 or ARTT 002 and at least one previous course in the chosen medium. Humanities.

1 credit.

ARTT 070. Advanced Studies - Ceramics

ARTT 071. Advanced Studies - Drawing

ARTT 072. Advanced Studies - Painting

ARTT 073. Advanced Studies -Photography

ARTT 074. Advanced Studies - Sculpture

ARTT 075. Advanced Studies -Architectural Drawing

#### ARTT 076. Advanced Studies - Book Arts

#### Advanced Studies II

Continuation of ARTT Advanced Studies 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. Humanities.

1 credit.

ARTT 080. Advanced Studies II - Ceramics

Prerequisite: ARTT 070 Corequisite: ARTT 002

### ARTT 081. Advanced Studies II - Drawing Prerequisite: ARTT 071

**ARTT 082. Advanced Studies II - Painting** Prerequisite: ARTT 072

ARTT 083. Advanced Studies II -Photography Prerequisite: ARTT 073

**ARTT 084. Advanced Studies II - Sculpture** Prerequisite: ARTT 074

ARTT 085. Advanced Studies II -Architectural Drawing Prerequisite: ARTT 075

**ARTT 086. Advanced Studies II - Book Arts** Prerequisite: ARTT 076

#### ARTT 090. Senior Thesis Workshop I

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. Humanities.

1 credit. Fall 2017. Studio Faculty.

#### ARTT 091. Senior Thesis Workshop II

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. Humanities. 1 credit.

Spring 2018. Studio Faculty.

WILLIAM GARDNER (Modern Languages and Literatures, Japanese), Coordinator Anna Everetts (Administrative Assistant)

Committee: Farid Azfar (History) Pallabi Chakravorty (Music and Dance) BuYun Chen (History)3 K. David Harrison (Linguistics) William Gardner (Modern Languages and Literatures, Japanese) Steven Hopkins (Religion)<sup>3</sup> Yoshiko Jo (Lecturer, Modern Languages and Literatures, Japanese) Wol A Kang (Lecturer, Modern Languages and Literatures, Chinese) Haili Kong (Modern Languages and Literatures, Chinese)3 Gerald Levinson (Music and Dance) Bakirathi Mani (English Literature)<sup>3</sup> Xu Peng (Modern Languages and Literatures, Chinese) Tomoko Sakomura (Art History) Kirsten Spiedel (Lecturer, Modern Languages and Literatures, Chinese) Atsuko Suda (Lecturer, Modern Languages and Literatures, Japanese) Megumu Tamura (Lecturer, Modern Languages and Literatures, Japanese) Jiajia Wang (Modern Languages and Literatures, Chinese) Min Wang (Lecturer, Modern Languages and Literatures, Chinese) Jonathan Washington (Linguistics) Tyrene White (Political Science) Thomas Whitman (Music and Dance)

<sup>3</sup> Absent on leave, 2017-2018.

Asian Studies is an interdisciplinary program that introduces students to the critical and methodological approaches that have informed the study of Asia. As one of the largest interdisciplinary programs at Swarthmore, Asian Studies trains students in the study of diverse texts, images, performances, bodies of knowledge and cultural practices across geographic and temporal boundaries. Students are encouraged to engage in a rigorous examination of the political, economic, social, environmental, and religious formations of the myriad societies that have constituted Asia. Asian Studies aims to provide students with a depth of knowledge and multiple critical perspectives with which to understand how these diverse locales have been and continue to be interwoven with the global.

# 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 nation-states, 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 Plan. 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:

**1. 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 or region that is not the principal focus of a student's program.

**2. Disciplinary breadth.** Courses must be taken in at least three different departments.

**3. Temporal breadth.** At least one course focusing on the Pre-modern or Early Modern (before 1900) Eras, and at least one course on the Modern (after 1900) Era must be completed. This requirement can be fulfilled by taking at least two courses that examine substantial material on both the Premodern/Early Modern and Modern Eras.

**4. Intermediate and advanced work.** A minimum of 5 credits must be completed at the intermediate or advanced level in at least two departments.

5. Asian language study. At least one year of college-level study of an Asian language or its equivalent in intensive summer coursework is required of all majors. Up to four credits of Asian language study may be applied to the major. Advanced topical courses taught in the original language are not subject to the four credit limit. Students wishing to study an Asian language not offered at Swarthmore are encouraged to fulfill this requirement through study abroad, intensive summer study, approved coursework at neighboring institutions (tri-co, University of Pennsylvania), etc.

# 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 2-credit 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.)

# **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:

1. 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.

2. 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.

**3. Temporal breadth.** At least one course focusing on the Premodern or Early Modern (before 1900) Eras, and at least one course on the Modern (after 1900) Era must be completed. This requirement can be fulfilled by taking at least two courses that examine substantial material on both the Premodern/Early Modern and Modern Eras.

**4. Intermediate or advanced work.** At least 2 credits of work must be completed at the intermediate or advanced level.

5. Asian language study. Asian-language study is not required but is strongly recommended. Up to two credits in Asian language study may be applied 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.

# **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 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, disciplinary, and temporal breadth requirements.** These are the same as those for the course major (see above)

**2. Asian language study.** This requirement is the same as for the course major (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 courses 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 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. Temporal breadth.** At least one course focusing on the Pre-modern or Early Modern (before 1900) Eras, and at least one course on the Modern (after 1900) Era must be completed. This requirement can be fulfilled by taking at least two courses that examine substantial material on both the Pre-modern/Early Modern and Modern Eras.

4. Asian language study. Asian language study is not required, but courses in Asian languages may count toward the honors minor. Up to 2 credits of Asian language study may be applied to the honors minor. For languages offered at Swarthmore (Chinese and Japanese), courses above the secondyear 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.

 Honors preparation. One preparation, normally a two-credit seminar, will be submitted for external examination.

Senior Honors Seminar for minors. The student will fulfill the requirements set for honors minors by the department offering the honors preparation.

Grade-point average requirement. A student must earn at least a B+ in all courses applied to the honors minor.

## Fellowship and Grant Opportunities for Students

The Alice L. Crossley Prize in Asian Studies is awarded annually to the student or students who submit the best essay(s) on any topic in Asian or Asian American Studies.

The Genevieve Ching-wen Lee '96 Memorial Fund supports a lecture each year in Asian American studies. This fund also supports an annual competition for summer research support for projects related to Asian studies or Asian American studies.

The Penelope Mason '57 Memorial Fund for Asian Studies is available to support Asian studies related projects proposed by students, faculty members, or both.

# **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.

## **Asian Studies Courses**

Courses in the Asian Studies Program are listed below. Courses of independent study, special attachments on subjects relevant to Asian 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 Asian Studies Committee. Students who wish to pursue these possibilities should consult with the Asian Studies chair.

# ASIA 093. Directed Reading 1 credit.

#### ASIA 096. Thesis

Writing course. 1 credit.

## ASIA 180. Honors Thesis

Writing course. 2 credits.

The following courses may be counted for credit in the Asian Studies Program. Descriptions of the courses can be found in each department's course listings in this catalog:

## Art History

ARTH 003. Asian Art: Past and Present ARTH 034. Colloquium: Asian Calligraphy ARTH 036. Modern Architecture in Japan: Culture, Place, Tectonics **Chinese** CHIN 003. Second-Year Mandarin Chinese CHIN 004. Second-Year Mandarin Chinese CHIN 007. Chinese/Japanese Calligraphy

CHIN 007. Chinese/Japanese Califgra CHIN 011. Third-Year Chinese

- CHIN 011. Third-Tear Chinese CHIN 012. Advanced Chinese
- CHIN 012. Advanced Chinese
- CHIN 012A. Advanced Chinese Conversation
- CHIN 020. Readings in Modern Chinese

CHIN 021. Topics in Modern Chinese CHIN 033. Introduction to Classical Chinese CHIN 036. Women's Literature in Premodern China CHIN 055. Contemporary Chinese Cinema: The New Waves (1984-2005) CHIN 087. Water Policies, Water Issues: China/Taiwan and the U.S. CHIN 088. Governance and Environmental Issues in China CHIN 089. Tea in China: Cultural and Environmental Perspectives. CHIN 090. Practicum in Bridging Swarthmore and Local Chinese Communities CHIN 091. Special Topics: Martial Arts Tradition in Chinese Literature and Theater CHIN 103. Lu Xun and His Legacy in 20th-Century China CHIN 108. The Remaking of Cinematic China: Zhang Yimou, Wong Kar-wai, and Ang Lee Dance DANC 025A. Dance and Diaspora DANC 038. Performing Ecstasy Dancing the Sacred DANC 046. Dance Technique: Kathak DANC 049D. Dance Performance Repertory: Taiko DANC 049F. Dance Performance Repertory: Kathak DANC 079. Dancing Desire in Bollywood Films Economics ECON 051. International Trade and Finance\* ECON 081. Economic Development\* ECON 083. East Asian Economies ECON 151. International Economics+ ECON 181. Economic Development+ English Literature ENGL 065. Asian American Literature ENGL 077. South Asians in America Environmental Studies ENVS 032. China, Brazil, and the Global Food Environment Film and Media Studies FMST 055. Contemporary Chinese Cinema History HIST 001D. First-Year Seminar: China and the World: A History of Collecting HIST 009A. Premodern China HIST 009B. Modern China: Reformers. Revolutionaries, and Rebels HIST 060. The East India Company, 1600-1857 HIST 073. Writing China, Picturing Chineseness HIST 074. The Consuming Passions: Visual and Material Cultures of East Asia HIST 075. Thinking Hands: Work and Craft in Premodern China HIST 076. Women's Work in Premodern China HIST 077. Fashion: Theory and History HIST 078. China, Capitalism, and Their Critics HIST 090C. Women in Late Imperial and Republican China HIST 090D. A Global History of Chinese Labor

HIST 145. Women and Gender in Chinese History Japanese JPNS 003. Second-Year Japanese JPNS 004. Second-Year Japanese JPNS 007. Chinese/Japanese Calligraphy JPNS 008. Extensive Reading in Japanese JPNS 012. Third-Year Japanese JPNS 012A. Japanese Conversation JPNS 013. Third-Year Japanese JPNS 013A. Readings in Japanese JPNS 018. Manga, Bande Dessinée, and the Graphic Novel: A Transnational Study of Graphic Fictions JPNS 019. Fourth-Year Japanese JPNS 024. Japanese Film and Animation JPNS 033. Tokyo Central: The Metropolis in Modern Japanese Literature and Film JPNS 035. Narratives of Disaster and Rebuilding in Japan JPNS 041. Fantastic Spaces in Modern Japanese Literature Music MUSI 008A. Music & Mao: Music and Politics in Communist China MUSI 030. Music of Asia MUSI 049A. Performance (Balinese Gamelan) Linguistics LING 033. Introduction to Classical Chinese **Political Science** POLS 050. The Politics of South Asia POLS 055. China and the World POLS 056. Patterns of Asian Development POLS 058. Contemporary Chinese Politics POLS 064. American-East Asian Relations POLS 065. Chinese Foreign Policy POLS 076. Challenges for Developing Democracies\* POLS 087. Water Policies, Water Issues: China/Taiwan and the U.S. POLS 088. Governance and Environmental Issues in China POLS 102. Comparative Politics: Greater China POLS 108. Comparative Politics: East Asia Religion RELG 008. Patterns of Asian Religions RELG 009. The Buddhist Traditions of Asia RELG 012. The History, Religion, and Culture of India I: From the Indus Valley to the Hindu Saints RELG 012B. Hindu Traditions of India: Power, Love, and Knowledge RELG 013. The History, Religion, and Culture of India II: Muslim, Hindu, Sikh, and Dalit in North India RELG 013A. Indian Religion and Philosophy RELG 030. The Power of Images: Icons and Iconoclasts\* RELG 031. Religion and Literature: From the Song of Songs to the Hindu Saints\* RELG 034. Partitions: Religions, Politics, and

Gender in South Asia Through the Novel RELG 042. Performing Ecstasy Dancing the Sacred

RELG 049. Yoga in History, Philosophy, and Practice

RELG 108. Poets, Saints, and Storytellers: The Poetry and Poetics of Devotion in South Asian Religions

RELG 114. Love and Religion\*

### Note:

\* **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.

# Biology

SARA HIEBERT BURCH. Professor RACHEL A. MERZ, Professor KATHLEEN K. SIWICKI, Professor<sup>3</sup> ELIZABETH A. VALLEN. Professor and Chair AMY CHENG VOLLMER, Professor NICHOLAS KAPLINSKY, Associate Professor JOSE LUIS MACHADO, Associate Professor<sup>3</sup> ALEXANDER BAUGH, Assistant Professor DAWN CARONE, Assistant Professor BRAD DAVIDSON, Assistant Professor VINCENT FORMICA. Assistant Professor ELIZABETH NICHOLS, Assistant Professor SHANNON BALLARD, Visiting Assistant Professor TANIA KIM, Visiting Assistant Professor ERIN CLEMENS, Laboratory Instructor PHILIP KUDISH, Academic Coordinator/Laboratory Instructor/Science Associate Coordinator JOCELYNE MATTEI-NOVERAL, Laboratory Instructor STACEY MILLER, Laboratory Instructor NICOLE STOWELL, Laboratory Instructor DIANE FRITZ, Administrative Coordinator

3 Absent on leave, 2017-2018.

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 intermediatelevel 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, two-credit 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 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

## 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 advisor in the Biology Department.

## **Course Major**

## Acceptance criteria

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.

CHEM 010, or placement approved by the Chemistry and Biochemistry Department.

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.

Completion of an additional course in the specified list of quantitative courses in NSE.

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 first 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.

Students who have not completed the requirements for acceptance to the major will be deferred until the end of the fifth semester. Students who have not completed all requirements for acceptance to the major by the end of the fifth semester will no longer have priority in lotteries based on their sophomore plan, and will need to re-apply for the major before the last day of classes in their junior year.

## Requirements for graduation

**Credit requirements:** Students majoring in biology must complete a minimum of eight biology credits by the end of their senior year, 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.

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).

Students majoring in biology may count only one course numbered 003-009 toward the eight required credits. Courses numbered 003-009 do not meet the Group distribution requirement. 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. 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.

Seminar requirement: All biology majors are required to take 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.

All seminars must be taken at Swarthmore College. 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.

Students majoring in Biology must complete two courses from the list of quantitative NSE courses (below).

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.

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 counts as one of the eight credits required for a major in biology.

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.

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.

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.

Quantitative NSE courses which can be used for the Biology major: ASTRO 016, CHEM 015 or above, COMP SCI 021 or above, ENGI 005 or above, MATH 26 or above, PHYS 003 or above (with the exception of PHYS 029), STAT 11 or above.

## **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

The course requirements for an honors major in biology are the same as those for a course major in biology (see above).

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.

Students should list the anticipated fields of study, including two 2-credit seminar courses, in their Sophomore Plan.

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

**Credit requirements for honors:** In addition to fulfilling the requirements to be accepted as 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 take are welcome and encouraged to attend the seminars.

**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).

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:

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.

An honors major who has taken both BIOL 001 and BIOL 002 can use them to satisfy any **one** of the distribution requirements.

AP credit may not be used to satisfy the distribution requirement.

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.

The two seminars used for honors preparations must be taken from different faculty members and must be taken at Swarthmore College.

**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.

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.

Students should plan on completing their research by the end of the fall semester of their senior year.

The honors thesis has a page limit of 20 pages, not counting references, figures, figure legends or tables.

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.

**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.

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-on-one, 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).

## **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.

Honors biochemistry majors are expected to participate in Senior Honors Study (BIOL 199) only if the thesis research is done in the Biology Department.

Honors biochemistry majors must conduct thesis research with a Swarthmore faculty member.

## Neuroscience

The Psychology and Biology departments offer a special major in Neuroscience for course and honors majors that combines work in the two departments in a way that allows students flexibility in choosing the focus of their Neuroscience major. Approval for this special major is done through both departments. Each Neuroscience major is assigned a faculty advisor from whichever of the two departments that best reflects the focus of that student's plan of study. Details about the Neuroscience special major can be found on the Biology website.

## Bioeducation

The special major in bio education requires six credits in biology. Most students take BIOL 001 and BIOL 002; a score of 5 on the Biology AP exam or equivalent can substitute for BIOL 001 and/or BIOL 002 and count for 1 credit. Students must take Evolution (BIOL 034) and at least one Group I and one Group II course. Completion of Chem 010, Math 015 and STAT 011 or placement out of these courses is required. In addition, the NSE elective requirement can be fulfilled by one of the following: ASTR 016, CHEM 015 or CHEM 022, CPSC 021 or above, PHYS 003/003L or above (not including PHYS 29 or 95), ENGR 005 or above, Math 025 or above. The special major in Bio education will include at least five credits in Educational Studies. Students should consult with the chair of the Educational Studies Department about specific requirements. Approval and advising for this special major are through 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 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 Advisor 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 on- and 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 Jocelyne Noveral or Stacey Miller if you will be on campus for the summer and are interested in participating.

## **Teacher Certification**

Students may complete the requirements for teacher certification through a program approved by the state of Pennsylvania. Options to pursue a biology major along with teacher certification or to pursue a special major in biology and educational studies are available. For further information about the relevant set of requirements, please refer to the Educational Studies section of the Bulletin.

## 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.

## **Biology Courses**

Biology course numbers reflect study at different levels of organization-General Studies (001-009, 061-069), 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. BIOL 001 **does not** have to be taken before BIOL 002; it can be taken afterward. Natural sciences and engineering practicum. Writing course One laboratory period per week. 1 credit. Fall 2017. Staff.

#### BIOL 001SP. Cellular and Molecular Biology

BIOL 001SP will provide an enriched experience for first-year students who want to excel and continue studies in biology or a related discipline (e.g., biochemistry, neuroscience, environmental studies). Entrance to the course will be determined by a commitment to both hard work and engagement with the subject rather than by high school GPA, SAT or AP scores.

Graded CR/NC.

Corequisite: Students must apply to get into BIOL 001SP and concurrently enroll in BIOL 001 (including a lab section). 0.5 credit. Fall 2017. 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.

Natural sciences and engineering practicum. Writing course.

One laboratory per week. 1 credit. Eligible for ENVS

Spring 2018. Staff.

# BIOL 002SP. Organismal and Population Biology

BIOL 002SP will provide an enriched experience for first-year students who want to excel and continue studies in biology or a related discipline (e.g., biochemistry, neuroscience, environmental studies). Entrance to the course will be determined by a commitment to both hard work and engagement with the subject rather than by high school GPA, SAT or AP scores. Graded CR/NC. Corequisite: Students must apply to get into BIOL 002SP and concurrently enroll in BIOL 002 (including a lab section).

Please click here for an application. 0.5 credit. Spring 2018. Staff.

## BIOL 009. Our Food

(Cross-listed as ENVS 009)

The scale and efficiency of our food system is one of the marvels of the modern world. Yet in many ways this system is broken. This course will address the current state of our agricultural food system from a scientific perspective, focusing on the U.S. Each student will grow and maintain a micro-garden plot as part of the class, as well as develop educational signage for the public that conveys information about agriculture or their crop. Three hours of lecture/discussion/lab and one floating hour of fieldwork per week. One field trip. Natural science and engineering.

1 credit. Eligible for ENVS Spring 2018. Pfluger.

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

## 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.

Prerequisite: BIOL 001 and BIOL 002, and previous or concurrent enrollment in CHEM 010; or permission of the instructor.

Natural sciences and engineering practicum. One laboratory period per week. 1 credit.

Spring 2018. 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.

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

Eligible for ENVS

# 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. Prerequisite: CHEM 022; BIOL 001 and BIOL 002 or by permission of the instructor. Natural sciences and engineering practicum. One laboratory period per week.

1 credit.

Eligible for ENVS

## BIOL 019. Omics

An introduction to the study of genome structure, function, and evolution, with a focus on applying our understanding of genomes to answer fundamental biological questions. The course will also investigate the related fields of proteomics, metabolomics, and systems biology. Prerequisite: BIOL 001 and BIOL 002 or by permission of the instructor. Natural sciences and engineering practicum. One laboratory period per week. 1 credit.

## 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. Prerequisite: BIOL 001 and BIOL 002 or permission of the Instructor. Natural sciences and engineering practicum. 1 credit. Eligible for ENVS Fall 2017. Hiebert Burch.

## **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.

Prerequisite: BIOL 001 and CHEM 010. Natural sciences and engineering practicum. One laboratory period per week. 1 credit. Eligible for COGS Spring 2018. Staff.

## **BIOL 024. Developmental Biology**

In this course, we will explore the process by which single cells (fertilized eggs) develop into complex organisms. Students will conduct detailed observations of live embryos and engage in independent experimental analysis during weekly laboratory sessions.

Prerequisite: BIOL 001 and BIOL 002. Natural sciences and engineering practicum. One laboratory period per week.

# Biology

1 credit. Eligible for GSST Fall 2017. Davidson.

## 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. Prerequisite: BIOL 001 and BIOL 002. Natural sciences and engineering practicum. One laboratory period per week. 1 credit. Eligible for ENVS Spring 2018. Kaplinsky.

## BIOL 026. Invertebrate Biology

The evolution, morphology, ecology, and physiology of invertebrate animals. Prerequisite: BIOL 001 and BIOL 002. Natural sciences and engineering practicum. One laboratory period per week; some all-day field trips. 1 credit. Eligible for ENVS Fall 2017. Merz.

#### **BIOL 029. Developmental Neurobiology** Group A Neuroscience.

This course and its laboratory component will examine the fundamental principles underlying nervous system development in both bertebrates and invertebrates. Students will be introduced to the complex underlying mechanisms guiding

neural development in several model organisms. Prerequisite: BIOL 001 and BIOL 002; or permission of instructor.

Natural sciences and engineering practicum. One laboratory period per week. 1 credit.

## Group III: Population Biology (030-039)

## BIOL 030. Animal Behavior

This course will focus on the mechanistic basis, functional consequences, evolutionary history and development of animal behavior. We will explore the conceptual roots of ethology and the current state of the art. Bi-monthly journal clubs introduce students to the primary literature. Lab and field component combines descriptive and experimental approaches to studying behavior and class-wide projects offer an opportunity to discover new knowledge in this field. Course content emphasizes statistical and quantitative methods. Prerequisite: BIOL 001 and BIOL 002 or equivalent.

Natural sciences and engineering practicum. Lab required. 1 credit. Fall 2017. Baugh.

## **BIOL 034. Evolution**

The course focuses on how the genetic and phenotypic structure of a population changes in response to mutation, natural selection, migration, and genetic drift. Other topics, such as quantitative genetics, speciation, phylogeography, and adaptation, provide a broader view of evolutionary processes.

Prerequisite: BIOL 001 and BIOL 002. Natural sciences and engineering practicum. One laboratory period or field trip per week.

1 credit.

Eligible for ENVS

Spring 2018. Formica.

## **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. Prerequisite: BIOL 002 or permission of the instructor.

Natural sciences and engineering practicum. 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. 1 credit.

Eligible for ENVS

## **BIOL 037. Conservation Biology**

This course provides an overview of the foundational concepts and future horizons of biodiversity conservation, and illustrates central issues in contemporary conservation with case studies, critical reading of primary literature, field experiences and exposure to quantitative methods Prerequisite: BIOL 002 or permission of the instructor.

Natural sciences and engineering practicum. One laboratory period or field trip per week. 1 credit.

Eligible for ENVS

## BIOL 039. Marine Biology

Ecology of oceans and estuaries, including discussions of physiological, structural, and behavioral adaptations of marine organisms. Prerequisite: BIOL 001 and BIOL 002. Natural sciences and engineering practicum. One laboratory per week; several all-day field trips. 1 credit.

Eligible for ENVS

## **BIOL 068. Bioinformatics**

(Cross-listed as CPSC 068)

This course is an introduction to the fields of bioinformatics and computational biology, with a central focus on algorithms and their application to a diverse set of computational problems in molecular biology. Computational themes will include dynamic programming, greedy algorithms, supervised learning and classification, data clustering, trees, graphical models, data management, and structured data representation. Applications will incluse genetic sequence analysis, pair wise-sequence alighment, phylogenetic trees, motif finding, gene-expression analysis, and protein-structure prediction. No prior biology experience is necessary. BIOL 068 can count as one of the credits required for the Biology major but does NOT satisfy distribution (Group I, II, or III) requirements. Prerequisite: CPSC 035. Natural science and engineering. Lab required. 1 credit. Eligible for COGS

## 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.

0.5-1 credit.. Fall 2017. Staff. Spring 2018. 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.

0.5-1 credit.. Fall 2017. Staff. Spring 2018. Staff.

# BIOL 094A. Research Project: 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.

## **BIOL 180. Honors Research**

Independent research in preparation for an honors research thesis. Fall 2017. Staff. Spring 2018. Staff.

## Senior Comprehensive Examination

## BIOL 095. Senior Project

With the permission of the department chair, 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. Natural science and engineering. 1 credit.

Fall 2017. Staff.

## **Honors Study**

## **BIOL 199. Senior Honors Study**

An interactive, integrative program that allows honors students to finalize their research thesis spring semester. BIOL 199 is not part of the 8credit minimum required for the biology major. Writing course. 1 credit.

Spring 2018. Staff.

## Seminars

#### BIOL 111. Genome Regulation by Noncoding RNA

This seminar explores regulatory mechanisms governing gene expression, nuclear organization and inheritance. We will specifically explore the ways in which non-protein-coding RNA contributes to gene regulation and the maintenance of genomic integrity, including the molecular bases for a variety of human pathologies such as cancer and aging. Through extensive reading of primary literature and laboratory research, students can be expected to gain an in-depth understanding of the properties, functions and evolution of noncoding RNAs in critical genomic regulatory processes and current applications to human disease research.

Prerequisite: Any Group I course or BIOL 024, or BIOL 025, or permission of instructor. Natural Science and Engineering practicum. 2 credits.

Spring 2018. Carone.

## **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*.

With permission of instructor, a student may take the discussion (NOT LAB) section of this seminar as 1 credit of BIOL 093. Prerequisite: Any Group I or Group II biology course.

Natural sciences and engineering practicum. One required laboratory per week. 2 credits.

## BIOL 115E. Plant Molecular Genetics and Biotechnology

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. With permission of instructor, a student may take the discussion (NOT LAB) section of this seminar as 1 credit of BIOL 093.

Prerequisite: BIOL 025 or any Group I course. Natural sciences and engineering practicum. Laboratory projects will include independent and ongoing research. One required laboratory per week.

2 credits. Eligible for ENVS Fall 2017. 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 015, BIOL 016, BIOL 017, or CHEM 038.

Natural sciences and engineering practicum. Writing course. Lab required. 2 credits. Eligible for ENVS

Spring 2018. 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. Weekly laboratory projects will incorporate genomic and molecular approaches.

With permission of instructor, a student may take the discussion (NOT LAB) section of this seminar as 1 credit of BIOL 093.

Prerequisite: Any Group I or Group II biology course.

Natural sciences and engineering practicum. Lab required. 2 credits.

## BIOL 121. Neural Systems and Behavior.

This seminar will examine the genetic, molecular, and functional requirements of identified brain systems, neural circuits, and individual neurons in the regulation of behavior. Discussion of primary literature will include the neural systems and behaviors of invertebrate and vertebrate model organisms, including Drosophila, mice, and humans. Research projects will utilize Drosophila as a model system to investigate the genes, neurons, and circuits involved in courtship, motor, and pain-sensing behaviors.

Prerequisite: BIOL 022, or BIOL 029, or permission of instructor.

Natural sciences and engineering practicum. 2 credits.

Fall 2017. Ballard.

## **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.

Prerequisite: BIOL 022 or permission of the instructor.

Natural sciences and engineering practicum. Independent laboratory projects required. 2 credits.

Eligible for COGS

## **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.

With permission of instructor, a student may take the discussion (NOT LAB) section of this seminar as 1 credit of BIOL 093.

Prerequisite: BIOL 020 or BIOL 022 or permission of the instructor.

Natural sciences and engineering practicum. Independent laboratory projects required. 2 credits.

# BIOL 125. The Cellular Basis of Embryonic Development and Cancer

Through discussion of the primary literature and independent experimental studies, students will investigate how precisely coordinated cellular processes promote the formation of embryos. We will also explore how disruptions in these processes promote cancerous cell behaviors. Potential topics include - cell migration and metastasis, the role of matrix adhesion in regulating embryonic and stem cell proliferation and the ability of cells to interpret their environment using dynamic internal structures. Prerequisite: Completion of one of the following: BIOL 010, 014, 019, 024, or 025 or permission of

# Biology

the instructor. Natural sciences and engineering practicum. Lab required. 2 credits. Spring 2018. Davidson.

## 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. Prerequisite: Any Group II or Group III course. Natural sciences and engineering practicum. Lab required. 2 credits.

## **BIOL 131. Animal Communication**

This seminar will examine animal communication from a cross-disciplinary perspective with a focus on the physiological basis and evolution of communication systems and an emphasis on understanding the primary literature. Independent projects form the core of the course and these typically involve studies of wild songvirds (Crum) or captive frogs (lab). Course content emphasizes statistical and quantitative methods. Prerequisite: Completion of BIOL 001 and BIOL

002, or their equivalents; completion of at least one of the following: BIOL 020, BIOL 022, BIOL 030, BIOL 034, BIOL 123 or BIOL 124 with lottery preference for students who have completed BIOL 030; recommended: a course in statistics (e.g. STAT 011).

Natural sciences and engineering practicum. One required laboratory per week. 2 credits.

Eligible for COGS

## BIOL 135. Parasite Ecology and Conservation

This course will review the epidemiological, ecological, and conservation concepts required to understand the complex role of parasitic biodiversity in ecology, conservation and the medical sciences. Drawing on primary literature, the course will emphasize links between field observations and quantitative methods, as well as cover a series of contemporary 'hot-topics' in which parasitic diversity plays a key role. Prerequisite: BIOL 002 and BIOL 036 or BIOL 037, or permission of the instructor. Natural sciences and engineering practicum. One laboratory period or field trip per week. 2 credits. Fall 2017. Nichols.

#### BIOL 136. Molecular Ecology and Evolution

Understanding molecular techniques and analysis has become increasingly important to researchers in the fields of ecology and evolution. Through discussion of the primary literature, and independent laboratory projects, students will explore how molecular tools are being implemented in studies of biogeography, dispersal, mating systems, biological diversity, and speciation. Depending on interest, topics such as wildlife forensics, conservations genetics, human migration, molecular clocks, and bioinformatics will also be discussed.

With permission of instructor, a student may take the discussion (NOT LAB) section of this seminar as 1 credit of BIOL 093.

Prerequisite: BIOL 002 or BIOL 034, and one Group I or Group III Biology course or BIOL 025. Natural sciences and engineering practicum. One required laboratory each week with continuing, independent laboratory projects. 2 credits.

Fall 2017. Formica.

## 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.

With permission of instructor, a student may take the discussion (NOT LAB) section of this seminar as 1 credit of BIOL 093.

Prerequisite: For Biology majors: any biology course numbered BIOL 026 or higher. Other students should seek permission of the instructor before registration.

Natural sciences and engineering practicum. Lab required.

2 credits.

Eligible for ENVS

## **Black Studies**

NINA JOHNSON (Sociology/Anthropology), Coordinator Rose Maio (Administrative Coordinator)

Committee: Timothy Burke (History) Syd Carpenter (Art) Anthony Foy (English Literature) Keith Reeves (Political Science) Eric Glover (English Literature) Nina Johnson (Sociology and Anthropology) Micheline Rice-Maximin (Modern Languages and Literatures, French) Joseph Nelson (Education and Black Studies) Peter Schmidt (English Literature) Christine Schuetze (Sociology and Anthropology) Valerie Smith (Black Studies and English Literature) Jamie Thomas (Linguistics) Sarah Willie-LeBreton (Black Studies, Sociology and Anthropology) Carina Yervasi (Modern Languages and Literatures, French)<sup>3</sup>

3 Absent on leave, 2017-2018.

The purpose of Black Studies is to introduce students to the history, culture, art, social relationships, and political, religious, and economic experiences of black people in Africa and the African Diaspora.

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 postmodern, postcolonial, and Afrocentric approaches.

## The Academic Program

## **Course Minor**

All interdisciplinary minors in Black Studies are required to take BLST 015: Introduction to Black Studies, ordinarily during their first two years, and four additional courses listed in the catalog that earn Black Studies credit. Honors minors must complete a two-credit honors thesis as one of these additional courses. Of these four additional courses, at least one of them must be outside of the departmental major, and no more than one course may be taken outside of Swarthmore. To be accepted into the minor a GPA of 3.0 in Black Studies related courses will be required. We strongly advise students to take a course in African or African diasporic history.

## Honors Minor

Honors minors must meet all requirements of the course minor. 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 options apply:

1. A two-credit honors thesis written under program supervision,

2. A one credit thesis paired with a BLST course,

3. A two-credit honors seminar that counts toward the BLST Program, or

4. The pairing of two one-credit courses that count toward the BLST Program.

## Requirements and Preparation for Honors Minors

The two-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% 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.

## Application Process Notes for the the Minor

Students in any department may add an interdisciplinary minor in Black Studies to their departmental major by fulfilling the requirements stated subsequently. Applications for admission to the interdisciplinary minor should be made in the spring semester of the sophomore year through mySwarthmore.

## **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. The special major includes the requirements for the minor plus 5 additional credits, one of which usually includes a cap stone experience to be decided upon in consultation with the program's coordinator.

## Thesis / Culminating Exercise

Students may complete a one-credit course thesis (BLST 091) as part of the 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.

## 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, while 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.

## **Black Studies 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.

## **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 civil rights and anti-colonialist movements in the U.S., 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 U.S. Non-distribution.

1 credit.

Fall 2017. Willie-LeBreton.

#### BLST 040G. Between the "Is" and the "Ought" Black Social and Political Thought

(Cross-listed as SOCI 048G)

Our study of black social and political thought will include not only the pivotal scholarly texts, but also the social and political practice and cultural production of abolitionists, maroons, Pan-Africanists, club women, freedom fighters, poets, and the vast array of "race men and women" across the spectrum of crusades. We will explore the range of intellectual and cultural production and protest ideology/action of Blacks through the politics and social observation of the preemancipation period, post-emancipation liberation struggles, and the post-colonial and post-civil rights period.

Non-distribution. 1 credit.

#### BLST 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 Days, cartoons, paintings and plays of 1960s Black Arts Movement and the poems, lyrics, and graphic art of early hip-hop. Non-distribution. l credit.

# BLST 090G. Black Liberation 1969: Black Studies in History Theory and Praxis

This research seminar on the civil rights movement and student activism will investigate the history of the black student movement on college campuses in America circa 1968-1972 with an emphasis on unearthing the story of Swarthmore's own black student protest in 1969. Students will write the first accurate history of the black protest as well as develop a creative project designed to educate the campus and broader community about these events.

## **Black Studies**

Non-distribution 1.5 credits.

## BLST 091. Thesis

Writing Course. 1 credit. Fall 2017, Staff.

BLST 092. Seminar in Black Studies

Non-distribution. 1 credit.

**BLST 093. Directed Reading** 

1 credit. Fall 2017, Staff.

## BLST 116. Redefining US Southern Literature

(Cross-listed as ENGL 116) Our focus this year will be on the long, grand, and problematic tradition of U.S. Southern literature especially fiction in both comic and tragic modes as it developed after the Civil War to the present. Prerequisite: 20th/21st c.

Humanities. 2 credits. Fall 2017. Schmidt.

## **BLST 180. Honors Thesis**

2 credits Fall 2017 Staff

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.

## Dance

DANC 043. Dance Technique: African I DANC 049C. Dance Performance Repertory: African

DANC 053. Dance Technique: African II Economics

ECON 073. Race, Ethnicity, and Gender in Economics

ECON 081. Economic Development ECON 082. Political Economy of Africa

ECON 181. Economic Development

Educational Studies

EDUC 048. From the Undercommons: Ethnic Studies and Education

EDUC 068. Urban Education

EDUC 167. Identities and Education

## English Literature

ENGL 060. Early African American Print Cultures

ENGL 061. Fictions of Black America

ENGL 062. Classic Black Autobiography

ENGL 063. Contemporary Black Autobiography

ENGL 064. The New Negro Versus Jim Crow ENGL 068. Black Culture in a "Post-Soul" Era

ENGL 119. Black Cultural Studies

## Film and Media Studies

FMST 059. Re-Envisioning Diasporas

## French

FREN 043. Ecrire le Moi/Writing the Self FREN 045C. Le Monde francophone : Haitian Literature and Culture and the French D.O.M. FREN 111. Le Désir colonial: représentations de la différence dans l'imaginaire français History HIST 007A. African American History, 1619 to 1865 HIST 007B. African American History, 1865 to Present HIST 008A. West Africa in the Era of the Slave Trade, 1500 to 1850 HIST 008B. Mfecane, Mines, and Mandela: Southern Africa from 1650 to the Present HIST 008C. History of East Africa HIST 043. Antislavery in America HIST 051. Black Reconstruction HIST 053. Black Women in the Civil Rights Movement HIST 058. Africa in America: Gullah/Geechee Life and Culture HIST 089. The Environmental History of Africa HIST 090E. On the Other Side of the Tracks: Black Urban Community HIST 137. Slavery, 1550 to 1865 HIST 140. The Colonial Encounter in Africa Literatures LITR 059FG. Re-Envisioning Diasporas LITR 077F. Caribbean and African Literatures and Cultures in Translation Music MUSI 003. Jazz History MUSI 061. Jazz Improvisation MUSI 071. Salsa Dance/Drumming **Political Science** POLS 070B. Politics of Punishment POLS 106. The Urban Underclass and Public Policy Religion RELG 010. African American Religions RELG 024. From Vodun to Voodoo: African Religions in the Old and New Worlds RELG 025. Black Women, Spirituality, Religion RELG 109. Afro-Atlantic Religions Sociology and Anthropology ANTH 003F. Culture and Religion in Africa ANTH 023C. Anthropological Perspectives on Conservation ANTH 043F. Culture, Power, and Religion in Africa SOAN 020B. Urban Education SOCI 007B. Introduction to Race and Ethnicity in the United States SOCI 007C. Sociology Through African American Women's Writing SOCI 048G. Between the "Is" and the "Ought" Black Social and Political Thought SOCI 048I. Race and Place: A Philadelphia Story (Inside-Out Exchange Course) SOCI 048L, Urban Crime and Punishment SOCI 127 Race Theories

KATHLEEN P. HOWARD, Professor ROBERT S. PALEY, Professor PAUL R. RABLEN, Professor<sup>3</sup> THOMAS A. STEPHENSON, Professor<sup>4</sup> CHRISTOPHER R. GRAVES. Associate Professor STEPHEN T. MILLER, Associate Professor and Chair LILIYA A. YATSUNYK, Associate Professor DANIELA FERA, Assistant Professor SILVIA L. PORELLO, Visiting Assistant Professor KATHRYN R. RILEY, Visiting Assistant Professor and CFD Postdoctoral Fellow KYLE C. WAGNER, Visiting Assistant Professor VIRGINIA M. HECK, Senior Lecturer MARIA G. NEWPORT, Lecturer DONNA T. HALLEY, Senior Laboratory Instructor CAROLINE A. BURKHARD, Laboratory Instructor LORI P. SONNTAG, Laboratory Instructor IAN MCGARVEY, Scientific Instrumentation Specialist CATHERINE CINQUINA, Administrative Assistant

<sup>3</sup> Absent on leave, 2017-2018.

4 Absent on administrative leave, 2017-2018.

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 subdisciplines 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 HN and 022 during their first year at Swarthmore. During the sophomore year students can take 032 and 038 or 044 and 055 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 HN, 022 and one semester of a 40-level or 50-level course constitute a minimum set of prerequisites for enrollment in any

Chemistry and Biochemistry Department 100level seminar. In addition, individual seminars carry additional prerequisites so students should plan ahead accordingly.

## **Course Major in Chemistry**

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 010/010 HN	CHEM 022
CHEM 032	CHEM 038
CHEM 044	CHEM 055
CHEM 056	CHEM 057
One 100-level seminar	

## Ancillary Requirements (prerequisites for physical chemistry):

PHYS 003 and PHYS 004/004L (or 007, 008) MATH 034 (or equivalent)

## 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 two chemistry courses are 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 the considered judgment of the faculty; that includes the student's potential for satisfactory performance in advanced course work and their fulfillment of the comprehensive requirement.

## **Course Minor in Chemistry**

## 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 HN, 022, and 044 and two additional credits, at least one of which must be numbered 050 or higher. Chemistry 001 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 titled 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, that includes the student's potential for satisfactory performance in advanced course work.

## Honors Major in Chemistry

## Requirements

An Honors preparation in Chemistry consists of three seminars - two in Chemistry (see item 1, below) and one in a minor - and a research thesis (see item 2, below). If, after following the procedures for applying for research in the department, an on-campus research mentor cannot be found, an Honors candidate should consult with the department's class advisor to explore alternate means of meeting the requirement.

1. Honors chemistry majors must take at least two seminars (instead of only one required for the course major). These seminars (and their associated prerequisites) will serve as two of the honors preparations in the major.

2. Honors chemistry majors are expected to write a senior research thesis under the supervision of an on-campus research mentor. 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 two 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, that includes the student's potential for satisfactory performance in advanced course work. To be admitted as a major in the Honors Program, a student must present a minimum of two 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 in Chemistry

## Requirements

The honors minor in chemistry parallels the course minor, except that the program for an honors minor 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, that includes the student's potential for satisfactory performance in advanced course work. To be admitted as a minor in the Honors Program in chemistry, a student must present a minimum of two 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

## **Chemistry and Biochemistry**

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 HN CHEM 022

CHEM 032	CHEM 038
CHEM 044	CHEM 055
CHEM 056	CHEM 057

One biochemically related 100-level seminar in the Chemistry and Biochemistry Dept. (CHEM 106, 108, 110 or 112)

Biochemistry majors must also complete either (1) a sophomore-level Biology course (with lab) and a biochemically related advanced Biology seminar (with lab) or (2) two sophomore-level biology courses (with labs).

The sophomore level Biology classes for Biochemistry majors can be any Biology course numbered 010 through 039. 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 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.

## Changes in Requirements for the Class of 2019

Biochemistry majors in the Class of 2019 are expected to take CHEM 048 during their junior year, barring extraordinary circumstances (consult with Departmental Class Advisor for exceptions). 2019 Majors are required to take either CHEM 055 or CHEM 056; both are not required. Finally, majors in this class may take CHEM 058 (to be offered fall of 2018) in lieu of CHEM 057. For those opting to take CHEM 057, the pre-requisite of CHEM 056 will be waived for the spring 2018 offering of CHEM 057.

# Changes in Requirements for the Classes of 2020 and 2021

CHEM 010/010 HN	CHEM 022
CHEM 032	<b>CHEM 038</b>
CHEM 044 or 55	CHEM 048
CHEM 058	

One biochemically related 100-level seminar in the Chemistry and Biochemistry Dept. (CHEM 106, 108, 110 or 112, 118 or others with approval of Department)

Biochemistry majors must also complete either (1) a sophomore-level Biology course (with lab) and a biochemically related advanced Biology seminar (with lab) or (2) two sophomore-level biology courses (with labs).

The sophomore level Biology classes for Biochemistry majors can be any Biology course numbered 010 through 039. 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 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.

# Ancillary Requirements (prerequisites for physical chemistry):

PHYS 003/003L and PHYS 004/004L (or 007,008) MATH 034 (or equivalent)

MATH 034 (or equivalent)

## 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 Bioinorganic Chemistry (CHEM 106) or Biochemistry (CHEM 108) or Biophysical Chemistry (CHEM 110), Supramolecular Chemistry (CHEM 112), or Special Topics in Biochemistry and Its Applications (CHEM 118).

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 for this work.

## Requirements

In preparation for a major in chemical physics, students must complete by the end of the sophomore year: (1) CHEM 010/010 HN 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, 055, 056, and/or 057) or PHYS (013/015 and 017/018); (4) MATH 034. A chemical physics major will ordinarily include both semesters of physical chemistry (CHEM 044 and 055). 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 057 or PHYS 082 in order to satisfy the requirement.

*Example of a special major in chemical physics:* CHEM 022, 044, 055, 056, 057, 105; PHYS 007, 008, 013/015, 017/018 050, 111, 113.

## Acceptance Criteria

Acceptance criteria are the same as for chemistry majors, except that the faculty of the Chemistry and Biochemistry Department and Physics and Astronomy are both 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. If, after following the procedures for applying for research in the department, an on-campus research mentor cannot be found, an Honors candidate should consult with the department's class advisor to explore alternate means of meeting the requirement.

4. One additional preparation chosen from the Chemistry and Biochemistry Department or from the Physics and Astronomy Department.

## **Comprehensive Requirements**

## Chemistry

The senior comprehensive requirement 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 actual colloquium presentations. The department offers two routes for satisfying the second component of the comprehensive requirement:

1. 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.

2. 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:

a. The department will administer a minimum of seven exams during each academic year.

b. An exam will generally be administered during the week following a speaker's presentation.

c. The exams will be designed such that prepared students should be able to answer the question(s) in 60 minutes or less.

d. Satisfactory performance on any 4 of the exams constitutes completion of this component of the comprehensive requirement.

3. Finally, all students must attend at least one safety training session before the beginning of the senior year. These are offered one time per

semester during the academic year and one time during the summer research session.

## Biochemistry

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

## **Chemical Physics**

The comprehensive requirement for chemical physics majors is the same as for chemistry majors. Occasionally, however, and on a case-bycase 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.

## 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 can place into Foundations of Chemical Principles - Honors (Chemistry 010 HN). Students can use the Chemistry Placement Exam to place into Chemistry 010 HN 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, provided that they were taken after the student matriculated at Swarthmore. 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 department website for details.

## **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 Plan carefully and consult with their academic advisor.

## 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:

1. 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.

2. CHEM 096 (research thesis). A full year (two credits) of CHEM 096 corresponds to a research thesis for course majors.

3. 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) requires a second seminar and a research thesis through a full year of CHEM 096 or 180 (in addition to the minimum chemistry major).

## Chemistry and Biochemistry Courses

## CHEM 010. Foundations of Chemical Principles

Building upon a student's high school introduction to 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.

Natural sciences and engineering practicum. One laboratory period weekly. 1 credit.

Fall 2017. Yatsunyk, Riley.

## CHEM 010 HN. Foundations of Chemical Principles - Honors

Topics will be drawn from the CHEM 010 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. Can only be taken as either a first or second year student. Prerequisite: Performance on the departmental placement examination taken the week prior to the start of classes of a student's first-year at Swarthmore.

Natural sciences and engineering practicum. One laboratory period weekly. 1 credit.

Fall 2017. Staff.

## **CHEM 015. Environmental Chemistry**

The course covers selected aspects of atmospheric chemistry, aquatic chemistry, and soil chemistry. There will be a specific focus on the environmentally important element cycles for C, N, O, P, and S in the absence and presence of current human activity. The chemistry of organic pollutants across the three zones will also be examined. The course content will involve a discussion of relevant current events. Prerequisite: CHEM 010 or CHEM 010 HN; or discretion of the instructor.

Natural sciences and engineering practicum. One laboratory period weekly. 1 credit. Eligible for ENVS

Spring 2018. Graves.

## 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. Prerequisite: CHEM 010 or CHEM 010 HN. Natural sciences and engineering practicum. One laboratory period weekly. 1 credit.

Spring 2018. Staff.

## 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. Prerequisite: CHEM 022. Natural sciences and engineering practicum. One laboratory period weekly. 1 credit. Fall 2017. 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.

Prerequisite: CHEM 032.

Natural sciences and engineering practicum. One laboratory period weekly. 1 credit. Spring 2018. Staff.

# 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. Prerequisite: CHEM 010 CHEM 010 HN; CHEM 022; MATH 025 (or MATH 026); and PHYS 003 and PHYS 004 (or PHYS 003L, PHYS 004L, or PHYS 007, PHYS 008). Prior enrollment in MATH 034 (or equivalent) is recommended. Natural sciences and engineering practicum. One laboratory period weekly. 1 credit. Fall 2017. Howard.

## CHEM 048. Biological Chemistry II

A continuation of CHEM 038. More advanced aspects of proteins, nucleic acids, and metabolism will be covered along with an introduction to the structure, function and chemistry of carbohydrates and lipids. Additional topics include the transport of molecules and signals across and within membranes.

Prerequisite: CHEM 038

Natural sciences and engineering.

1 credit. Fall 2017. Fera.

# CHEM 055. 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. Prerequisite: CHEM 010 CHEM 010 HN; PHYS 003, PHYS 004 (or PHYS 003L, PHYS 004L or PHYS 007, PHYS 008) and MATH 034 (or equivalent). Natural sciences and engineering. 1 credit.

Spring 2018. Staff.

## CHEM 056. Inorganic Chemistry

A study of the structure, bonding, and reactivity of inorganic compounds with emphasis on the transition metals. Included in the syllabus are discussions of crystal and ligand field theories, organometallic chemistry, and bioinorganic chemistry.

Prerequisite: Four prior semesters of college chemistry or discretion of the instructor. Natural sciences and engineering. 1 credit. Fall 2017. Graves

Fall 2017. Graves.

## CHEM 057. Advanced Integrated Experimental Chemistry

Integrated experimental projects incorporating analytical, inorganic, physical, and biochemistry methods. In the absence of extenuating circumstances, it is strongly recommended that this course be taken as a junior.

Prerequisite: CHEM 044, CHEM 056 must have already been completed or taken as a co-requisite. Natural sciences and engineering practicum. Writing course.

Laboratory course. 1 credit. Spring 2018. Staff.

## CHEM 058. Advanced Experimental Biological Chemistry

Experimental projects will build upon fundamental laboratory techniques acquired in earlier courses and focus on recombinant DNA technology, biochemical and structural biology methods to obtain information about biological macromolecules. Students will gain experience in experimental design and data analysis while exploring numerous classical and modern experimental techniques used in biochemistry research.

Prerequisite: CHEM 038; CHEM 048 must have already been completed or taken as a co-requisite.

Natural sciences and engineering. 1 credit.

## CHEM 093. Directed Reading

A program of literature study in a designated area of chemistry not usually covered by regular courses or seminars. Overseen by a chemistry faculty member. The student will present oral and written reports to the instructor. 0.5-1 credit.

## Seminars

Students should note that completion of CHEM 010/010 HN, 022, and one semester of a 40-level or 50-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 or 50-level chemistry course be completed prior to enrollment in a seminar. Individual seminars carry additional prerequisites, as listed here.

## CHEM 102. Topics in Synthetic 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.

Prerequisite: CHEM 032 and CHEM 044, CHEM 055 or CHEM 056.

Natural sciences and engineering. 1 credit.

## 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.

Prerequisite: CHEM 044, MATH 034 (or equivalent). Some familiarity with linear algebra will be useful.

Natural sciences and engineering. 1 credit.

## 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

# **Chemistry and Biochemistry**

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. Prerequisite: CHEM 038 and CHEM 056. Natural sciences and engineering. 1 credit.

## CHEM 107. Topics in Surface Chemistry and Surface Analysis

The ability to design and specifically modify surfaces at the molecular level has enabled the miniaturization of many technologies. Topics will include methods to fabricate micropatterned surfaces and techniques used to characterize surfaces chemically and spatially using microscopy and surface spectroscopies. Material will be drawn both from current literature and textbook sources.

Prerequisite: CHEM 044 or CHEM 055. Natural sciences and engineering. 1 credit. Spring 2018. Wagner.

## 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. Prerequisite: CHEM 038, CHEM 044 or CHEM 055.

Natural sciences and engineering. 1 credit.

## 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 CHEM 055.

Natural sciences and engineering. 1 credit.

#### CHEM 112. Topics in Supramolecular Chemistry

This course will focus on supramolecular chemistry as related to nanotechnology, logic gates, drug delivery, and novel materials. We will start with the principles of supramolecular chemistry covering the works of the Nobel Prize winner Jean-Marie Lehn considered by some to be the "Father of Supramolecular Chemistry". Major part of the course will focus on unusual DNA structures, DNA assemblies, and DNA-based nanomaterial (including DNA origami) as well as DNA nanomachines. The other part of the course will cover topics selected by students according to their interests.

Prerequisite: CHEM 038, CHEM 044 Of CHEM 055

Natural sciences and engineering. 1 credit. Fall 2017. Yatsunyk.

#### CHEM 118. Special Topics in Biochemistry and Its Applications

This course will address selected topics of interest in the field of biochemistry, which may include protein-protein and protein-nucleic acid recognition, viruses, immunoglobulins, signal transduction, and structure-based drug design. Different experimental approaches, as well as the atomic and physical properties of different biological macromolecules and their complexes, will be analyzed and evaluated in the context of human disease development and research. Material will largely be drawn from the primary literature and students will read, evaluate and discuss scientific papers critically.

Prerequisite: CHEM 038 and either CHEM 044 or CHEM 055.

Natural sciences and engineering. 1 credit.

Spring 2018. Fera.

## 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 faculty members. Students who propose to take this course should consult with the faculty 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.

0.5-1 credit. Fall 2017. Staff. Spring 2018. 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. Fall 2017. Staff. Spring 2018. Staff.

## CHEM 180. Honors Research

Thesis An opportunity for students in the External Examination Program to participate in research with individual faculty 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. Fall 2017. Staff. Spring 2018. Staff. ROSARIA MUNSON, J. Archer and Helen C. Turner Professor WILLIAM N. TURPIN, Professor<sup>2</sup> GRACE LEDBETTER, Associate Professor and Chair JEREMY LEFKOWITZ, Associate Professor MARILYN EVANS, Visiting Assistant Professor DEBORAH SLOMAN, Administrative Assistant

<sup>2</sup> Absent on leave, spring 2018.

The field of Classics is devoted to the study of the cultures of the ancient Greeks and Romans. The curriculum includes training in the Greek and Latin languages at the Elementary, Intermediate, and Seminar levels. In addition, the department offers a range of courses on the history, literature, philosophy, religion, and cultural life of antiquity, including classes that explore the reception of the Classical past in later periods up to the present day. The rigorous training in Greek and Latin that is the hallmark of Swarthmore's Classics program has meant that the department enjoys remarkable success in producing students who go on to become leaders in the field. But because it is a truly interdisciplinary field, Classics also appeals to students with a wide variety of interests and career goals.

## The Academic Program

Greek, Latin, classical studies, and ancient history may be a major or minor subject in either the Course or the Honors Program. Three of these majors (Greek, Latin, and ancient history) require advanced work in one of the original languages, while a major or minor in classical studies and a minor in ancient history encourage but do not require language study. Acceptance into one of the majors is dependent on promising work in relevant courses (normally indicated by A's and B's).

## **Course Major**

**Greek:** 8.5 credits required, including 0.5-credit senior course study (see below). Two credits must come from an honors seminar in Greek.

Latin: 8.5 credits required, including 0.5-credit senior course study (see below). Two credits must come from an honors seminar in Latin.

**Classical Studies:** 8.5 credits in Greek, Latin, classical studies or ancient history including 0.5-credit senior course study (see below). Two credits must come from a double-credit Classical Studies Capstone Seminar. Other departments on campus offer courses focused on aspects of classical antiquity (e.g. art history, philosophy, political science), and usually these will count toward completion of the major; students are advised to consult the chair for an accurate list of such courses. For 2016-2017, these additional courses are ENGL 009E FYS:Narcissus and the History of Reflection; PHIL 020/CLST 020 Plato and his Modern Readers; PHIL 102 Ancient Philosophy;

POLS 011 Ancient Political Theory; POLS 100 Ancient Political Theory; RELG 057/LING007 Hebrew Text Study I; and RELG 059/LING010 Hebrew Text Study II.

Ancient History: A major in ancient history consists of four ancient history courses (ANCH 031, 032, 042, 044, 056, or 066), four credits in Greek or Latin, two of which must be from an honors seminar, and 0.5-credit senior course study. A second seminar in Latin or Greek can be substituted for two ancient history courses.

## **Course Minor**

Greek: 5 credits in Greek.

Latin: 5 credits in Latin.

**Classical Studies:** 5 credits in Greek, Latin, classical studies or ancient history

Ancient History: 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.

## Culminating Exercise/Senior Course Study

The culminating experience for course majors in Greek, Latin, classical studies, and ancient history is a 0.5-credit senior course study (GREK 098, LATN 098, CLST 098, ANCH 098). This independent study will be taken in the senior year to prepare for a graded oral exam taken in the spring with the Classics faculty. The oral exam will be based on a 2-credit seminar the student has completed. The students will submit their final exams and a paper from the seminars, which may be revised. The oral exam focus on the seminars as a whole as well as on the papers and written exams submitted. Enrollment in senior course study will not prevent enrollment in a standard 4 credit course load.

## **Honors Program in Classics**

Greek and Latin: 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.

**Classical Studies:** Honors majors will complete 8 credits in Greek, Latin, classical studies, or ancient history. They must complete three 2-credit units of study, of which at least one must a double-credit Classical Studies Capstone Seminar. Preparation for the honors exam will consist of the three 2-credit units of study. Minors will complete 5 credits in Greek, Latin, classical studies, or ancient history including a Classical Studies Capstone Seminar. The Classical Studies Capstone Seminar will serve as the honors preparation for the minor.

Ancient History: 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 Honors Study

All honors 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 2,000-3,000 words as an appropriate guideline (4,000 words is the senior honors limit set by the College). 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 (threehour) written and (one-hour) 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. However, the mode of external assessment for Classical Studies honors minors will be a three-hour written exam and oral exam on the double-credit Capstone Seminar.

## Advanced Placement/International Baccalaureate Credit

The department will grant one credit (only) for one or more grades of 5 on the Latin AP, or the IB equivalent. This credit may be counted toward the major or minor in Latin or CLST.

## **Off-Campus Study**

A semester of off-campus study is usually possible for 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.

## **Research and Summer Study**

The department often sponsors students in independent summer research, often 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, Ireland. The department has also supported students participating in archeological excavations of classical sites, including in recent years the Anglo-American Project at Pompeii and the SMU / Franklin and Marshall Field School at Poggio Colla in Tuscany.

## Life After Swarthmore

Many 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. In recent years Classics majors have been admitted to graduate programs at UNC-Chapel Hill, Penn, CUNY Graduate Center, Yale, Harvard, Duke, Princeton, University of Chicago, and Stanford. 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. Most majors and minors 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.

## **Classics Courses**

## Greek

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

Students who start in the GREK 001-002 sequence must pass 002 to receive credit for GREK 001. Students learn the basics of the language and are introduced to the culture and thought of the Greeks. The course provides a selection of readings from the most important Greek authors, including Herodotus, Thucydides, Sophocles, Euripides, and Plato. The course meets four times a week.

Year-long course. Humanities. 1.5 credits each. Fall 2017. Lefkowitz. Spring 2018. Evans.

## GREK 011. Plato and Socratic Irony

This course will focus on one or more of the Socratic dialogues of Plato in Greek. Emphasis will be placed on developing skills in reading and composing Greek, and also on the analysis of Plato's characteristic literary techniques and philosophical thought. The course will include a systematic review of grammar, syntax, and vocabulary. GREK 011 is normally taken after GREK 002

Humanities. 1 credit. Fall 2017. Evans.

## GREK 012. Homer's Iliad

This course examines the literary, historical, and linguistic significance of omer's *Iliad*. Selections from the poem are read in Greek and the entire poem is read in translation. Humanities.

1 credit.

# GREK 013. Introduction to Plato's Republic

The main focus will be on reading Book I of the *Republic* in Greek, giving sustained attention Greek grammar and vocabulary. We will also read the rest of the *Republic* in English, and consider select problems of interpretation, such as the role of Plato's guardians," the place of poetry, and Plato's purpose in exploring an "ideal state." The course is intended for students who have completed a first year of classical Greek, or the equivalent in High School or summer courses. Humanities.

1 credit.

## **GREK 015. Sophocles**

In Sophocles' *Ajax*, Achilles is dead and the prize of his arms has been awarded to Odysseus. Can the hero withstand being passed over as 'the best of the Achaens'? Can he accept that in a political community everything is in flux and friends become enemies, and enemies friends? We will be reading this tragedy in Greek, paying great attention to grammar and style. Humanities. 1 credit. Spring 2018. Munson.

#### GREK 091. Attachment: Classical Studies Capstone Seminar

Students read texts in Greek that complement a Classical Studies Capstone Seminar. Humanities. 1 credit.

## **GREK 093. Directed Reading**

Independent work for advanced students under the supervision of an instructor. Interested students should contact the chair as soon as possible concerning possible authors and topics. 1 credit.

## **GREK 098. Senior Course Study**

Independent study taken normally in the spring of senior year by course majors. Students will prepare for a graded oral exam held in the spring with department faculty. The exam will be based on any two-credit unit of study within the major (Honors seminar or course plus attachment), with students submitting their final exam and a paper, which can be revised.

0.5 credit.

Spring 2018. Ledbetter.

## Latin

## LATN 001, 002. Intensive First-Year Latin

Students who start in the LATN 001-002 sequence must pass 002 to receive credit for 001.Students learn the basics of the language, with readings drawn from Plautus, Cicero, Sallus, Martial, the emperor Augustus, and Catullus. The course meets four times a week.

LATN 001 offered in the fall only, LATN 002 offered in the spring only. Humanities. 1.5 credits each. Fall 2017. Turpin.

Spring 2018. Morton.

#### LATN 011. Lyric, Pastoral, and Elegiac Poetry

This course is intended for students who have completed Intensive First Year Latin (Latin 001-002) or the equivalent in summer programs or high school. Readings will be drawn from such authors as Catullus, Horace, Vergil, Propertius and Ovid. Students will read selected modern criticism and will develop interpretative as well as linguistic skills.

Humanities. 1 credit. Fall 2017. Munson.

# LATN 013. Tradition and Transformation in the Roman Empire

Selected readings by the poet Ovid. opics 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.

#### 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.

## 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.

## 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. Spring 2018. Evans.

## LATN 021. Republican Literature

In this course, we will be reading Book 1 of the Ab Urbe Condita by Livy as an example of Roman historiography in the Late Republic and Early Empire. The course will view the text both as a problematic document for Rome's earliest history but also as evidence for Livy's own age in the early Augustan regime. Humanities.

## 1 credit.

## 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.

Humanities. Writing course. 1 credit.

# LATN 024. Latin Poetry and the Roman Revolution

The transformation of the Roman Republic into the monarchy of Augustus and the emperors was accompanied by a similar transformation in Roman poetry. In place of the staunch independence of Lucretius and the outrageous irreverence of Catullus, the new poets Propertius, Horace, and Vergil wrote poetry that responded directly or indirectly to the new political world. This course will explore one or more of these poets in depth, both within their political context and within the broader literary tradition. Students will read modern scholarly criticism, and develop their own critical approaches to writing about Latin poetry. They will also review basic Latin morphology and syntax, and build a stronger Latin vocabulary. The course is suitable for those with 3-4 years of High School Latin, or 1-2 years of Latin in college. Humanities. Writing course. 1 credit.

# 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. Humanities. Writing course. 1 credit.

## LATN 027. Gender and Sexuality in Rome

This course will focus on Latin texts that reflect the sexual attitudes and behaviors of the ancient Romans and the gender roles that both shaped and were shaped by those attitudes. Among other topics, we will explore the roman institutions of marriage and the family. Conceptions of femininity and masculinity, and attitudes toward homosexuality. We will also engage with recent scholarship on gender and sexuality in antiquity from a wide range of critical perspectives. Our Latin texts will be drawn from several different genres, including graffiti, comedy, satire, love poetry, epic, letters, history and inscriptions. Humanities.

## LATN 028. Apuleius

Ready to be shocked, perplexed, and surprised at every turn? Try Apuleius' *Metamorphoses* (or *Asinus Aureus*), one of the earliest novels in Western literature. We will read the whole of this unconventional and mysterious work in English and books I and III in Latin, paying close attention to grammar, style, narratology, issues of genre and cultural context. Assignments will include articles dealing with literary criticism and background of the work.

## LATN 029. Caligula and Claudius

This is an advanced Latin course, intended for students with one or more intermediate Latin courses at the college level, or c. 4 years of Latin in high school. The emperor Gaius Caligula, famous for considering his favorite racehorse for the office of consul, raises urgent questions about what we consider normal in our leaders. The emperor Claudius, made generally famous by the classic TV series "I Claudius," presents similar questions. He was a transformative figure in Roman imperial history, responsible for the creation of a civil service, expansion of the Roman citizenship, and the conquest of Britain. But he also had medical problems, and made some spectacularly inappropriate marriages. The principal Latin texts will be Suetonius' Life of Gaius Caligula, Tacitus' bitter account of Claudius in his Annals, and selected documents (inscriptions and Latin papyri). We will also read Seneca's exposition of Stoic ideals in his de Providentia, and Seneca's (?) Apocolocyntosis, a spoof account of Claudius' posthumous journey to heaven.

Can serve as an honors preparation when combined with a one credit attachment. Humanities. Writing course. 1 credit. Fall 2017. Turpin.

## LATN 029A. Attachment: Caligula and Claudius

Attachment to LATN 029 Caligula and Claudius (see LATN 029 for course description). Humanities. Writing course. 1 credit. Fall 2017. Turpin.

## LATN 030. Advanced Survey of Latin Poetry

The poems in this course will be chosen in consultation with participants. Depending on interest, texts to be read in Latin may include Catullus, "The Marriage of Peleus and Thetis" and "The Lock of Berenice"; Lucretius; Vergil, Eclogues or Georgics; Ovid, esp. Ars Amatoria; the Pervigilum Veneris; selections from the Anthologia Latina; selections fro the Carmina Burana or other medieval texts. Students will read modern critical scholarship and write a number of critical essays. Students interested in this course should contact the instructor, preferably before the start of classes.

Prerequisite: Students should have completed one or two intermediate Latin courses at the college level, or the equivalent in high school (e.g. successful completion of the AP or IB programs). Humanities.

Writing course. 1 credit.

## LATN 031. Latin Rhetoric & History

This is an advanced intermediate course suitable for students with two or more courses of Latin at the intermediate level (or equivalent). Texts to be read in Latin may include Tacitus, Agricola and Annals (selections), Suetonius, Sallust, or Cicero. In addition, we will read certain rhetorical texts in translation, e.g. Cicero, Quintilian, or the Auctor and Herennium. This course is NOT a writing course.

Prerequisite: Two or more courses of Latin at the intermediate level (or equivalent) Humanities.

## LATN 032. Latin Satire

This course will focus on the Latin satirical poetry of Horace and Juvenal. We will also read Greek and Latin texts in English (e.g. Aristophanes, Plautus, Terence, Lucian), to explore ancient ideas about humor in general and literary characters in particular. The course is intended for students at the advanced intermediate level in Latin, e.g. a 5 on the Latin AP or one or two intermediate Latin courses at the college level. For questions about placement contact the instructor. Prerequisite: Please see course description. Humanities.

1 credit.

## LATN 050. The Age of Nero

This course will explore Latin texts from the circle of Nero, such as Petronius' Satyrica and Seneca's De Providentia. The Neronian texts will be complemented by Tacitus' later account f the period in his Annales. Selected Latin texts will be supplemented by further reading in English translation. The course will explore the events and the ethos of Nero's regime, including his dramatic matricide, his interesting hobbies, his disastrous marriages, the Great Fire of Rome, the scapegoating of Christians, the Pisonian Conspiracy, and the "Stoic Opposition." Students should have completed one or two intermediate Latin courses at the college level, or the equivalent in High School (e.g. successful completion of the AP or IB programs). The course may be taken in conjunction with an attachment (Latin 51A) to create a two credit honors preparation. Humanities. 1 credit.

## LATN 091. Attachment: Classical Studies Capstone Seminar

Students read texts in Latin that complement a Classical Studies Capstone Seminar. Humanities. 1 credit.

## LATN 093. Directed Reading

Independent work for advanced students under the supervision of an instructor. Interested students should contact the chair as soon as possible concerning possible authors and topics. 1 credit.

## LATN 098. Senior Course Study

Independent study taken normally in the spring of senior year by course majors. Students will prepare for a graded oral exam held in the spring with department faculty. The exam will be based on any two-credit unit of study within the major (Honors seminar or course plus attachment), with students submitting their final exam and a paper, which can be revised. 0.5 credit.

Spring 2018. Ledbetter.

## Ancient History

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

#### ANCH 010. First-Year Seminar: Slavery in Ancient Greece and Rome

According to the ancient historian M. I. Finley, there have been only five genuine slave societies, and two of them were ancient: those of classical Greece and Rome (the other three are the United States, the Caribbean and Brazil). Slavery was deeply woven into the fabric of everyday life in both societies, since it functioned as the key principle of social organization and the dominant mode of production. This course will explore slavery as a social, political, legal, economic and cultural institution in both the Greek and Roman worlds. In order to consider the impact of slavery on state and society in ancient Greece and Rome we will reflect on a number of topics, including the origins of slavery; the sources, number, legal status and treatment of slaves; ancient attitudes towards slaves and slavery; the family life of slaves; the many forms of slave labor; slave revolts and resistance; and manumission and freedom. We will also consider slavery in the American south to help us situate ancient slavery in a broader historical context. Social Sciences. Writing course.

1 credit. Fall 2017. Evans.

#### ANCH 023. Alexander and the Hellenistic World

The conquests of Alexander the Great (332-323 BCE) as far as Afghanistan and the Hindu Kush mark one of the great turning points of ancient history. In his wake, what it meant to be Greek was radically changed, and a new world and culture emerged. In this course, we start with the life and campaigns of the Macedonian King, before turning to the Hellenistic world of his successors, following events down to the rise of Rome. Along with the political narrative, the course will consider Hellenistic poetry and historiography, archaeology and architecture, and the documentary evidence for daily life. Social sciences.

1 credit.

# ANCH 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. Writing course. 1 credit.

Fall 2017. Munson.

## ANCH 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.

Social sciences. Writing course. 1 credit.

#### ANCH 035. History and Archaeology of Republican Rome

This course is an introduction to the history and archaeology of Rome from its early beginnings in the 9th century BCE to the establishment of the Roman Empire in the 1st century BCE. We begin with the pre-Roman inhabitants of central Italy who most influenced early Rome, continue with the foundation of the city and its growth as the leader of peninsular Italy and Mediterranean world, and end with the social turmoil of the late Republic and the establishment of the principate of Augustus. The course combines the study of Italy's rich archaeological record with a close reading of ancient texts including Plautus, Polybius, Plutarch, Cicero and Livy. Social sciences. 1 credit.

## ANCH 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.

Social sciences.

Writing course.

1 credit.

## ANCH 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.

Social sciences. Writing course. 1 credit.

# ANCH 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.

ANCH 044 (The Early Roman Empire) and RELG 004 (New Testament and Early Christianity) provide useful background.

Prerequisite: No Prerequisite exists, though CLAS 044 (Early Roman Empire) and RELG 004. New Testament and Early Christianity provide useful background.

Social sciences. Writing course.

1 credit.

## ANCH 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. Social sciences. Writing course. 1 credit. Spring 2018. Evans.

## ANCH 093. Directed Reading

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

## ANCH 098. Senior Course Study

Independent study taken normally in the spring of senior year by course majors. Students will prepare for a graded oral exam held in the spring with department faculty. The exam will be based on any two-credit unit of study within the major (Honors seminar or course plus attachment), with students submitting their final exam and a paper, which can be revised.

0.5 credit. Spring 2018. Ledbetter.

## ANCH 030. History and Archaeology of the Early Roman Empire

This course is an introduction to the history and archaeology of the Roman Empire from the fall of the Republic through the Antonine Age (50 BCE-192 CE). Major themes include the political, economic, social and cultural impact of the Roman Empire; the material, visual and spatial manifestations of power; the homogeneity and diversity of Roman imperial culture; and the changing relationship between the state and society. We will draw on a wide range of evidence to explore these themes, focusing mainly on the close reading of works of ancient literature and the study of ancient artifacts and monuments. Key authors include Petronius, Suetonius, Tacitus and Apuleius.

Social sciences. 1 credit.

## **Classical Studies**

## CLST 011. First Year Seminar: Talking Animals

Talking animals appear in diverse storytelling traditions in virtually all periods of recorded history. Often dismissed as nothing more than a playful device of children's literature, the granting of speech to voiceless animals is in fact a complex and potentially transgressive modification of the human-animal binary. What is it about talking animals that has proven so appealing to storytellers in such different cultural and historical contexts? Does the overt anthropomorphism of such representations preclude the possibility of serious ethical concern for real animals? This first-year seminar surveys the history and meanings of talking animals in ancient and modern storytelling traditions, from Aesop's fables to Disney films, from the Panchatantra to the graphic novels of Art Spiegelman. And we will go to the zoo.

Humanities. 1 credit. Spring 2018. Lefkowitz.

## CLST 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. Humanities.

Writing course.

1 credit.

## CLST 020. Plato and His Modern Readers

(Cross-listed as PHIL 020)

Plato's dialogues are complex works that require literary as well as philosophical analysis. While our primary aim will be to develop interpretations of the dialogues themselves, we will also view Plato through the lens of various modern and postmodern interpretations (e.g., Nietzsche, Heidegger, Derrida, Jung, Foucault, Irigaray, Rorty, Lacan, Nussbaum, Vlastos). Humanities. Writing course. 1 credit. Eligible for INTP

## CLST 025. Greek Myth in Opera and Ballet

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.

## CLST 036. Classical Mythology

What is a myth? How is myth different from fairy tale or fable? What is its connection to ritual and religion? What sets myth apart from history? In this survey of the mythology of Greco-Roman antiquity, we will investigate the diverse meanings of 'myth', its social functions, its origins, its history, and its contemporary relevance. Students will get a broad overview of Classical mythology through direct and close readings of primary sources (all in English translation), including such texts as Homer's *Odyssey*, plays by all three of the major Greek tragedians (Aeschylus, Sophocles, and Euripides), and Ovid's *Metamorphoses*. Our readings of ancient texts will be supplemented by study of ancient art and frequent investigations of modern responses to and theorizing of myth in diverse fields and media, including sociological, psychological, and philosophical treatises; modern poetry; visual arts; and film. Humanities. Writing course.

1 credit. Eligible for INTP Fall 2017. Lefkowitz.

## CLST 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. Humanities. Writing course.

1 credit.

## CLST 093. Directed Reading

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

## CLST 098. Senior Course Study

Independent study taken normally in the spring of senior year by course majors. Students will prepare for a graded oral exam held in the spring with department faculty. The exam will be based on any two-credit unit of study within the major (Honors seminar or course plus attachment), with students submitting their final exam and a paper, which can be revised. 0.5 credit.

Spring 2018. Ledbetter.

## CLST 104. Classical Studies Seminar: Ancient Storytelling and Fiction

This course will explore the origins, uses and genres of ancient Greek and Latin narratives in prose. We will be reading (in English translation) different types of fables, specimens of anecdotes, novelle, and myths embedded in the works of Herodotus, Xenophon, Plato, Plutarch and others, as well as the first representatives of the Westsern genre of the novel, such as the works of Petronius, Apuleius, Chariton, and Longus. With the help of narratological theory and parallels with modern narratives, we will especially pay attention to the voice of the narrator, the character of the narrate as inscribed in the text, and the different discourse techniques used for creating a narrative. We will also explore the ways in which a narrative advertises itself as a fiction, a piece of history, or a parable, and learn to recognize a narrative's rhetorical purpose and the more or less covert message it intends to convey. Humanities.

2 credits.

#### CLST 105. Classical Studies Capstone: The Classical in Art and Literature

Layers of representation, interpretation, and theoretical frameworks filter our view of Greco-Roman Antiquity, and continually reconfigure the meaning of the "classical". This seminar will examine the histories, texts, theories, and works of art through which the classical tradition continues to evolve. Topics and authors may include: Greek mythology in contemporary art and fiction, theories of mythology, adaptation studies, 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), antiquity in modernism. Humanities. 2 credits

#### CLST 106. Classical Studies Capstone: Dante: Christianity and the Classical Tradition

In the *Divina Commedia*, Dante adapts the Classical theme of the heroic journey to the Underworld to his task as a visionary poet and Christian prophet. We will read the *Inferno*, *Purgatorio*, and *Paradiso* in English translation, exploring its different levels of meaning and Dante's surprising reinterpretation of the ancient authors. We will reconstruct his world view in the broader context of Medieval culture: his thought on life, death, love, language, the visual arts, politics and history. Humanities

Humanitie 2 credits.

## **Honors Capstone Seminars**

#### **CLST 094.** Ancient Drama in Performance

What does it mean to study the performance of plays that were composed and staged more than two thousand years ago? How is this approach different from simply reading the texts? Focusing on Greek and Roman tragedy, comedy, and satyr plays (all of which we will read in English translation), we will examine approaches to ancient drama that emphasize its performance, including historical and cultural conditions; the physical realities of ancient theaters; staging conventions; acting and actors; and the various ways in which Greek and Roman plays are continually rediscovered and reinvented through modern performances on stage and screen. May be taken for 1 credit with permission from the instructor.

Humanities. 2 credits. Spring 2018. Lefkowitz.

#### CLST 104. Classical Studies Seminar: Ancient Storytelling and Fiction

This course will explore the origins, uses and genres of ancient Greek and Latin narratives in prose. We will be reading (in English translation) different types of fables, specimens of anecdotes, novelle, and myths embedded in the works of Herodotus, Xenophon, Plato, Plutarch and others, as well as the first representatives of the Westsern genre of the novel, such as the works of Petronius, Apuleius, Chariton, and Longus. With the help of narratological theory and parallels with modern narratives, we will especially pay attention to the voice of the narrator, the character of the narrate as inscribed in the text, and the different discourse techniques used for creating a narrative. We will also explore the ways in which a narrative advertises itself as a fiction, a piece of history, or a parable, and learn to recognize a narrative's rhetorical purpose and the more or less covert message it intends to convey. Humanities.

2 credits.

#### CLST 105. Classical Studies Capstone: The Classical in Art and Literature

Layers of representation, interpretation, and theoretical frameworks filter our view of Greco-Roman Antiquity, and continually reconfigure the meaning of the "classical". This seminar will examine the histories, texts, theories, and works of art through which the classical tradition continues to evolve. Topics and authors may include: Greek mythology in contemporary art and fiction, theories of mythology, adaptation studies, 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), antiquity in modernism. Humanities. 2 credits.

CLST 107. Capstone: Comparative Epic Humanities.

2 credits.

## **GREK 111. Greek Philosophers**

This seminar usually focuses on selected literary and philosophical topics in the Presocratics and Plato. Humanities.

2 credits. Fall 2017. Ledbetter.

## **GREK 112. Greek Epic**

This seminar studies either the entirety of Homer's *Odyssey* in Greek or most of the *Iliad*. Humanities. 2 credits. Spring 2018. Munson.

## **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. Humanities. Writing course. 2 credits.

## 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. Humanities.

2 credits.

## **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 so-called rise of the individual, political and performative contexts, and modern interpretive approaches. Humanities.

2 credits.

## 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. Humanities.

2 credits.

## LATN 103. Latin Epic

This seminar usually focuses on Vergil's *Aeneid*, although it may include other major Latin epics. Humanities. Writing course. 2 credits.

## 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. Humanities. Writing course. 2 credits.

## 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.

Humanities.

2 credits.

## 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?

Humanities.

2 credits.

## 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. Humanities.

Writing course.

2 credits.

## 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 post-classical European drama. Humanities.

2 credits.

## LATN 110. Roman Rhetoric

This seminar will focus on Roman rhetoric. We will read speeches delivered in the Roman Senate, before the popular assembly, or before juries. The principal author will be Cicero, but we will also read discussions of rhetorical theory and practice, both ancient and modern. In addition, students will have the opportunity to explore a number of topics related to ancient oratory and rhetoric, including (among others) public performance; theories of persuasion; the relationship between rhetoric and Roman law; Roman (and Greek) education practices; and the enduring influence of ancient rhetoric and oratory in the contemporary world. Humanities.

2 credits.

## **Cognitive Science**

DANIEL GRODNER (Psychology), Coordinator Anna Everetts (Administrative Assistant)

Committee: Alan Baker (Philosophy) Victor Barranco (Mathematics and Statistics) Peter Baumann (Philosophy) Stella Christie (Psychology) Frank Durgin (Psychology) Daniel Grodner (Psychology) K. David Harrison (Linguistics) Lisa Meeden (Computer Science) Lisa Payne (Psychology) Ameet Soni (Computer Science) Jonathan Washington (Linguistics) Matthew Zucker (Engineering)<sup>3</sup>

3 Absent on leave, 2017-2018.

The Cognitive Science Program has been developed to guide students who are interested in the interdisciplinary study of the mind, brain, and language, with emphases on formal structure, biological information processing, and computation. The program is designed to emphasize guided breadth across various disciplines that contribute to cognitive science as well as depth within a chosen discipline.

## The Academic Program

We conceive of cognitive science as a loose federation of six specific disciplines. The disciplines included are: artificial intelligence (including robotics), cognitive psychology, linguistics, mathematics and statistics, neuroscience, and philosophy. To demonstrate breadth, students majoring or minoring in cognitive science are required to complete credits in at least three of these six disciplines.

## **Course Minor**

Six credits are required for the minor. One of these is a required introductory course, COGS 001. The remaining 5 credits are to be distributed across three different disciplines of cognitive science. That is, 2 credits of listed courses, from 3 of the 6 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. 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.

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. Many more courses, taught on campus, are closely relevant to cognitive science. This list is subject to periodic re-evaluation.

In addition to fulfilling the 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 4 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**

Typically, the program for a special major in cognitive science involves fulfilling all requirements for the minor and then adding 4 or more cognitive science related courses including a thesis, bringing the total number of credits up to 10-12. Note that these additional credits may include courses not listed as eligible for the minor or major, subject to the approval of the program coordinator. Students who special major in cognitive science are normally required to do a 1-credit senior thesis (COGS 090) but may elect to complete a 2-credit thesis.

## Honors Special Major

An honors special major in cognitive science is possible. Students must fulfill all requirements for the minor and take four 2-credit honors preparations. One of these preparations is a Senior Honors Thesis (COGS 180). The other three preparations must be distributed across at least two disciplines within cognitive science. The nature of these honors preparations will be determined by the standard practices of the relevant department.

## **Thesis / Culminating Exercise**

Minors who wish to get formal research experience may choose to complete a 1-credit thesis or a 2-credit honors 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.

### **Cognitive Science 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? Non-distribution.

1 credit. Eligible for COGS Fall 2017. Staff.

#### 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.

Eligible for COGS Fall 2017. Staff.

#### COGS 092. Independent Study

1 credit. Eligible for COGS Fall 2017. Staff.

#### COGS 180. Senior Honors Thesis

2 credits. Eligible for COGS Fall 2017. Staff. The following courses may be counted for credit in the Cognitive Science Program. Descriptions of the courses can be found in each department's course listings in this catalog.

## Artificial Intelligence (Computer Science and Engineering)

CPSC 063. Artificial Intelligence+ CPSC 065. Natural Language Processing CPSC 068. Bioinformatics CPSC 081. Adaptive Robotics+ ENGR 027. Computer Vision ENGR 028. Mobile Robotics Cognitive Psychology PSYC 007. First-Year Seminar: Early Social Cognition PSYC 032. Perception+ PSYC 033. Cognitive Psychology+ PSYC 034. Psychology of Language+ PSYC 039. Developmental Psychology+ PSYC 106. Research Practicum in Cognitive Development PSYC 132. Perception, Cognition and the Embodied Mind Seminar PSYC 133. Metaphor and Mind Seminar PSYC 134. Seminar in Psycholinguistics Linguistics LING 040. Semantics+ LING 043. Morphology and the Lexicon LING 045. Phonetics and Phonology+ LING 050. Syntax+ LING 081. Semantics II LING 106. Seminar in Morphology LING 108. Semantics Seminar: Temporality and Modality Mathematics Two credits are required from a single mathematics sub-discipline. The sub-areas of mathematics and their eligible seminars and courses are the following: Algebra MATH 057. Topics in Algebra MATH 058. Number Theory MATH 067. Introduction to Modern Algebra MATH 077. Advanced Topics in Algebra MATH 102. Modern Algebra II Analysis MATH 034. Several-Variable Calculus MATH 044. Differential Equations MATH 053. Topics in Analysis MATH 054. Partial Differential Equations MATH 063. Introduction to Real Analysis MATH 073. Advanced Topics in Analysis MATH 101. Real Analysis II MATH 103. Complex Analysis Discrete Mathematics MATH 029. Discrete Mathematics MATH 046. Theory of Computation MATH 069. Combinatorics Geometry MATH 055. Topics in Geometry MATH 075. Advanced Topics in Geometry

## **Cognitive Science**

MATH 106. Advanced Topics in Geometry Statistics STAT 011. Statistical Methods I STAT 021. Statistical Methods II STAT 041. Topics in Applied Statistics STAT 051. Probability STAT 061. Mathematical Statistics I STAT 111. Mathematical Statistics II Topology MATH 104. Topology Neuroscience (Biology and Psychology) BIOL 022. Neurobiology+ BIOL 123. Learning and Memory PSYC 030. Behavioral Neuroscience PSYC 031. Cognitive Neuroscience+ PSYC 031A. Social, Cognitive and Affective Neuroscience+ PSYC 091. Special Topics in Behavioral Neuroscience PSYC 130. Seminar in Behavioral Neuroscience PSYC 131. Seminar in Cognitive Neuroscience PSYC 131A. Seminar in Psychology and Neuroscience: The Social Brain Philosophy PHIL 012A. Logic+ PHIL 012B. Logic+ PHIL 024. Theory of Knowledge PHIL 028. Philosophy of Language PHIL 031. Advanced Logic+ PHIL 086. Philosophy of Mind+ PHIL 113. Topics in Epistemology PHIL 116. Language and Meaning PHIL 118. Philosophy of Mind

+ Focus Courses

SIBELAN FORRESTER (Modern Languages and Literatures, Russian)<sup>1</sup>, Co-Coordinator EMILY FREY (Modern Languages and Literatures, Russian), Co-Coordinator TBA (Administrative Assistant)

Committee:

Khaled Al-Masri (Modern Languages and Literatures, Arabic) Elizabeth Bolton (English Literature)<sup>3</sup> Rachel Buurma (English Literature) Richard Eldridge (Philosophy, Aesthetics) William O. Gardner (Modern Languages and Literatures, Japanese) María Luisa Guardiola (Modern Languages and Literatures, Spanish) Alexandra Gueydan-Turek (Modern Languages and Literatures, French) Haili Kong (Modern Languages and Literatures, French) Haili Kong (Modern Languages and Literatures, French) Bols Rehak (Film and Media Studies) Hansjakob Werlen (Modern Languages and Literatures, German)

1 Absent on leave, fall 2017.

3 Absent on leave, 2017-2018.

The comparative literature major is administered by a Comparative Literature Committee, made up of the coordinator and faculty representing the Classics, English literature, Modern Languages and Literatures, Film and Media Studies, and Theater departments. 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 who are interested in literary critical research. This major is not for everyone: it 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, Modern Languages and Literatures, Film and Media Studies, and Theater departments. In Classics and Modern Languages and Literatures, only courses numbered 011 or above may count as constituents of the comparative literature major. Only one course in English Literature numbered ENGL 008A-Z and 009A-Z, may be counted toward the major.

## Major in Course

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 of specialization. The senior thesis (described in the section on "Thesis/Culminating Exercise" section, below) does not count toward these 10 credits.

Students working in French, German, or Spanish may propose one course in translation (or LITR

course) from that language. Because of the special demands of Arabic, Chinese, Japanese, and (to a lesser extent) Russian, students working in any of these languages may propose a program based on attachments (in Arabic, Chinese, Japanese or Russian) to literature courses taught in translation.

A 1- or 2-credit thesis of 35 to 40 pages for one credit, 50-60 pages for two credits, covering work in at least two languages (see "Thesis/Culminating Exercise," below).

An oral comprehensive examination, of 1 hour, during the final exam period of the senior year, based on the thesis and courses and seminars that the major comprises.

#### Application Process for the Honors Major and the Minor

Successful completion of an advanced literature course 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 B is required.

Students applying for the (Honors) 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 6- to 10-page writing sample from a previously completed course. The committee will then review the proposal and the essay to advise the student.

In lieu of a traditional course, the Comparative Literature Committee will consider proposals for one or more research papers written as course attachments.

## Honors Major

Four 2-credit preparations---3 seminars and a 2credit thesis of 50 to 60 pages---in at least two literatures in the original language. One of the preparations may be used as an independent minor (in Russian or Theater, 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.

A 3-hour written examination for each preparation, prepared by the external examiner, and a 30-minute oral based on the contents of the written examination, as well as an oral thesis examination with two Honors examiners

## **Honors Minor**

*Five credits* in two literatures in the original languages, with a minimum of 2 courses in each of the literatures.

*One 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 and minors will meet with the Coordinator of the Comparative Literature Program before the end of the junior year to review and assess the student's program.

At this time, the student will submit a general thesis outline, and will propose two faculty advisors 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.

The final draft of the thesis will be submitted no later than April 30 of the senior year, and it may be due earlier for Honors Majors.

## **Comparative Literature Courses**

**CPLT 096. Senior Thesis** 1 credit. Spring 2018. Staff.

**CPLT 180. Senior Honors Thesis** Spring 2018. Staff.

## Sample: Comparative Literature Course Major

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. *Focus: The Black Atlantic* (English and French) 1-credit thesis

FREN 014. Advanced French: La France et le monde francophone contemporains 1 FREN 045C. Le Monde francophone: Haitian Literature and Culture and the French D.O.M. SPAN 050. Afrocaribe: literatura y cultura visual ENGL 060. Early African American Print Cultures ENGL 061. Fictions of Black America ENGL 119. Black Cultural Studies

#### Sample: Comparative Literature Honors Major

*Focus: Myth in Film and Literature* (Classics and Japanese)

2-credit thesis

CLST 025. Greek Myth in Opera and Ballet CLST 036. Classical Mythology ENGL 009E. First-Year Seminar: Narcissus and the History of Reflection ENGL 046. Tolkien and Pullman and Their Literary Roots ENGL 071K. Lesbian Novels Since World War II FMST 020. Critical Theories of Film and Media FMST 090. Film and Media Studies Capstone JPNS 024. Japanese Film and Animation JPNS 074. Japanese Popular Culture and Contemporary Media RUSS 047. Russian Fairy Tales

#### Sample: Comparative Literature Honors Minor

*Focus: Modernism* (English and Spanish) 2-credit thesis SPAN 023. Introducción a la literatura latinoamericana ENGL 045. Modern British Poetry ENGL 078. Modernism GMST 091. Contemporary German Literature/Gegenwartsliteratur

## **Computer Science**

RICHARD WICENTOWSKI, Professor and Chair JOSHUA BRODY, Assistant Professor<sup>3</sup> ANDREW DANNER, Associate Professor LILA FONTES. Assistant Professor LISA MEEDEN, Professor TIA NEWHALL, Professor AMEET SONI, Assistant Professor KEVIN WEBB, Assistant Professor MARTIN GAGNÉ, Visiting Assistant Professor SARA MATHIESON, Visiting Assistant Professor ZACHARY PALMER, Visiting Assistant Professor BRYCE WIEDENBECK, Visiting Assistant Professor LAURI COURTENAY, Academic Support Coordinator JEFFREY KNERR, System Administrator and Visiting Instructor DAVID MAUSKOP, Lecturer BRIDGET M. ROTHERA, Administrative Assistant

3 Absent on leave, 2017-2018.

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 031 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 031: Introduction to Computer Systems 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 031 or CPSC 035 and have not taken CPSC 021 should take the placement exam and also contact the department placement coordinator about placement. Students or advisors who want more advice on placement in computer science faculty.

#### 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 five courses approved as cognitive science courses: CPSC 063 (Artificial Intelligence), CPSC 065 (Natural Language Processing), CPSC 066 (Machine Learning), CPSC 068 (Bioinformatics)and CPSC 081 (Adaptive Robotics). Students with an interest in Cognitive Science are encouraged to consider COGS 001 (Introduction to Cognitive Science).

## **Computer 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).

#### Application Process 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 031 or 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 will be re-evaluated upon completion of additional computer science courses.

### **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, substitute one course from any Group listed below.

b. CPSC 031, CPSC 035 and CPSC 097.

c. One course from each of the following three groups:

Group 1: CPSC 041, CPSC 046 or CPSC 049. Group 2: CPSC 043, CPSC 044, CPSC 045, CPSC 075, CPSC 087 or CPSC 089.

Group 3: CPSC 040, CPSC 063, CPSC 065, CPSC 066, CPSC 068, CPSC 071, CPSC 073 or CPSC 081.

d. Two CPSC courses numbered above CPSC 035, must be different than the choices in part c.

2. Two MATH/STAT courses at the level of Linear Algebra or above (Discrete Math and Linear Algebra are recommended). CPSC 046/MATH 046 may not be used to satisfy the Math requirement.

To be eligible for a computer science major, a student must have at least a B- average in the introductory courses (CPSC 021, CPSC 031 and CPSC 035). In addition, students must have at least a C in CPSC 031 and CPSC 035 to be eligible to take upper-level computer science courses. Students who have not met this criterion may re-take CPSC 031 or CPSC 035 to obtain the necessary foundation for success in upper-level courses. Students who are deferred have one year

from the date of their application to satisfy these requirements.

### **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, substitute one course from any Group listed below.)

b. CPSC 031.

c. CPSC 035.

d. Two upper-level courses drawn from different groups:

Group 1: CPSC 041, CPSC 046 or CPSC 049. Group 2: CPSC 043, CPSC 044, CPSC 045,

CPSC 075, CPSC 087 or CPSC 089. Group 3: CPSC 040, CPSC 063, CPSC 065, CPSC 066, CPSC 068, CPSC 068, CPSC 071, CPSC 073 or CPSC 081.

e. One CPSC course numbered above CPSC 035.

2. One MATH/STAT course at the level of Linear Algebra or above (Discrete Math recommended). CPSC 046/MATH 046 may not be used to satisfy the Math requirement.

The requirements for acceptance into the minor are the same as for acceptance into the major.

### **Honors Major**

An honors major in computer science must complete the regular course major requirements. The honors major includes three honors preparations: an honors thesis and two separate honors preparations of two related courses each (see below).

The following will be submitted to external examiners for evaluation:

Two 2-credit preparations to be selected from combinations of upper-level courses listed under Approved Preparations. Each preparation will be examined by a 3-hour written examination and an oral examination. The exams will focus on a single course in each preparation (the focus course), with the second course (the breadth course) providing additional background in the general area of the focus course.

The two 2-credit preparations must include at least 3 distinct courses. In certain circumstances, the Computer Science Department may be willing to consider other groupings of courses, seminars, or the inclusion of a specific Special Topics course (CS91). These are approved on a case-by-case basis by the chair. Students are required to petition for approval by September 15 of their senior year. 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 honors thesis to be read by an external examiner and examined in an oral examination. 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, CPSC 031 and CPSC 035, and at least one Group 1 course.

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 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. Completed 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 completion of the course minor and one 2-credit preparation.

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 preparation will be examined by a 3-hour written examination and an oral examination. The exams will focus on a single course in each preparation (the focus course), with the second course (the breadth course) providing additional background in the general area of the focus course. In certain circumstances, the Computer Science Department may be willing to consider other groupings of courses, seminars, or the inclusion of a specific Special Topics course (CS91). These are approved on a case-by-case basis by the chair. Students are required to petition for approval by September 15 of their senior year. 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:

 Have a B+ average in all computer science courses completed by the end of the junior year.
 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

From any of the following sets of course groupings, create two 2-credit honors preparations: one focus course and one breadth course selected from the same set. For example, CPSC 41 and 46 are a valid course preparation pairing, but CPSC 41 and 68 are not. Honors majors must have at least three distinct courses in their set of two 2credit preparations (e.g. CPSC 63 and 65 can be used as one preparation and 65 and 68 as the other, but 63 and 65 as one prep and 65 and 63 as the other is not allowed). Honors majors may choose both of their 2-credit preparations from the same set of courses, or may choose one 2-credit preparation from one set and the other from a different set.

The following are the approved sets of course groupings. These may not all be available to all students because of the faculty's schedules.

Set 0: CPSC 41 Algorithms CPSC 46 Theory of Computation CPSC 49 Probabilistic Method Set 1: CPSC 63 Artificial Intelligence CPSC 65 Natural Language Processing CPSC 66 Machine Learning CPSC 68 Bioinformatics CPSC 81 Adaptive Robotics Set 2: CPSC 43 Computer Networks CPSC 44 Database Systems CPSC 45 Operating Systems CPSC 87 Parallel and Distributed Computing CPSC 89 Cloud Computing Set 3: CPSC 37 Structure and Interpretation of Computer Programs CPSC 73 Programming Languages CPSC 75 Compilers Set 4: CPSC 40 Computer Graphics CPSC 87 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.

## **Computer Science Placement**

The computer science placement exam is required for all students who think that they may place out of the introductory computer science course (CPSC 21). Students who want to start with CPSC 21 do not need to take the placement exam. Students who think they may place out of both CPSC 21 and CPSC 35 should take the placement exam and also contact the department placement coordinator about their placement.

The placement exam is offered during fall orientation week. Incoming first year students should take it then. Students who do not take it during orientation can contact the CS main office to schedule a time to take the exam. Students who do not take CS21 must take the placement exam before registering for CS31 or CS35. For more information see:

https://www.cs.swarthmore.edu/program/placemen t\_exam.html

## **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 must notify the department after completion of one computer science course in order to receive AP credit. 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 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.

## **Computer Science Courses**

## CPSC 021. Introduction to Computer Science

This 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 object-oriented programming and data structures allows students to construct correct, understandable, and efficient algorithms. CPSC 031 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.

Prerequisite: No Prerequisites.

Natural sciences and engineering practicum. Lab work required, programming intensive. 1 credit.

Eligible for DGHU Fall 2017. Wicentowski. Knerr. Mathieson. Spring 2018. Staff

## CPSC 031. Introduction to Computer Systems

This course is a broad introduction to computer science that focuses on how a computer works and

how programs run on computers. We examine the hardware and software components required to go from a program expressed in a high-level programming language like C or Python to the computer actually running the program. This course takes a bottom-up approach to discovering how a computer works. Topics include theoretical models of computation, data representation, machine organization, assembly and machine code, memory, I/O, the stack, the operating system, compilers and interpreters, processes and threads, and synchronization. This course also introduces parallel and distributed computing with a specific focus on shared memory parallelism for multicore and SMP systems.

Prerequisite: CPSC 021 or equivalent. Natural sciences and engineering practicum. Lab work required. 1 credit.

Fall 2017. Newhall. Spring 2018. Staff

#### 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 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.

Natural sciences and engineering practicum. Lab work required.

1 credit.

Fall 2017. Danner Gagne. Spring 2018. Staff.

#### 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 (non-geometric) modeling, texture mapping, and animation. Labs will explore various tools for rendering graphics, including pixel buffers, OpenGL, shading languages, and general purpose GPU computing.

Prerequisite: CPSC 031, CPSC 035 and Linear Algebra required or permission of the instructor. Corequisite: (Linear Algebra may be taken concurrently.).

Natural sciences and engineering practicum.

Group 3 course. Lab work required. 1 credit. Eligible for DGHU

#### 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. Next offered when staffing permits. Proceedings of the staffing permits.

Prerequisite: CPSC 035 required. Mathematics background at the level of Linear Algebra or higher is required (may be taken concurrently). Natural science and engineering. Group 1 course. Lab work required. 1 credit. Eligible for DGHU

Fall 2017. Fontes. Wiedenbeck.

#### **CPSC 043. Computer Networks**

This course covers the design, implementation and applications of computer networks, primarily focused on the protocols that enable the Internet and network applications. Additionally, this course will cover network security, such as viruses, worms, and botnets. Topics will include: data communication theory; packet-switched routing; the Internet and its protocols; socket and network application programming; overlays and P2P networks; and network security. Prerequisite: CPSC 031 and CPSC 035 required. Natural science and engineering. Group 2 course. Lab work required. 1 credit.

Fall 2017. Webb.

#### **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 031 and CPSC 035 required. Natural science and engineering. Group 2 course. Lab work required. 1 credit.

#### 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 031 and CPSC 035 required. Natural sciences and engineering practicum.

Group 2 course. Lab work required. 1 credit.

#### 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. Next offered when staffing permits. Prerequisite: CPSC 035 required. Mathematics

hackground at the level of Linear Algebra or higher is required (may be taken concurrently). Natural science and engineering.

Group 1 course. Lab work required.

1 credit.

Spring 2018. Staff.

#### CPSC 052. Principles of Computer Architecture

(Cross-listed as ENGR 025) Natural sciences and engineering practicum. 1 credit.

#### 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 typically include neural networks, decision trees, genetic algorithms, and reinforcement techniques. Prerequisite: CPSC 035 required. Natural sciences and engineering practicum. Group 3 course. Lab work required. 1 credit. Eligible for COGS Spring 2018. Staff.

#### 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. Natural science and engineering. Group 3 course. Lab work required. 1 credit. Eligible for COGS

#### CPSC 066. Machine Learning

This course will introduce algorithms and frameworks that train computers to learn from data in order to better complete specific tasks. The first part of the course will focus on the task of making predictions (supervised learning). The course will then cover other areas of the field including structured learning, unsupervised learning, and semi-supervised learning, among others. The course will also develop general machine learning methodologies; frameworks for analyzing and validating algorithms and theoretical foundations. Prerequisite: CPSC 035 required. Natural science and engineering. Group 3 course. Lab work required 1 credit. Eligible for COGS Fall 2017. Soni.

#### **CPSC 068. Bioinformatics**

(Cross-listed as BIOL 068)

This course is an introduction to the fields of bioinformatics and computational biology, with a central focus on algorithms and their application to a diverse set of computational problems in molecular biology. Computational themes will include dynamic programming, greedy algorithms, supervised learning and classification, data clustering, trees, graphical models, data management, and structured data representation. Applications will include genetic sequence analysis, pair wise-sequence alignment, phylogenetic trees, motif finding, gene-expression analysis, and protein-structure prediction. No prior biology experience is necessary. Prerequisite: CPSC 035 required. Natural science and engineering. Group 3 course. Lab work required. 1 credit. Eligible for COGS Spring 2018. Staff.

#### CPSC 071. Software Engineering

Software engineering is the application of systematic, measurable, and disciplined approach to the creation of computer programs. In this course, students will learn how to plan, organize, and maintain large software projects. Topics include software development methodologies, design principles, collaboration techniques, the use of modern libraries and frameworks, quality assurance, and timeline management. Prerequisite: CPSC 035 required. Natural science and engineering. Group 3 course. Lab work required. 1 credit. Fall 2017. Palmer.

#### CPSC 072. Computer Vision

(Cross-listed as ENGR 027) Natural sciences and engineering practicum. 1 credit. Eligible for COGS

#### CPSC 073. Programming Languages

This course presents a collection of features central to programming languages' design and implementation. Core topics include identifiers and scope, higher-order functions, types and type checking, state and mutation, objects, and memory management. The course explores these concepts through the implementation of interpreters and other programs that manipulate programs, and through exercises that explore choices in the space of programming language design. Prerequisite: CPSC 035.

Group 3 course.

Lab work required, programming intensive

#### CPSC 075. Compilers

(Cross-listed as ENGR 023)

This course explores the conversion of programs from source code to executable forms. Topics covered include lexical analysis, formal grammars and parsing, runtime representation decisions, code transformation and generation, and static optimization techniques. Prerequisite: CPSC 031 and CPSC 035 required.

Natural sciences and engineering. Group 2 course. Lab work required. 1 credit.

#### **CPSC 081. Adaptive Robotics**

This seminar 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 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 required. CPSC 063 is recommended. Natural sciences and engineering practicum. Group 3 course. Lab work required.

1 credit. Eligible for COGS Fall 2017. Meeden.

#### **CPSC 082.** Mobile Robotics

(Cross-listed as ENGR 028) Natural sciences and engineering practicum. 1 credit. Eligible for COGS

#### 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 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.

Prerequisite: CPSC 031 and CPSC 035 required. CPSC 045 is recommended. Natural science and engineering.

Group 2 course.

Lab work required.

1 credit.

## CPSC 089. Cloud Systems and Data Center Networks

On the Internet today, popular services like Google, Facebook, and many others are too large to be hosted by just a few servers. Instead, service providers "scale out" across a coordinated set of hundreds to thousands of machines. Such clusters yield an interesting operating environment, the data center, in which a single administrative entity owns a network at the scale that resembles the Internet. To meet customer demands, administrators often face stringent inter-machine coordination constraints. In this course, we'll examine the current state of the art in providing cloud-based services, including many interesting problems in distributed systems, networking, failure recovery, and OS virtualization. Prerequisite: CPSC 031 and CPSC 035. Group 2 course. Lab work required.

## CPSC 091. Special Topics in Computer Science

Subject 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. Natural science and engineering. Lab work required. 1 credit. Fall 2017. Staff. Spring 2018. 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 dynamic analysis (2013, sensing for healthcare (2012), data management systems (2010, 2011), 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 maior.

Natural science and engineering. Writing course. Lab work required. 1 credit. Fall 2017. Staff.

#### CPSC 180. Thesis

CPSC 199. Senior Honors Study

## **Economics**

AMANDA BAYER, Professor JOHN P. CASKEY, Professor<sup>2</sup> STEPHEN S. GOLUB, Professor PHILIP N. JEFFERSON, Professor and Chair MARK KUPERBERG, Professor ELLEN B. MAGENHEIM, Professor<sup>2</sup> STEPHEN A. O'CONNELL, Professor ERIN TODD BRONCHETTI, Associate Professor DAIFENG HE, Associate Professor<sup>1</sup> JENNIFER PECK, Assistant Professor MARC REMER, Assistant Professor TAO WANG, Assistant Professor SYON BHANOT, Assistant Professor JOSEPH HARGADON, Visiting Professor (part time) NANCY CARROLL, Program Coordinator and Adm. Assistant

1 Absent on leave, fall 2017.

<sup>2</sup> Absent on leave, spring 2018.

<sup>3</sup> Absent on leave, 2017-2018.

### 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.

#### 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 Plan 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 Plan, 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, first-served,

with seniors in the Honors Program having absolute priority.

#### 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 051 as prerequisite), by taking STAT 111 (which requires STAT 051), or by taking STAT 051 in combination with either STAT 011 or STAT 021. STAT 011 and STAT 021 alone are not sufficient.

In order to read the literature in economics critically, a knowledge of elementary calculus is extremely useful. Students 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 is 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 in the Mathematics section of this catalog.

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

## Economics

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).

### **Course Major**

#### To graduate as a course major, a student must:

 Have at least eight credits in economics.
 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 Plan to both departments.

### Honors Major

Typically, a student who wants to major in the Honors Program first applies for the program through the Sophomore Plan. In the Sophomore Plan, 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: The Honors Program

Applicants for an honors major should have satisfied all of the requirements for acceptance as 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

Applicants for an honors minor should have satisfied all of the requirements for acceptance as 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. While minors are not required to complete a specific number of economics courses, they must satisfy all the prerequisites for their honors preparation.

#### **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: The Honors Minor

Applicants for an honors minor should have satisfied all of the requirements for acceptance as 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 Preparations**

ECON 101: Advanced Microeconomics (2 credits) Prerequisites: ECON 011 and multivariable calculus (MATH 033, 034, or 035). Enrollment is restricted to juniors and seniors. 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 and ECON 031 (or its equivalent).

ECON 151: International Economics (2 credits) Prerequisites: ECON 011 and ECON 021. ECON 155: Behavioral and Experimental Economics (2 credits)

Prerequisites: ECON 011 and ECON 031 (or its equivalent).

ECON 162: Regulating Markets: How and Why the US Government Intervenes (2 credits) Prerequisites: ECON 011 and ECON 031 (or its equivalent).

ECON 175: Health Economics (2 credits) Prerequisites: ECON 011 and ECON 031 (or its equivalent).

ECON 176: Environmental Economics (2 credits) Prerequisites: ECON 011 and ECON 031 (or its equivalent) and single-variable calculus (MATH 025 or higher).

ECON 181: Economic Development (2 credits) Prerequisites: ECON 011, ECON 021, and either ECON 031, STAT 011, or STAT 021.

#### Interdisciplinary Majors and Minors including Economics

Certain economics courses can be counted toward programs in black studies, Asian studies, environmental studies, Latin American studies, peace and conflict studies, 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 evidence-syllabus, papers, and examinations-concerning 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.

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 must consult the department chair before taking a non-Swarthmore course for business credit. Students should bring all relevant business course materials as well as a completed copy of the Economics Department Credit Transfer form when seeking credit for business courses completed away from Swarthmore. 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 (Financial 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.

Swarthmore students can get business credit, but not economics credit, for finance courses taken outside of the tri-College system. If, however, a student has taken Financial Economics at Swarthmore (ECON 022 or 122), or a similar course elsewhere, no credit will be granted for additional, substantially overlapping, finance courses.

## **Teacher Certification**

For economics majors, the College offers teacher certification in social studies or citizenship through a program approved by the state of Pennsylvania. For further information about specific requirements for Economics students, please refer to the Educational Studies section of the Bulletin.

## Additional Matters

**Recommended course sequence:** Take ECON 001 in the first 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, first-served 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.

### **Economics 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. Social sciences.

1 credit. Fall 2017. Staff. Spring 2018. Staff.

# 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. Prerequisite: ECON 001 and any statistics course (or the consent of the instructor). EDUC 014 is strongly recommended. Social sciences.

1 credit.

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: ECON 001 and MATH 015. Social sciences.

1 credit.

Fall 2017. Golub.

#### ECON 012. Game Theory and Strategic Behavior

How should one 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.

Prerequisite: ECON 001 Social sciences. 1 credit. Eligible for PEAC Spring 2018. Bayer.

#### ECON 015. Economic Poverty and Inequality

This course examines the causes and consequences of poverty and (income and wealth) inequality. Topics covered include measurement, mobility, and the impact of globalization, technical change, taxation, and aid. Micro interventions and macro initiatives are contrasted. Public policies and programs aimed at prevention, alleviation, and redistribution are analyzed and evaluated. The developed and developing country contexts are considered.

Prerequisite: ECON 001. Social sciences. 1 credit.

Spring 2018. Jefferson.

#### 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. Freshmen may not enroll. Prerequisite: ECON 001 and MATH 015. Social sciences. 1 credit. Spring 2018. 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 001 and ECON 031 or its equivalent. Social sciences. 1 credit. Fall 2017. Caskey.

#### 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. Prerequisite: ECON 001. Social sciences. 1 credit. Fall 2017. Bronchetti. Spring 2018. He.

#### ECON 032. Operations Research

(Cross-listed as ENGR 057) Social sciences. 1 credit. Eligible for CBL, ENVS

#### 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. Prerequisite: ECON 001.

Social sciences.

1 credit.

Fall 2017. Hargadon. Spring 2018. 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 001 and ECON 031 or STAT 051.

Social sciences.

1 credit. Fall 2017. Jefferson.

#### **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.

Prerequisite: ECON 001. Recommended: ECON 011.

Social sciences. 1 credit. Spring 2018. 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.

Prerequisite: ECON 001. Recommended: ECON 011.

Social sciences. 1 credit. Fall 2017. Kuperberg.

#### 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 001 and ECON 031 or its equivalent. Social sciences.

1 credit.

## ECON 051. International Trade and Finance

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, exchange-rate fluctuations, the international monetary system, and macroeconomic interdependence.

Prerequisite: ECON 011 and ECON 021 Social sciences.

1 credit.

Eligible for ASIA, PEAC

#### 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 laissezfaire 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 efficient-markets 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, and Africa). Prerequisite: ECON 001. Social sciences. 1 credit.

Spring 2018. Golub.

#### ECON 055. Behavioral Economics

In the past 50 years, economists have increasingly used insights from psychology to explore the limitations of the standard economic model of rational decision making - a field now known as "behavioral economics." This course is an introduction to the central concepts of behavioral economics, touching on related research in psychology and experimental economics. We will also discuss the public policy implications of this work, and current policy applications of behavioral research around the world. Topics covered include: self-control, procrastination, fairness, cooperation and reciprocity, reference dependence, and choice under uncertainty. A student can count 1 credit for either ECON 055 or ECON 056 towards a major in Economics. If a student takes ECON 055 and ECON 056, then only one of them will count towards an Economics major. (The cross-listed interdisciplinary course ECON 056 (PSYC 047) was a one-time offering in 2015-2016. It is no longer offered.) Prerequisite: ECON 001. Social sciences.

1 credit.

Fall 2017. Bhanot.

#### ECON 061. Industrial Organization

Industrial organization studies how competition between firms affects prices, profits, and consumer welfare. This course moves beyond basic models of perfect competition and monopoly, and analyzes markets where businesses make strategic choices and anticipate responses from competitors. We will explore how businesses set prices, choose product attributes, and make entry decisions. Other topics include antitrust policy, collusion, advertising, and network competition. Prerequisite: ECON 001 Social sciences. 1 credit. Fall 2017. Remer.

## 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. Prerequisite: ECON 001. Social sciences. 1 credit. Eligible for BLST, GSST Fall 2017. Bayer.

#### ECON 075. Health Economics

This course applies microeconomic theory, including models from behavioral economics, to analyze consumers', producers', and the government's behavior with respect to health and health care. Special attention will be paid to the role of socioeconomic and demographic factors in explaining patterns of health and access to health care. Other topics include environmental health, international comparisons of health and health care systems, and ongoing state and federal health care policy reform.

Prerequisite: ECON 001. Social sciences. 1 credit. Fall 2017. Magenheim.

#### ECON 076. Environmental Economics

Introduction to the microeconomics of environmental issues with applications to the design of environmental policy. The course will cover the concepts and methods used in the valuation of environmental goods as well as the design of policy instruments and regulations to improve environmental quality. Specific topics include pollution and environmental degradation, the use of renewable and non-renewable resources, and climate change.

Prerequisite: ECON 001. Recommended: ECON 011.

Social sciences. 1 credit. Eligible for ENVS Fall 2017. Peck.

#### ECON 081. Economic Development

A survey covering the principal theories of economic development and the dominant issues of public policy in low-income countries. 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). Prerequisite: ECON 001 Social sciences. 1 credit. Eligible for ASIA, BLST, PEAC Spring 2018. 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. Prerequisite: ECON 001 Social sciences. 1 credit.

Eligible for BLST, PEAC

#### ECON 083. East Asian Economies

This course will provide an overview of the East Asian economy and the economic interdependencies that characterize the region. After providing an understanding of the factors that have made East Asia the most dynamic in the world economy, current challenges of the region will be given particular attention. Topics that will be addressed include: economic growth in East Asia; trade and economic growth; the East Asian tradeproduction network; East Asia's role in global imbalances; the Asian financial crisis; financial cooperation in East Asia; monetary cooperation in East Asia; East Asia's role in global economic governance; inequality in East Asia; demographic challenges of East Asian countries; environmental challenges and the move to sustainable economics. Prerequisite: ECON 001 Social sciences.

1 credit. Eligible for PEAC

#### ECON 099. Directed Reading

With consent of a supervising instructor, individual, or group study in fields of interest not covered by regular course offerings.

#### Seminars

#### ECON 091A. Research Seminar in Economics: Community-Based Field Experimental Research

We will collaborate as a group on field experimental research with a community partner off campus, on a topic related to behavioral economics and/or health economics. The relationship with a community partner will be established and the basic focus of the experiment will be determined before the semester begins. Students will participate in all remaining stages of the research including experimental design, implementation, data collection and analysis, and preparation of a final report, which may form the basis of a journal article. Students will read and discuss literature on the methodological approach of field experimentation in economics and related to the topic of the experiment. Students will spend time off campus for planning meetings with the community partner, during the implementation of the experiment, and to present our findings. There may be opportunities for one or two students to receive funding to continue working on the project over the following summer.

Prerequisite: ECON 011 and ECON 031 (or its equivalent)

Social Sciences.

1 credit.

#### ECON 091B. Research Seminar in Economics: Development Economics

This course provides each student with an opportunity to write an original empirical research paper in development economics. The course emphasizes key steps in the research process, including motivating and posing a research question, adopting a theoretical framework, designing and implementing an empirical strategy, presenting data and findings, and developing policy implications. Students study the research process through the lens of prominent recent papers in development economics, while developing and reporting on their own projects from initiation to conclusion. Student-identified projects may focus on aspects of household or firm behavior; poverty, inequality, and/or economic growth; public service delivery; impact assessment; or economic policy, along with other potential topics in a developing-country context. Student projects will employ observational or experimental data as appropriate, with an emphasis (not exclusive) on publicly available data. Prerequisite: ECON 011 and ECON 031 (or its equivalent)

Social Sciences. 1 credit.

#### ECON 101. Advanced Microeconomics

Subjects covered include consumer and producer theory, optimization and duality, general equilibrium, risk and uncertainty, asymmetric information, and game theory. Prerequisite: ECON 011 and multivariable calculus (MATH 033, MATH 034, or MATH 035). Enrollment is restricted to juniors and seniors. Social eciences

Social sciences. 2 credits. Spring 2018. 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. Prerequisite: ECON 011, ECON 021, and multivariable calculus (MATH 033, MATH 034 or MATH 035, or MATH 025 or MATH 026 with permission of the instructor). Recommended: MATH 043 or MATH 044. Social sciences. 2 credits. Fall 2017. Kuperberg.

#### **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. Prerequisite: ECON 011, ECON 031 or ECON

035, and MATH 025 or higher calculus. Social sciences. 2 credits.

#### 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.

Prerequisite: ECON 035 and linear algebra (MATH 027, MATH 028 or MATH 028S). Social sciences. 1 credit.

Spring 2018. He.

#### **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. Prerequisite: ECON 011 and ECON 031 (or its equivalent) Social sciences. 2 credits. Spring 2018. Bronchetti.

#### **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. Prerequisite: ECON 011 and ECON 021 Social sciences. 2 credits. Eligible for ASIA, PEAC Spring 2018. Golub.

#### ECON 155. Behavioral and Experimental Economics

The standard model of economic behavior is based on a set of assumptions about individual rationality, willpower, and preferences. Increasingly, researchers are finding that these assumptions can be inconsistent with observed behavior. This seminar focuses on behavioral and experimental economics, subfields of economics that draw from the broader social science literature to explore how individuals actually behave and make decisions, with the goal of improving both economic theory and public policy. The seminar will cover behavioral economics concepts and their applications in the real-world (in both highincome and low-income contexts worldwide), as well as experimental economics research and methods. Students in the seminar will read, critique, and present on the latest and most influential academic papers in behavioral and experimental economics. Topics include: selfcontrol problems in financial behavior, preferences regarding inequality and fairness, cooperative behavior, social preferences, and consumer decision making.

A student will receive 1 credit for ECON 155 if they've received credit for either ECON 055 or ECON 056.

Prerequisite: ECON 011 and ECON 031. Social sciences. 2 credits. Fall 2017. Bhanot.

ECON 162. Antitrust and Market Regulation

This seminar studies the regulation of firms operating in imperfectly competitive markets. The course will have a strong focus on antitrust topics, such as collusion, mergers, and exclusive dealing. Other forms of regulation, such as net neutrality, FCC wireless spectrum auctions, and energy price controls, will also be studied. Students will learn to apply economic models and use data to understand the impact of government intervention on the strategic actions of businesses and consumer welfare. There will be a strong emphasis on learning the realities of policy implementation, the tools government economists use to evaluate regulations, and real-world case studies. Prerequisite: ECON 011 and ECON 031 (or its equivalent). Social sciences. 2 credits. Spring 2018. Remer.

#### **ECON 175. Health Economics**

This seminar applies microeconomic theory, including models from behavioral economics, to analyze consumers', producers', and the government's behavior with respect to health and health care. Special attention will be paid to the role of socioeconomic and demographic factors in explaining patterns of health and access to health care. Other topics include environmental health, international comparisons of health and health care systems, and ongoing state and federal health care policy reform.

Prerequisite: ECON 011 and ECON 031. Social sciences. 2 credits.

#### **ECON 176. Environmental Economics**

This seminar examines the microeconomics of environmental issues with applications to the design of environmental policy. The seminar will cover the concepts and methods used in the valuation of environmental goods as well as the design of policy instruments and regulations to improve environmental quality. Specific topics include pollution and environmental degradation, the use of renewable and non-renewable resources, and climate change.

Prerequisite: ECON 011 and ECON 031 (or its equivalent), and single-variable calculus (MATH 025 or higher). Social sciences.

2 credits. Fall 2017. Peck.

#### 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. Prerequisite: ECON 011, ECON 021, and either ECON 031, STAT 011, or STAT 021 Social sciences. 2 credits.

Eligible for ASIA, BLST Fall 2017. O'Connell.

#### ECON 198. Thesis

With consent of a supervising instructor, honors majors may undertake a senior thesis for double credit.

## **Educational Studies**

K. ANN RENNINGER, Professor and Chair LISA SMULYAN, Professor DIANE DOWNER ANDERSON, Associate Professor<sup>3</sup> ELAINE ALLARD, Assistant Professor EDWIN MAYORGA, Assistant Professor<sup>3</sup> JOSEPH NELSON, Assistant Professor ROSEANN LIU, Visiting Assistant Professor JENNIFER BRADLEY, Visiting Assistant Professor MARGARET INMAN LINN, Visiting Associate Professor (part time) RUTHANNE KRAUSS, Administrative Assistant CATHERINE DUNN, School Liaison

3 Absent on leave, 2017-2018.

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 pursue 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 and 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.

### The Academic Program

Students interested in educational studies at Swarthmore may design an honors or course special major in educational studies and another discipline or an honors or course minor in educational studies. Students also have the option to pursue teacher certification.

## **Course Special Major**

In special majors involving educational studies the student combines work in educational studies with work in another academic department or interdisciplinary program. Pre-established programs have been created with the following disciplines: biology, chemistry, computer science, English literature, French, German, history, Latin American studies, linguistics, mathematics/statistics, music, peace and conflict studies, physics, political science, psychology, Russian, sociology/anthropology, and Spanish. Special majors with other disciplines can be pursued with the approval of both the Educational Studies Department and the second department or program. In the case of all special majors involving educational studies, both departments collaborate in advising the student.

The special major usually requires 10 to 12 credits, at least 5 of which must be in educational studies. All special majors are required to complete a thesis or a comprehensive examination integrating work in their two fields of study. Special majors are encouraged to take EDUC 065 Educational Research for Social Change in the spring of their sophomore or junior year. This course, which can be taken for 0.5 - 1 credit, prepares students to write a special major thesis in their senior year. Each partnering department or program provides specific course requirements for the completion of a special major and for the thesis/comprehensive exam, details of which may be found on the departmental website.

If special majors pursue teaching certification, EDUC 092: Curriculum and Methods Seminar and EDUC 093: Practice Teaching are not counted as part of a special major requirements. The prerequisite for acceptance to the special major program is successful completion of EDUC 014: Introduction to Education and one other course in the department.

### **Course Minor**

The educational studies minor provides students with the opportunity to choose from a variety of educational studies courses and prompts students to reflect on the overarching theme of their experience in the department. The educational studies minor requires at least 5 credits in educational studies. Students identify a focus when they apply for the minor and then explain how their coursework supports this focus. Possible foci include but are not limited to Teaching and Practice, Educational Policy, Educational Psychology, School and Society, Special Education, Urban Education, Environmental Education, and Literacy. The prerequisite for acceptance to the educational studies minor program is EDUC 014: Introduction to Education. Minors may also pursue teacher certification.

### Honors Program

The department supports the Honors Program for special majors and minors.

#### Honors Special Majors

Students may opt to pursue an Honors Special major in educational studies and another department or interdisciplinary program. Preestablished special majors have been created with the following disciplines: English, linguistics, political science, psychology and sociology/anthropology. Honors special majors with other disciplines can be pursued with the approval of both educational studies and the partnering department or program. The Honors special major, like the Course special major, requires a total of 10 to 12 credits, at least 5 of which must be in educational studies. However, Honors special majors must also include 4 Honors preparations in their program. These must be distributed as follows:

Three (2 credit) Honors preparations, at least 1 or 2 of which must be in educational studies and 1 or 2 in the other discipline.

Most honors preparations in educational studies consist of a 2 credit honors seminar.

It is possible to complete a one-credit educational studies course with a one-credit attachment as an honors preparation. Availability of this option is limited and designed with a supervising faculty member from the Educational Studies Department.

One Honors preparation through the completion of a double-credit thesis. This thesis normally serves to integrate the fields of the special major and is supervised by faculty members in both departments of the special major. Honors special majors are encouraged to take EDUC 065 Qualitative Research Methods: Educational Research for Social Change in the spring of their sophomore or junior year. This course, which can be taken for 0.5 - 1 credit, prepares students to write the special major thesis in their senior year.

Honors preparation through the completion of a double-credit thesis. This thesis serves to integrate the fields of the special major and is supervised by faculty members in both departments of the special major.

Each partnering department or program also provides specific requirements for the completion of an Honors special major, which may be found on the departmental website. Students are expected to have a B+ average in their educational studies courses to complete an Honors special major. Additionally, students must complete external examinations upon completion of the program. The prerequisite for acceptance to the Honors Educational Studies Major Program is EDUC 014: Introduction to Education, 2 additional educational studies courses of the student's choice, and an average grade of B+ in all educational studies courses at the time of application. Honors majors may also pursue teacher certification.

#### **Honors Minors**

Students may opt to pursue an Honors minor in educational studies. The Honors minor requires five credits in educational studies, including EDUC 014: Introduction to Education (1 credit), one Honors seminar (2 credits), and two additional credits of the student's choice. Students are expected to have a B+ average in their educational studies courses and to complete the external Honors examination. The prerequisite for acceptance to the Honors educational studies minor program is EDUC 014: Introduction to Education. Honors minors may also pursue teacher certification.

#### **Additional Honors Program Details**

#### **External Examinations**

As part of the Honors Program, students complete an examination for each completed preparation. The thesis preparation for Honors special major students involves a 45-60-minute individual oral exam on their work with an outside examiner. Examination for Honors preparations other than the thesis includes a written and an oral component. The written portion of the exam is set by an external examiner who writes exam questions based on the seminar syllabus. The exam may include a problem set, a case and/or additional readings relevant to the work students have undertaken in that preparation. These materials may be sent to the student in advance of the written exam. All educational studies honors exams are written in the Educational Materials Center. A maximum of 5 hours is allowed for completion of each exam.

#### Intellectual Autobiography

All Honors students (special majors and minors) in educational studies write a short intellectual autobiography that is sent to the Honors examiner. Students may also choose to send to the examiner a paper from an Honors seminar. The autobiography and the paper are not formally evaluated by the examiner; they are intended to familiarize the examiner with the student's experience and background in educational studies, since each student in each seminar brings different disciplinary content to his/her understanding of the material. The autobiography is written in the spring of the senior year under the supervision of the department chair in educational studies.

#### Sophomore Plan Application Process

Students interested in pursuing a special major or minor through the department are encouraged to discuss their interests and plans with faculty members. The department's website may also be helpful. Faculty will advise and assist students as they explore the multiple options available to them.

In order to complete the Sophomore Plan, students will:

Arrange a meeting with the chair of the department to discuss their educational studies interests and how they might complete the necessary requirements during the remainder of their Swarthmore career.

Write a Sophomore Plan and submit it to the department in conjunction with specifications provided by the Dean's Office at www.swarthmore.edu/student-life/academic-advising-and-support/sophomore-plan-of-study.xml.

## Pathways to Teaching

Swarthmore students come to an interest in teaching at many points during their own educational careers-some before they enter college, others during their four undergraduate years, and some as they investigate possible careers after Swarthmore. Students are encouraged to explore the many opportunities available to them in the field of education. Pathways to Teaching, on the department's website, offers students more information on the options available to them:

Mentoring and tutoring opportunities offered through Swarthmore.

Summer opportunities to work in classrooms or enrichment programs or complete an education related internship.

Teacher certification at Swarthmore.

Graduate study in education, including teaching programs and other programs in educational studies.

Post-graduation teaching/education job opportunities and resources (for all students-with or without certification)

#### Research Opportunities and Experiences

Engaging in research is integral to students' work in educational studies. Participation in research supports students to understand the importance of research to theory, policy-making, and practice.

In each course and seminar in the department, students are introduced to qualitative and/or quantitative methods of research, which they use to work directly with questions addressed in coursework. Students not only read original research, but they also collect and analyze data using appropriate methods in each course.

Students are strongly encouraged to take EDUC 065: Qualitative Research Methods: Educational Research for Social Change in the spring of their sophomore or junior year. This course, which can be taken for 0.5 - 1 credit, prepares students to

write a special major thesis in their senior year. It can be used as the methods course for special majors with Sociology and Anthropology.

As a culminating activity in the department, most special majors write a thesis. Students select the focus of their thesis work; these typically build on students' course work and methods training in educational studies and the other department comprising their special major.

Some students conduct independent research or serve as research assistants on faculty members' projects. Students may begin working as research assistants as early as the summer following their first year. Many such collaborations have led to student-faculty co-authored conference presentations, articles, and chapters.

#### Fieldwork and Service-Learning Opportunities

Bridging research and practice is a goal for courses and seminars in the department. Many courses and seminars have a distinctive field work component. Course descriptions indicate if a course involves a field placement.

Depending on transportation options, students can request fieldwork placements in urban, suburban, or rural communities and choose from public, charter, or private school settings. Students are encouraged to use the field placements as an opportunity to explore a range of school and population types. A list of school sites may be found on the department's website. In addition, EDUC 070: Community Outreach Practicum is a course designed for students working in out-ofschool educational and community-based settings.

## Study Abroad

Students requesting credit in educational studies for course or field work done abroad (or at another institution in the U.S.) must take EDUC 014: Introduction to Education. This course may be taken before or after the study abroad credit is completed, but the credit will only be accepted after Introduction to Education has been completed.

Three study abroad programs with explicit developed educational studies components include:

## The Cloud Forest School Program, Costa Rica

Through this program, students complete a school based internship (3 educational studies credits) and receive an intercultural credit for Spanish language learning. For more information see http://www.swarthmore.edu/academics/educationa l-studies/academic-program/off-campus-

study/cloud-forest-program.xml.

#### Globalization, Environment and Society: South Africa

This program focuses on both environmental and educational issues such as literacy, equity, intersections between schools, communities, and the environment in South Africa. For more information see

http://www.swarthmore.edu/academics/educationa 1-studies/academic-program/off-campusstudy/globalization-and-the-environmentprogram.xml.

## **Transfer Credit**

Transfer credit is accepted once a student has completed EDUC 014: Introduction to Education. To request transfer credit, the student must present a syllabus and all course work for the department to review. Some additional work may be required.

## **Teacher Certification**

Swarthmore offers a state accredited teacher preparation program for both special majors and minors (Honors or Course). Certification for

elementary, middle and/or high school teaching is transferable to all 50 states; after PA certification, some states may require additional exams or content. A guide to certification reciprocity is available through Certification Map at http://certificationmap.com/states/reciprocitydisclaimer/.

Swarthmore's programs for secondary certification are designed with guidance from faculty members in the discipline in which the student is being certified as well as members of the Educational Studies Department. Students preparing for elementary certification design their course of study with advisement from the Swarthmore Educational Studies Department and Eastern University.

Formal admission to the teacher certification program occurs at the start of EDUC 092: Curriculum and Methods and EDUC 093: Practice Teaching after students have successfully completed their core educational studies and discipline major requirements. Students must have completed 12 Swarthmore College credits (48 credit hours) to enroll in the program.

State Requirements for Certification In order to be certified, students must attain either an overall grade point average of 3.0 or an overall grade point average of 2.8 GPA and a qualifying score on the appropriate PRAXIS exams. More information about the exams required for certification can be found on the Educational Studies Department website under "Teacher Certification > Student Teaching > Exam Information."

Students seeking certification must meet 1) all Swarthmore's general requirements for graduation with a Bachelor's degree, 2) educational studies requirements for certification, and 3) state teaching certification distribution requirements in mathematics, English literature, and English composition. The following outline presents the ways in which students might meet these state distribution requirements:

Mathematics: 6 credit hours. This may be fulfilled by any sufficient combination of the following options:

Activity	Credit Hour Value
Swarthmore 1-credit Math/Statistics or Natural Science course	4
Score of 4 or 5 on AP Calculus AB	4
Score of 4 or 5 on AP Calculus AB/BC	4
Score of 4 or 5 on AP Statistics	4
Score of 6 or 7 on the Higher Level IB Exam	4
Scores of 560 or higher on the SAT level 1 or II math level IC or IIC	3
CLEP math test (http://clep.collegeboard.org/exam)	4
Combination should total	6

English Literature: 3 credit hours. This may be fulfilled by any of the following options:

Activity	Credit Hour Value
Swarthmore 1-credit English Department course	4
Score of 4 or 5 on AP English Literature	4
Score of 6 or 7 on the Higher Level IB Exam	4

CLEP literature test (http://clep.collegeboard.org/exam)	4
Combination should total	3

English Composition: 3 credit hours, met by the College's general distribution requirement of writing courses.

## **Certification Options**

Swarthmore offers a wide variety of teacher certification options for students who are interested in receiving this credential.

**Elementary Certification (Grades Pre-K-4)** 

Certification in elementary education is granted to Swarthmore students through Eastern University. Students complete the majority of their coursework at Swarthmore, including student teaching, but must also complete 2 Eastern University summer courses (offered at Swarthmore) in order to receive elementary certification. Eastern University will award the Pennsylvania PreK-4 certification; students who want to complete the 4-8 elementary/middle school certification may add this certification through testing. The department recommends that students complete both PreK-4 and 4-8 certifications.

Students must fulfill all of the state general distribution requirements. Additionally, required Swarthmore coursework includes:

EDUC 014: Introduction to Education EDUC/PSYC 021: Educational Psychology EDUC 042: Teaching Diverse Young Learners EDUC/PSYC 026: Special Education EDUC 053: Language Minority Education Recommended-EDUC 023: Adolescence The Eastern University summer school program consists of two elementary methods courses in Language Arts and Reading. The hybrid online and face-to-face course work begins in mid-May and ends in early June for a total cost of approximately \$3,890 (cost as of spring 2015; students on financial aid can apply for support). Students can receive 1 Swarthmore College credit for these courses.

Students must consult with the chair of Swarthmore's Educational Studies Department regarding their program of study to ensure that it includes a representative distribution of English, social studies, math, and science coursework required for 4-8 certification.

Elementary Certification candidates complete one semester of student teaching through Swarthmore, which consists of EDUC 092: Curriculum and Methods (2 credits) and EDUC 093: Practice Teaching (2 credits).

#### Secondary Certification (Grades 7-12)

The department offers secondary (7-12) teacher certification in biology, chemistry, citizenship, English, mathematics, physics, and social studies. The department also offers K-12 certification in French, German, Russian, or Spanish. Students must complete a major or special major in their area of certification. Majors/special majors in history, economics, or political science receive secondary certification in either citizenship or social studies, and majors/special majors in psychology or sociology/anthropology receive secondary certification in social studies.

In order to be certified, students should fulfill all of the state general distribution requirements. Additionally, students must complete a major or a special major in their area of certification and take a total of five and a half core courses in educational studies:

EDUC 014. Introduction to Education EDUC/PSYC 021. Educational Psychology EDUC/PSYC 023. Adolescence EDUC 023A. Adolescents and Special Education (0.5 credit)

EDUC/PSYC 026. Special Education EDUC 053. Language Minority Education Students must complete subject-specific requirements that may or may not differ from the special major or major requirements already established. Students should refer to the subjectspecific requirements charts on the Educational Studies Department website for the special major discipline's course obligations with teacher certification

(http://www.swarthmore.edu/educationalstudies/secondary-certification)

Students must complete one semester of student teaching, which consists of EDUC 092: Curriculum and Methods (2 credits) and EDUC 093: Practice Teaching (2 credits).

## World Language Teaching Certification (Grades K through 12)

Students who wish to teach a world language (Spanish, French, German or Russian) will receive K-12 teaching certification in their specific language area upon completion of the program. This will allow them to teach elementary, middle, and high school. All world language certification students should follow the pathway for secondary teacher certification to attain the K-12 certification. Refer to the Secondary Certification section for details.

### **Student Teaching**

EDUC 092: Curriculum and Methods (2 credits) and EDUC 093: Practice Teaching (2 credits) are completed during the first semester of the senior year or in a ninth semester after graduation. Placement for practice teaching is available in a range of public and private schools.

## Ninth Semester

Students who have completed all of the requirements for certification (in their discipline and in educational studies) except for student teaching may return following graduation to complete the teacher certification program during a ninth semester. During this semester, students can only take EDUC 092: Curriculum and Methods (2 credits) and EDUC 093: Practice Teaching (2 credits). This option is only offered in the fall, and the cost is \$6,300. Starting in fall 2015, some tuition reimbursement will be available for ninth semester students. Students in the ninth semester program have full access to computing and other campus facilities but are not eligible for campus housing.

## **Educational Studies Courses**

#### EDUC 001C. The Writing Process: Pedagogy and Practice

(Cross-listed as ENGL 001C) Social sciences.

#### EDUC 014. Pedagogy and Power: An Introduction to Education

Schools are complex institutions, central to any society. Schools are sites of teaching and learning, places where inequalities are maintained or challenged, and institutions within which children and their teachers live out the daily realities of national political agendas. This course explores major questions in educational policy, theory, and practice. Students read original source materials from multiple disciplines, write, discuss, and complete fieldwork in area schools as an introduction to the interdisciplinary and expansive field of educational studies. EDUC14 or the first-year seminar EDUC 014F, is required for students pursuing teacher certification.

Social sciences. Writing course. 1 credit. Eligible for CBL Fall 2017. Staff. Spring 2018. Staff.

#### EDUC 014F. First-Year Seminar: Pedagogy and Power: An Introduction to Education

Schools are complex institutions, central to any society. Schools are sites of teaching and learning, places where inequalities are maintained or challenged, and institutions within which children and their teachers live out the daily realities of national political agendas. This course explores major questions in educational policy, theory, and practice. Students read original source materials from multiple disciplines, write, discuss, and complete fieldwork in area schools as an introduction to the interdisciplinary and expansive field of educational studies. EDUC14 or the firstyear seminar EDUC 014F, is required for students pursuing teacher certification. Social sciences. Writing course. 1 credit. Eligible for CBL Fall 2017. Staff. Spring 2018. Staff.

#### 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 on student learning and motivation provides the core readings for the course, which is run in a discussion-based, workshop like format. As part of the course, students collaborate with teachers of public school students in integrated classrooms on research questions. This experience also provides an introduction to the use of qualitative and quantitative method, their data reduction, and interpretation. This course is required for students pursuing special majors in psychology and educational studies, and for all students pursuing teacher certification. Social sciences.

1 credit. Eligible for CBL Fall 2017. 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 focuses on the adolescent's experience in a range of social contexts (e.g., family, peer group, school, etc.). Required for students pursuing secondary teacher certification.

Prerequisite: EDUC 014 or permission of the instructor.

Social sciences. 1 credit.

Eligible for CBL

Spring 2018. Nelson.

## EDUC 023A. Adolescents and Special Education

In this half credit attachment to EDUC 023, 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

## **Educational Studies**

academic needs of these adolescents in literacy, content area learning, and transitions out of school. Course includes a field placement. Required for students pursuing secondary teacher certification. Prerequisite: EDUC 026/PSYC 026 (can be taken concurrently) or permission of the instructor. Corequisite: EDUC 023 can be taken concurrently with EDUC 023A. 0.5 credit.

Fall 2017. Linn.

## 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. Social sciences.

1 credit. Fall 2017. Linn.

#### EDUC 041. A Site of Struggle: Educational Policy

This course examines preK-Higher Education policy as a site of struggle. Students will develop a working knowledge of the policy landscape on the federal, state, and local levels and use this knowledge to examine the relationship between policy, power, and practice. The course will examine a range of current policy topics, potentially including school finance, issues of adequacy and equity, standards based reform, assessment and accountability, bilingual education, school choice, early childhood education, special education, desegregation, and teacher quality and compensation. Drawing primarily from a critical policy studies framework, students will examine education policies and develop strategies and projects that would support, critique and transformextant policies. There will be an 8 hour field requirement for the course. Prerequisite: EDUC 014 or permission of the instructor. Social sciences. 1 credit.

Spring 2018. Mayorga.

#### EDUC 042. Teaching Diverse Young Learners

Why do children play? What is the role of culture in child development? What does it mean to learn? This course explores the ways in which children play, develop, and construct meaning in their personal, communal, and academic lives. Students will survey learning theories and optimal learning environments for diverse young learners, including: English Language Learners; racially, ethnically and socioeconomically diverse populations; culturally non-mainstream students; gender expansive students; students with learning differences and disabilities; and students with socioemotional classifications. Students in this course engage in weekly hands-on fieldwork, supporting and leading lessons in preschool, primary, and middle grade classrooms. This course is required for elementary certification. Social sciences. Social sciences. Writing course. 1 credit. Spring 2018. Bradley.

## EDUC 043. Teacher Narratives, Policy and Power

This course is an exploration of the lives of teachers: how they are framed within popular culture and policy, and how they frame themselves within the politics of the classroom, schools and broader society. Students will work with various critical social theories and analytical tools to think through teacher narratives, historical and sociological texts, film, policy debates, guest presentations, and other sources. Assignments will include conducting interviews with educators and producing mixed media projects that reframe educator identities. Social sciences.

1 credit.

#### 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. Social sciences.

Writing course. 1 credit. Eligible for GSST.

## EDUC 046. Race, Nation, Empire and Education

(Cross-listed as SOAN 040M)

Drawing on anthropology, history, and cultural studies, this course develops frameworks for understanding the historical and contemporary role of education in race-making, nation-building, and empire-building projects. We focus on how educational processes shape the material, cultural, psychological, socioeconomic, and political aspects of people's lives, and how these contend within a changing global landscape. Topics include: education's dual role in settler colonialism and its potential for decolonization; scientific racism as it relates to discourses about intelligence; institutions of higher education and their entanglements with slavery and imperialism; education in colonial and post-colonial settings; legislating bodies and intimacies among young women of color; and education as a site for producing hegemonic notions of the ideal citizensubject. This course includes films, guest speakers, and field trips to enhance the learning process. Social sciences.

1 credit.

#### EDUC 048. From the Undercommons: Ethnic Studies and Education

What is ethnic studies? How can ethnic studies be part of efforts to transformeducational and social conditions today from the position of the undercommons? This course is an examination of the origins, theories, pedagogies, politics, and policies that have come to define ethnic studies in US education. What key historical events and struggles in U.S. society and education have contributed to ethnic studies as an "undiscipline," and as curriculum? Colonialism, race, ethnicity, nationalism, diversity, inclusion, segregation, community control, resistance and survivance, are among the potential topics to be examined in relation to ethnic studies pedagogies, policies and social movements in formal (N-Higher Ed) and informal (afterschools, CBOs, museums, social movements, etc) settings. Coupled to this inquiry will be a weekly field assignment where students will be collaborating with educators (N-Higher Ed) in crafting or further developing curricular projects that apply an ethnic studies lens. Social science.

1 credit. Eligible for LALS, BLST

#### EDUC 053. Educating Emergent Bilinguals (Cross-listed as LING 053)

Emergent bilingual youth -- those students who speak another language at home and are in the process of learning English at school-- are one of the fastest growing and most underserved populations in U.S. schools today. This course examines their experiences through multiple lenses, exploring the impact of immigration policy on schools, linguistic discrimination and Englishonly ideologies, theories of bilingualism and language development, policies and practices for teaching multilingual students, and asset-based approaches to curriculum, instruction, and parent engagement. Students in the course complete weekly fieldwork in area classrooms serving emergent bilinguals and a small-group study of the neighborhood and school context. Required for students pursuing teacher certification and an essential first course for the ESL Program Specialist certificate.

Prerequisite: EDUC 014 or permission of the instructor.

Social sciences.

1 credit.

Eligible for LALS, CBL Fall 2017. Allard.

#### EDUC 054. Oral and Written Language

(Cross-listed as LING 054) Prerequisite: LING 001, LING 040, LING 045, or LING 050. Social sciences. 1 credit.

## EDUC 056. TESOL Methods: Theory in Practice

This hands-on course in Teaching English to Speakers of Other Languages (TESOL) provides students with experience designing and delivering content, and theme-based instruction for emergent bilinguals. Through readings in applied linguistics and language pedagogy, collaborative group work, and weekly apprenticeship in an ESOL classroom, students explore current issues and approaches to ESOL curriculum development, pedagogy, and assessment while developing the skills they need to support emergent bilinguals in ESOL and content classrooms, K-12. Required for the ESL Program Specialist Certificate. Prerequisite: EDUC 053 Educating Emergent

Bilinguals Social sciences.

1 credit.

#### EDUC 061. Gender and Education

This course examines how gender relations shape everyday life in schools. The course begins with the history and theory of gender and education in the United States, and then explores popular discourse and key debates in the field, with a focus on the core themes of access and equity in urban schools; the intersections of race, class, and sexuality; and the implications of gender issues for school policy and classroom practice. The goal is a reconsideration of what constitutes effective schooling for all students Prerequisite: EDUC 014 or permission of the instructor. Social Sciences. 1 credit. Eligible for GSST Fall 2017. Nelson.

#### EDUC 062. Sociology of Education

(Cross-listed as SOCI 062B)

This course will examine urban schools and classrooms in the United States from a sociological perspective. Students are introduced to the theory and method of the sociological study of education, and the core issues taken up in the field, such as social stratification and mobility, and educational equity and opportunity. Emphasis will be placed on the influence of local, state, and federal policies on the social organization of schools, relationships among social actors within these institutions, and patterns of inequality in what students learn. Variation among these issues will be primarily explored through race and ethnicity, citizenship status and native language, gender and sexual orientation, and disability/ability. The course will conclude with applying knowledge in the field to policy and practice at the PreK-12 and postsecondary level. Social sciences. Writing course.

1 credit. Fall 2017. Nelson.

#### EDUC 064. Comparative Education

This course examines key issues and themes in education as they play out in local and global contexts around the world. We will use case studies to explore the roles of local, national, and international actors and organizations in the construction of educational policy and practice. Topics will include immigration and schooling, equity, curriculum goals and constructs, and education in areas of conflict.

Prerequisite: EDUC 014 or permission of the instructor.

Social sciences. 1 credit. Fall 2017. Smulyan.

#### EDUC 065. Educational Research for Social Changes: Qualitative Methods

How can educational research change policy and practice? In this course, students engage with this question as they learn the basics of qualitative research methodology, including choosing a topic, reviewing literature, collecting and analyzing data, and communicating findings for various audiences. Students taking the course for a full credit work as members of a research team, conduct research in and around schools (projects vary each semester). Class participants visit educational research organizations and meet with researchers working on some of the most pressing issues in education today. This course is essential for students planning to write 1 or 2 credit theses in Educational Studies.

Prerequisite: EDUC 014 and an intermediate level educational studies course.

Social sciences. 1 credit. Eligible for CBL Spring 2018. Staff.

#### EDUC 068. Urban Education

(Cross-listed as SOAN 020B)

Drawing on anthropology, sociology, history, urban studies, and cultural studies, this course challenges popular notions of "urban education" rooted in deficit thinking. We consider "urban" as a lens for conducting a spatial analysis of inequalities, and "education" as an expansive concept that indexes the formal institution of schools, as well as informal youth culture. We also consider education's dual role in exacerbating inequalities, and its potential as sites of resistance, refusal, and liberation. Course topics include: market-based school reform, pedagogies of resistance, youth culture and the semiotics of language and fashion, school to prison pipeline, and segregation and integration. This course focuses on Philadelphia as a case study, and includes fieldwork, films, guest speakers, and field trips to enhance the learning process. Social sciences. 1 credit. Eligible for BLST, LALS, CBL Spring 2018. Liu.

## EDUC 069. Savage Inaccuracies: The Facts and Economics of Education in America

(Cross-listed as ECON 005) EDUC 014 is required to receive Educational Studies Department credit for this course. Social sciences. 1 credit.

#### 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. 0.5 - 1 credit. Eligible for CBL

#### EDUC 071. Introduction to Performing Arts Education: Music

(Cross-listed as DANC 091, MUSI 091) 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 and dance, we will also consider theater. We will look at primary education in the United States, and we will also touch upon some of the ways the performing arts are 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. Prerequisite: This course is open to any student who has taken at least one course in education, music, dance, or theater. EDUC 014 is required to receive Educational Studies Department credit for this course. Social sciences. 1 credit.

## EDUC 073. Creative Writing Outreach Course

(Cross-listed as ENGL 070L) Where do arts, education and activism meet? In this course students will explore artistic affinities through creative writing activities and consider arts education and advocacy through diverse texts. Students will cultivate skills necessary to becoming Teaching Artists in imaginative writing at the elementary level through coursework as well as through volunteer placement in local schools. Topics covered include: creative curriculum development and presentation, educational climate for grades K-5 and teaching pedagogy. Social sciences. 1 credit.

#### EDUC 075. Introduction to Science Pedagogy: Theory and Practice

(Cross-listed as PHYS 095) This course is designed for students who are interested in learning about issues surrounding science education, particularly at the high school and college level. How do students most effectively learn science? How can we facilitate this learning process as instructors and educators? How do we best assess whether such learning is happening? Since the course will integrate educational theory with concrete, practical strategies for becoming better teachers, it will be particularly relevant for students currently serving as Science Associates (or those who are interested in being Science Associates.) We will touch on issues related to students' conceptual development and conceptual change, collaborative learning, as well as practical issues encountered when engaging in responsive, interactive teaching. This is a seminar course where students are responsible for weekly readings (1-2 papers per week from the education research literature), in class discussions, and brief written reflections. Students will be encouraged to bring to the discussion their own unique experiences as both science students and science teachers.

Instructor approval required for enrollment. 0.5 credit.

#### EDUC 076. Pre Student Teaching Practicum

In this field-based practicum for students pursuing teacher certification, students will progress from observing, to working with individuals and small groups, to planning and teaching a full class lesson. Students will be placed in a classroom for 4-5 hours/week at the same grade level and/or subject level at which they will student teach. Supervision will be provided. Open to sophomores and juniors (and seniors pursuing the 9th semester) who plan to student teach.

Graded CR/NC. 0.5 - 1 credit.

#### 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. Graded CR/NC. 0 5 - 1 credit

Fall 2017. Staff. Spring 2018. 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 - 1 credit. Fall 2017. Staff. Spring 2018. Staff.

#### EDUC 092. Curriculum and Methods

This seminar is taken concurrently with EDUC 093 by students pursuing teacher certification. The goal of this course is to explore praxis: the application of educational research and theory to the classroom practices of student teachers. Course content covers: lesson planning; classroom management; inquiry-oriented teaching strategies; questioning and discussion methods; literacy; the integration of technology and media; classroombased and standardized assessments; instruction of special needs populations; multicultural, nonracist, and nonsexist education; and the legal rights of students and teachers. As part of the seminar, students take a series of special methods workshops, tailored to their content area. Required for students pursuing teacher certification Social sciences. 2 credits.

Fall 2017. Bradley.

#### EDUC 093. 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 093 concurrently. (Single-credit practice teaching may be arranged for individuals not seeking certification.) Social sciences. 2 credits. Fall 2017. Staff.

#### EDUC 096. Thesis

Normally in conjunction with a special major. 1 - 2 credits. Fall 2017. Staff. Spring 2018. Staff.

#### EDUC 097. Thesis

Normally in conjunction with a special major. 1 - 2 credits. Fall 2017. Staff. Spring 2018. Staff.

## EDUC 098. Psychology and Educational Studies Thesis

Normally in conjunction with a special major. Social sciences. 1 - 2 credits. Fall 2017. Rennniger. Spring 2018. 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.

1 credit with permission of the Instructor. Prerequisite: EDUC 021 Social sciences. Writing course. 2 credits.

#### 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.

Prerequisite: EDUC 014 and an additional course in the 060s.

Social sciences. Writing course. 2 credits.

#### EDUC 133. Black Childhoods, Intersectionality and Education

"This seminar examines the lives of Black children in U.S. schools. A sociohistorical and political perspective is taken to explore how Black childhoods, or the 'impossibility' thereof, has been conceived, resisted, and (re)imagined in public discourse, community organizations, social service agencies, and PreK-5 schools and classrooms. Intersectionality theory will be a prominent lens through which students interrogate the myriad ways race, class, and gender have served to marginalize Black children, particularly Black boys. The goal is to consider how schools can realize the promise and potential of a Black childhood."

Social sciences. 2 credits. Spring 2018. Nelson.

#### 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 fieldbased collaborative research project or program evaluation.

Prerequisite: EDUC 014 and an additional course in the 040-060s. Either EDUC 042 or EDUC 045 is highly recommended.

Social sciences. Writing course. 2 credits.

Eligible for CBL

#### EDUC 153. Latinos and Education

Amidst talk of a border wall and "bad hombres", ramped up deportations, and rising unease about immigration and educational policy shifts to come, what can schools and teachers do to support Latino students and families? This Honors research seminar will explore the schooling experiences of Latinos in the U.S. with a special focus on confronting the challenges undocumented students face in the current era. Participants will examine questions around educational quality and access, language and culture, immigration and demographic change, curriculum and pedagogy, and community activism in relation to Latino education.

Prerequisite: EDUC 014 and one additional course in Educational Studies or Latin American and Latino Studies. Social sciences.

1 or 2 credits. Eligible for LALS Spring 2018. Allard

#### EDUC 161. Politics, Policy and Education

Policy, Politics & Urban Education is an honors seminar that explores the intersections of social policy, urban politics, and urban schooling. Drawing on a racial-economic analytic framework we will study the geo-political formation of U.S. cities (Philadelphia serves as our primary case study), policy and social movement. We will also look at urban education policy and pedagogical practices. With this literature as a foundation, students will receive training in the theories and methods of critical, participatory action research (CPAR). Over the course of the semester, students work in small groups with a Philadelphia school or an education-focused, community based organization (CBO). In consultation with their partnering organization, student groups will develop and implement a CPAR project. Recommended: EDUC 068: Urban Education, and EDUC 041: A Site of Struggle: Educational Policy Prerequisite: EDUC 014 and an additional course in the 060s. Social sciences. 2 credits.

#### EDUC 180. Honors Thesis

Required for students completing special honors majors including educational studies. The thesis may be counted for 2 credits in educational studies or for 1 credit in educational studies and 1 credit in the other discipline in the student's Honors Program. 2 credits. Fall 2017. Staff. Spring 2018. Staff.

## Engineering

ERIK CHEEVER, Professor MAGGIE DELANO, Assistant Professor<sup>1</sup> ERICH CARR EVERBACH, Professor and Chair<sup>1</sup> VIDYA GANAPATI, Assistant Professor NELSON A. MACKEN, Professor<sup>2</sup> ARTHUR E. McGARITY, Professor<sup>3</sup> LYNNE ANN MOLTER, Professor ALLAN MOSER, Visiting Associate Professor FARUQ M.A. SIDDIQUI, Professor MATTHEW A. ZUCKER, Associate Professor<sup>3</sup> MICHAEL PIOVOSO, Visiting Professor ANN RUETHER, Academic Support Coordinator EDMOND JAOUDI, Electronics, Instrumentation, and Computer Specialist JAMES JOHNSON, Machine Shop Supervisor CASSY BURNETT, Administrative Coordinator

1 Absent on leave, fall 2017.

<sup>2</sup> Absent on leave, spring 2018.

<sup>3</sup> Absent on leave, 2017-2018.

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 of our program will be able to demonstrate the ability to:

Be flexible and resourceful, able to learn and apply new knowledge, and to 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, as appropriate.

#### 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 Plan. 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.

### **Course Major**

Engineering majors must complete requirements from two categories: (1) 12 engineering credits and (2) 8 credits in math and science, at least 3 in math and 3 in science. No courses taken at Swarthmore and intended to satisfy these departmental requirements may be taken credit/no credit, except those taken fall semester in the first year. The requirements are detailed below, with math and science discussed separately.

#### Math and Science Requirement

To fulfill the math and science requirement for the engineering major, students must receive at least eight credits in math and science (for this purpose science is defined as biological, chemical, and physical sciences). All of the courses used to fulfill the requirement must be acceptable for the minimal major in the offering department. The science courses must include two credits of college level physics, and one credit of either biology or chemistry. All but one of the science courses must include a substantial laboratory component. Students must have 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 MATH 026); Several-Variable Calculus (MATH 033, MATH 034, or MATH 035); and Differential Equations (MATH 043 or MATH 044). The minimal requirement is three credits in Mathematics. Students are recommended to take Linear Algebra (MATH 027 or MATH 028), which can count as a fifth math credit of the eight required math and science credits.

#### **Engineering Requirement**

Students majoring in engineering are required to take seven credits from the engineering core courses; Mechanics (ENGR 006), Electric Circuit Analysis I & Electric Circuit Analysis II (ENGR 011A) & ENGR 011B), Linear Physical Systems Analysis (ENGR 012) Experimentation for Engineering Design (ENGR 014), Digital Systems and Computer Engineering Fundamentals & Design of Digital and Embedded Systems (ENGR 015A & ENGR 015B) or Numerical Methods for Engineering Applications (ENGR 019), Thermofluid Mechanics (ENGR 041) and Engineering Design (ENGR 090). In their first semester students typically will take either 0.5 or 1.0 credits of engineering, choosing between ENGR 011A, ENGR 011B (prerequisite ENGR) 011A), ENGR 015A and ENGR 015B in accordance with their interests and high school preparation. A student with a very full schedule in the first semester can also opt to take no engineering courses until the spring without falling behind in degree requirements. Mechanics (ENGR) 006) is usually taken in the spring of the first year. In the fall of the sophomore year students typically will finish the ENGR 011A, ENGR 011B, ENGR 015A and ENGR 015B sequence. Linear Physical Systems Analysis (ENGR 012) and Experimentation for Engineering Design (ENGR 014) are usually taken in the spring of the sophomore year. Numerical Methods for Engineering Applications (ENGR 019) can be taken in the spring of the sophomore, junior or

senior year. Thermofluid Mechanics (ENGR 041) 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 advisor. 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, well-justified 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 wish to receive credit for courses taken at other institutions, including those taken abroad, as partial fulfillment of the requirements for the major should consult their academic advisors 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, and Control Theory and Design. Students having an interest in digital systems might replace one or more of these courses with Embedded Systems, Principles of Computer Architecture, Mobile Robotics or Computer Vision.

*Computer engineering group.* Principles of Computer Architecture, Embedded Systems, Computer Graphics, Computer Vision, Introduction to Computer Networks, Mobile Robotics, Operating Systems, and Compilers. Students with an interest in computer hardware may include Electronic Circuit Applications, Physical Electronics, Digital Signal Processing, and Control Theory and Design.

*Mechanical engineering group.* Mechanics of Solids, Fluid Mechanics, Heat Transfer, Thermal Energy Conversion, Solar Energy Systems, and Control Theory and Design.

*Civil and environmental engineering group.* Mechanics of Solids, Structural Analysis, Geotechnical Engineering: Theory and Design, 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 Design for those interested in architecture and construction. Other recommended courses include Solar Energy Systems, and Fluid Mechanics.

## **Course Minor**

#### Academic Advising

Students interested in pursuing a minor must have 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 advisor should seek the assistance of the chair of the Engineering Department. Students who plan to minor in engineering should regularly consult their engineering advisors. 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, ENGR 011A, ENGR 011B, ENGR 012, ENGR 014, ENGR 015A, ENGR 015B, ENGR 019 or ENGR 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. 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.

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 wish to receive credit for courses taken at other institutions, including those taken abroad, as partial fulfillment of the requirements for the minor, should consult their academic advisors 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 advisors.

### **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 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.

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 1-credit 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 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 upperlevel 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.

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.

### Courses Available to Students Not Majoring or Minoring in Engineering

Design and Sculpture in the Digital Age (ENGR 001), Problems in Technology (ENGR 003), Art and Engineering of Structures (ENGR 007) and Fundamentals of Food Engineering (ENGR 010) are designed for students contemplating only an introduction to engineering. Mechanics (ENGR 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 (ENGR 004A), Operations Research (ENGR 057), Solar Energy Systems (ENGR 035), Water Quality and Pollution Control (ENGR 063), Swarthmore and the Biosphere (ENGR 004B) and Environmental Systems (ENGR 006) appeal to many students majoring in other departments, particularly those pursuing an environmental

studies major or minor. Students interested in computers, including computer science majors or minors, may wish to consider Digital Systems and Computer Engineering Fundamentals & Design of Digital and Embedded Systems (ENGR 015A) & ENGR 015B), Principles of Computer Architecture (ENGR 025), Computer Graphics (ENGR 026), Computer Vision (ENGR 027), and Mobile Robotics (ENGR 028). Students majoring in the physical sciences or mathematics may enroll routinely in advanced engineering courses. Note that Design and Sculpture in the Digital Age, Problems in Technology, Environmental Protection, Swarthmore and the Biosphere, Art and Science of Structures, and Fundamentals of Food Engineering are not admissible as technical electives within an engineering major or minor but may be taken as free electives subject to the 20course rule.

### **Off-Campus Study**

## Swarthmore's Central European Program in Krakow Poland

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.

### **Engineering 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. Usually offered in alternate years. Natural sciences and engineering practicum. Writing course.

1 credit. Eligible for ENVS Fall 2017. Macken

### **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.

Natural sciences and engineering. 1 credit. Eligible for ENVS

### 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 trussbridge team design competition.

Prerequisite: MATH 015 and PHYS 003 strongly recommended.

Natural sciences and engineering practicum. 1 credit.

Spring 2018. 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. Usually offered in alternate years.

Natural sciences and engineering. 1 credit.

### ENGR 009. Engineering and Scientific Applications of Calculus

This half-credit course will focus on mathematical applications of single variable calculus, mainly from engineering and physics; it may also include some examples from other sciences if there is student interest. In addition, ENGR 009 will include a review of relevant pre-calculus topics. It is designed to give capable and hard-working students the best chance to excel in calculus, and is recommended for students who are interested in real-world contexts where calculus is used, including (but not limited to) potential science and engineering majors.

The course will meet twice weekly for a total of 2.5 hours, and have little outside work associated with it. Most of the time in class will be spent solving problems and doing group work. ENGR 009 may not be used to fulfill the requirements for the engineering major or minor, and is available only to students taking MATH 015 concurrently. 0.5 credit.

### ENGR 010. Fundamentals of Food Engineering

In this course, we will study the scientific principles that will enable students to understand why a variety of ingredients, recipes, and cooking processes function the way they do, and why they sometimes don't work as well as expected. The course will include lectures, demonstrations, and laboratory exercises. There are no prerequisites for this course, and it is open to all students, but it cannot be used to fulfill the requirements for a major or a minor in engineering.

Natural sciences and engineering practicum. 1 credit.

Spring 2018. Molter.

### ENGR 011A. Electrical Circuit Analysis I

Students will learn to analyze electrical circuits containing resistors, op amps, and diodes in order to determine unknown voltages and currents. Simple network theorems will be used to develop equations to model electrical networks containing multiple elements. The course includes a laboratory

Corequisite: MATH 025/MATH 026 or its equivalent, or permission of the instructor. If both ENGR 011A and ENGR 011B are taken, students can request NSEP credit. 0.5 credit.

Fall 2017. Molter, Piovoso.

### ENGR 011B. Electrical Circuit Analysis II

In this course, the development of electrical circuit analysis continues by considering how circuits with additional elements such as capacitors and inductors respond over time to initial energy storage, as well as both constant and sinusoidal sources. Students will learn to solve differential equations used to model linear circuits. Solutions will be formulated in both the time and frequency domains. This course includes a laboratory. Prerequisite: ENGR 011A

If both ENGR 011A and ENGR 011B are taken, students can request NSEP credit. 0.5 credit.

Fall 2017. Molter, Piovoso.

#### 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 011B and applies them to a broad range of linear systems, such as those in the mechanical, thermal, fluid, and electromechanical domains. Techniques used include Laplace Transforms, Fourier analysis, and Eigenvalue/Figenvector methods. Both transfer

Eigenvalue/Eigenvector methods. Both transfer function and state-space representations of systems are studied.

Prerequisite: ENGR 011B or the equivalent or permission of the instructor.

Natural sciences and engineering practicum.

The course includes a laboratory. 1 credit. Spring 2018. Cheever, Staff.

### 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 regression are covered.

Prerequisite: MATH 033 or equivalent or consent of instructor.

Natural sciences and engineering practicum.

Writing course Includes a laboratory.

1 credit.

Spring 2018. Piovoso, Moser.

### ENGR 015A. Digital Systems and Computer Engineering Fundamentals

This course introduces students to digital systems theory and design techniques, including number systems, logic gates, minimization, sequential logic, and state machines. Modeling and analysis of digital systems will be enabled through the use of the Verilog hardware description language. The course includes a laboratory.

This class may be taken before or after ENGR 015B.

If both ENGR 015A and ENGR 015B are taken, students can request NSEP credit. 0.5 credit. Eligible for DGHU

Fall 2017. Ganapati, Cheever.

### ENGR 015B. Design of Digital and Embedded Systems

This hands-on course focuses on the use of computer hardware in the physical world, including topics such as analog and digital I/O, sensors, actuators, and design of embedded systems. Students will gain experience in programming and debugging microcontrollers using a compiled language such as C or C++. The course includes a laboratory.

This class may be taken before or after ENGR 015A.

If both ENGR 015A and ENGR 015B are taken, students can request NSEP credit.

0.5 credit. Eligible for DGHU

Fall 2017. Ganapati, Cheever.

### ENGR 019. Numerical Methods for Engineering Applications

(Cross-listed as MATH 024)

This course is geared towards students who want to know how to transform a set of equations on a page into a working computer program. Potential topics include root finding, discrete and continuous optimization, gradient descent, solution of linear systems, finite element methods, and machine learning. We will also discuss how real numbers are represented by computers, especially insofar as they affect precision and accuracy of calculations. Techniques will be applied in a series of projects focused on engineering applications. Prerequisite: MATH 025/MATH 026 or its equivalent, or permission of the instructor. Natural sciences and engineering practicum. 1 credit.

Spring 2018. Ganapati.

# ENGR 020. Introduction to Computer Networks

This course introduces the principles and practice of computer networking. Topics include the structure and components of computer networks, packet switching, layered architectures, physical layer, window flow control, network layer, local area networks (Ethernet, Token Ring, FDDI), TCP/IP, error control, congestion control, quality of service, multicast, network security, wireless LANs and cellular wireless networks. Prerequisite: ENGR 015B or permission of the

Prerequisite: ENGR 015B or permission of the instructor.

Natural sciences and engineering practicum. 1 credit.

### ENGR 022. Operating Systems

(Cross-listed as CPSC 045) See Computer Science for course description and offerings.

Natural sciences and engineering practicum.

### ENGR 023. Compilers

(Cross-listed as CPSC 075) See Computer Science for course description and offerings. Natural sciences and engineering practicum.

### 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.

Prerequisite: One of ENGR 015B, CPSC 031, CPSC 035.

Natural sciences and engineering practicum. 1 credit.

### ENGR 026. Computer Graphics

(Cross-listed as CPSC 040) Natural sciences and engineering practicum. 1 credit.

### 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 offline and real-time object recognition and classification systems.

Prerequisite: ENGR 019 or CPSC 035. MATH 027 or MATH 028S is strongly recommended. Natural sciences and engineering practicum. 1 credit.

Spring 2018. 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.

Prerequisite: ENGR 019 or CPSC 035. MATH 027 or MATH 028S is strongly recommended. Natural sciences and engineering practicum. 1 credit. Eligible for COGS

Fall 2017. Staff.

### ENGR 029. Embedded Systems

Connected systems that used embedded microcontrollers are becoming more and more pervasive, with applications in the car, home, and body. This course will explore how to design embedded systems using a reconfigurable microcontroller system. Topics will include biomedical signal acquisition and processing, numerical computation, and audio/video signal processing. This course includes a laboratory. Prerequisite: ENGR 015A and ENGR 015B or permission of the instructor. L credit

Spring 2018. Delano.

### 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. Prerequisite: PHYS 004, MATH 015, or the equivalent or the permission of the instructor. Natural sciences and engineering practicum. 1 credit. Eligible for ENVS

Fall 2017. Staff.

### 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 and problem session is included.

Prerequisite: ENGR 006, ENGR 011A, ENGR 011B, ENGR 012 and ENGR 014, or the equivalent.

Natural sciences and engineering practicum. 1 credit.

Fall 2017. Macken, Moser.

### 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. Corequisite: Natural sciences and engineering practicum if taken as ENGR 057.

Natural sciences and engineering practicum. 1 credit.

Eligible for ENVS, CBL

### 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 A/D and D/A converters, digital controllers, and numerical control algorithms.

Prerequisite: ENGR 012 or permission of the instructor.

Natural sciences and engineering practicum. A laboratory is included.

1 credit.

### 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, photo elasticity, and elastic and plastic theories.

Prerequisite: ENGR 006 or the equivalent. Natural sciences and engineering practicum. A laboratory is included. 1 credit.

Fall 2017. Siddiqui.

### ENGR 060. Structural Analysis

This course covers fundamental principles of structural mechanics including statically determinate and intermediate analysis of frames and trusses, approximate analysis of indeterminate structures, virtual work principles, and elements of matrix methods of analysis and digital computer applications. Offered in the fall semester of alternate years.

Prerequisite: ENGR 006, or permission of the instructor.

Natural sciences and engineering practicum. A laboratory is included.

1 credit.

Fall 2017. 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. Offered in the fall semester of alternate years.

Prerequisite: Grade of B or better in ENGR 006 or permission of the instructor.

Natural sciences and engineering practicum. A laboratory is included.

1 credit.

### ENGR 062. Structural Design

This course covers the behavior and design of steel and concrete structural members. Topics will include a discussion of the applicable design codes and their applications to structural design. Normally offered in the spring semester of

alternate years.

Prerequisite: ENGR 006, or permission of the instructor.

Natural sciences and engineering practicum. A laboratory is included. 1 credit.

Spring 2018. 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, storm water, and nonpoint pollution on natural waters, and environmental impact assessment. Offered in the fall semester of alternate years.

Prerequisite: CHEM 010, MATH 025 or MATH 026, or the equivalent or permission of the instructor.

Natural sciences and engineering practicum. 1 credit.

Eligible for ENVS, CBL

### 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. Prerequisite: Recommended: ENGR 057 or the equivalent, or the permission of the instructor. Natural sciences and engineering practicum. 1 credit.

Eligible for ENVS

### ENGR 071. Digital Signal Processing

Students will be introduced to difference equations and discrete-time transform theory, the Ztransform 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.

Prerequisite: ENGR 012 or permission of the instructor.

Natural sciences and engineering practicum. A laboratory is included. 1 credit.

Spring 2018. Cheever.

### ENGR 072. Electronic Circuit Applications

The student will design electronic circuits that sense the surroundings (light, temperature, sound...), process the signal, and respond via an actuator (motor, light ...) or communication to a computer. Students will design and debug circuits, lay out printed circuit boards using CAD software, and solder the components onto the board. Electronic designs include those with diodes, opamps for amplification and filtering of electronic signals, and power MOSFET transistors used as switching devices for actuators. Students will program microcontrollers, including on-chip peripherals, and write code to process interrupts. Mixed signal devices (A/D and D/A converters) are introduced and used throughout the course. Prerequisite: ENGR 012 or permission of the instructor.

## Engineering

Natural sciences and engineering practicum. This course includes a laboratory. 1 credit. Fall 2017. Cheever.

### 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. Offered in the spring semester of alternate years. Prerequisite: ENGR 011A and ENGR 011B or PHYS 008 or permission of the instructor.

Natural sciences and engineering practicum. A laboratory is included.

#### ENGR 074. Semiconductor Devices and Circuits

This course explores the operation and application of semiconductor devices, including diodes, transistors (bipolar and field effect) and other devices. This includes terminal characteristics of semiconductor devices and circuits, including small signal models of single and multi-transistor amplifiers, and transistor-level modeling of operational amplifiers. The course also examines the speed and input-output characteristics of logic devices, the design of power circuits and problems of stability and oscillation in electronic circuits. Prerequisite: ENGR 011A and ENGR 011B or permission of the instructor. 1 credit.

### ENGR 075. Electromagnetic Theory I

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. The lab will include optical applications using lasers, fiber and integrated optical devices, modulators, nonlinear materials, and solid-state detectors. Offered in the fall semester of alternate years. Prerequisite: ENGR 012, or PHYS 008, or permission of the instructor.

Natural sciences and engineering practicum. 1 credit.

### ENGR 076. Electromagnetic Theory II

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. The lab will include optical applications using lasers, fiber and integrated optical devices, modulators, nonlinear materials, and solid-state detectors.

Offered as demand and staffing permits. Prerequisite: ENGR 075 or a physics equivalent. Natural sciences and engineering practicum. 1 credit.

### 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. Offered in the spring semester of alternate years. Prerequisite: ENGR 012 or permission of the instructor.

Natural sciences and engineering practicum. A laboratory is included. 1 credit.

### ENGR 081. Thermal Energy Conversion

This course covers the development and application of the principles of thermal energy analysis to energy conversion systems. The concepts of availability, ideal and real mixtures, and chemical and nuclear reactions are explored. Offered in the spring semester of alternate years. Prerequisite: ENGR 041 or permission of the instructor.

Natural sciences and engineering practicum. A laboratory is included. 1 credit.

### 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. Offered in the spring semester of alternate years.

Prerequisite: ENGR 041 or permission of the instructor.

Natural sciences and engineering practicum. A laboratory is included. 1 credit.

### 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. Offered in

## Engineering

the fall semester of alternate years. Prerequisite: ENGR 041 or permission of the instructor.

Natural sciences and engineering practicum. A laboratory is included. 1 credit.

### ENGR 086. Dynamics of Mechanical Systems

Rigid-body kinematics and kinetics in plane and three-dimensional motion; dynamics using energy, momentum, and variational methods of analysis. Application to electrodynamic systems and transducers. Matlab is used as a modeling tool for describing the linear and nonlinear behavior of the systems considered.

Prerequisite: ENGR 006, ENGR 011A, ENGR 011B, and ENGR 012; MATH 034/MATH 035 and MATH 043/MATH 044; or permission of the instructor.

A laboratory is included. 1 credit.

Spring 2018. 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. Natural sciences and engineering.

Writing course.

1 credit.

Spring 2018. Staff.

### ENGR 091. Biomedical Signals

This course explores methods for the analysis of biomedical signals. The types of signals discussed in this course include those that emanate from electrical activity in the body, such as electrocardiograms (ECG), electroencephalograms (EEG), and electromyograms (EMG). In addition, this course will examine signals generated from external sources such as image data from x-rays, computed tomography (CT), magnetic resonance images (MRI), and ultrasound. Methods of analysis for biomedical signals and images studied in this course include standard digital signal processing techniques as well as newer timefrequency domain methods such as the wavelet transform. Applications of these methods include filtering, denoising, spectral estimation, and classification. Topics such as the Radon transform, used in tomographic reconstruction of image data, will also be covered. This class includes a laboratory and project.

Prerequisite: ENGR 012 or permission of the instructor.

Includes laboratory and project. 1 credit.

### 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.

Offered only with departmental approval and faculty supervision.

1 credit.

### 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 advisor. A prospectus of the thesis problem must be submitted and approved not later than the end of junior year.

Offered only with departmental approval and faculty supervision.

1 credit.

### 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. Offered only with departmental approval and faculty supervision.

0.5 - 1 credit.

\*Courses numbered ENGR 004A-004Z serve all students interested in environmental science, technology, and policy. Some may meet requirements for a major or minor in environmental studies and special majors, and all carry NSE distribution credit (though not necessarily NSEP). Similar courses are available through the College's off-campus study programs in Central Europe and Cape Town, South Africa.

These courses may not be used to satisfy requirements for the major or minor in engineering.

### 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** 

Digital Systems & Computer Engineering Fundamentals/Design of Digital & Embedded Systems Principles of Computer Architecture

## Engineering

Electromagnetic Theory I 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 Embedded Systems

**Mobile Robotics and Machine Vision** Computer Vision Mobile Robotics

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 Analysis Structural Design

**Structural Mechanics** Mechanics of Solids Structural Analysis

**Structures and Soil** Structural Analysis 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

## **English Literature**

NATHALIE ANDERSON, Professor ELIZABETH BOLTON, Professor<sup>3</sup> NORA JOHNSON, Professor PETER J. SCHMIDT, Professor and Chair VALERIE SMITH, Professor and President of Swarthmore College CRAIG WILLIAMSON, Professor RACHEL BUURMA, Associate Professor ANTHONY FOY, Associate Professor JILL GLADSTEIN, Associate Professor and Director of Writing Associates Program BAKIRATHI MANI. Associate Professor<sup>3</sup> ERIC SONG. Associate Professor LARA COHEN, Associate Professor<sup>3</sup> SANGINA PATNAIK, Assistant Professor ERIC M. GLOVER, Mellon Postdoctoral Fellow and Visiting Assistant Professor ALBA NEWMANN HOLMES, Visiting Assistant Professor and Assistant Director of the Writing Program DON JAMES MCLAUGHLIN, Visiting Assistant Professor GREGORY FROST, Visiting Instructor (part time) RACHEL PASTAN, Visiting Instructor (part time)<sup>5</sup> DALE MEZZACAPPA, Visiting Instructor (part time)<sup>5</sup> TBD, Administrative Assistant

<sup>3</sup> Absent on leave, 2017-2018. <sup>5</sup> Fall 2017.

This department offers courses in English literature, American literature, Native American literature, Anglophone literature, Asian and Asian American literatures, gay and lesbian literatures, drama, film, 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 a variety of 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 crossdisciplinary major, or in a program with a concentration.

For the most current course offerings and prerequisite information, please consult the website.

### 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 advisor, 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 Plan. 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 graded courses in English, not counting creative writing workshops. Applications for the major will be deferred until two graded literature courses are completed.

### **Course Major**

The work of a major consists of a minimum of nine units of credit in the department, including

English 096 Methods

English 099 Senior Majors' Colloquium At least one unit in each of the following historical periods:

Medieval and Renaissance literature (Med/Ren) 18<sup>th</sup> and 19<sup>th</sup> century literature (18th/19th c.)

20<sup>th</sup> and 21<sup>st</sup> century literature (20th/21st c.) First Year Seminars (English 008 and 009A through Z), Writing ('W') courses, and Creative Writing courses count toward the major but not toward the historical requirements.

We also request that all Course and Honors majors identify a "concentration" of at least three English literature credits within the major, based on their own interests and goals. This concentration is to be defined by the student, but we encourage you to discuss choosing the courses for your concentration with a member of the department. Sample concentration topics: one of our three historical periods; American or African-American or Asian-American literature; theory; digital humanities; creative writing; a particular genre, such as fiction or poetry. Many other good possibilities exist. Students will define their potential concentration within the major as part of their sophomore plan, but this plan may be modified as needed junior or senior year.

AP credit only in Language/Literature, with a score of a four or a five, counts toward a major or minor in English Literature, but they do not satisfy historical requirements. AP credit in Language/Composition does NOT count towards a major or minor in English Literature. Journalism classes and English 1F, G, etc. or C (Writing Pedagogy) DO NOT count as part of the unit requirements.

### **Course Minor**

The work of a minor consists of a minimum of five units of literature credit in the department including at least one unit in two of the following historical periods: Medieval/Renaissance; 18th/19<sup>th</sup> century; 20<sup>th</sup>/21<sup>st</sup> century. First Year Seminars (English 008 and 009A through Z) and Creative Writing courses count toward the minor but not toward the historical requirements. AP credit counts toward the minor but does not satisfy historical requirements. Journalism classes and ENGL 001F, G, etc. or C (Writing Pedagogy) DO NOT count as part of the unit requirements.

### 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. All three preparations will normally be done through seminars (if approved by the Department, one preparation may be a thesis or creative writing project). The program must include seminars from at least two of the following historical periods:

Medieval and Renaissance literature (Med/Ren) 18th and 19th century literature (18th/19th c.) 20th and 21st century literature (20th/21st c.)

Honors majors, as part of their overall work in the department, must meet the general major requirement of 9 credits in English Literature, including at least one unit of credit in each of the three historical periods above. First Year Seminars (English 008 and 009A through Z) and Creative Writing courses count toward the major but not toward the historical requirements. AP credit counts toward the major but does not satisfy historical requirements. Journalism classes and ENGL 001F, G, etc. or C (Writing Pedagogy) DO NOT count as part of the unit requirements.

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 project); 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 unit each in two of the following: Medieval/Renaissance;  $18^{th}/19^{th}$  century;  $20^{th}/21^{st}$  century. First Year Seminars (English 008 and 009A through Z) and Creative Writing courses count toward the minor but not toward the historical requirements. AP credit counts toward the minor but do not satisfy historical requirements.

### **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 advisors. 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. Students must take at least one course each in two of the three historical periods listed above. 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 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 majors-must complete three units of creative writing in addition to the usual departmental historical requirements. The creative writing credits will normally consist of either three workshops (ENGL 070A, B, C, D, E, G, H, or J) OR two workshops and ENGL 070K, the Directed Creative Writing Project.

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.

For creative writing projects in the Honors Program, the 2-credit field will normally be defined as a 1-credit workshop (ENGL 070A, 070B, 070C, or 070H) 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.

**Note:** Creative writing and journalism classes do not count toward the departmental historical requirements. ENGL 070A, 070B, 070C, 070H, and 070K 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 in the department office.

### Thesis/Culminating Exercise

### **Course Majors**

English 099, Senior Course Majors Colloquium, is open only to senior English literature course majors and required for them to take. It 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.

Under some circumstances a course major may elect to write a thesis. See the description under ENGL 098.

### **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 1credit workshop plus a 1-credit directed creative writing project. For further information, including deadlines for directed creative writing proposals, see rubric under ENGL 070K.

### Advanced Placement/International Baccalaureate Credit

A maximum of 2 credits may be awarded for combined AP and IB work.

### AP Credit

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 <u>not</u> 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

IB Credit: a maximum of one 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.

### Off-Campus Study and 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. 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.

### **Teacher Certification**

English majors may complete the requirements for English certification through a program approved by the State of Pennsylvania. For further information about the relevant set of English and Educational Studies requirements, please refer to the Educational Studies section of the Bulletin.

### 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.

Journalism classes and English 1F, G, etc. or C (Writing Pedagogy) DO NOT count as part of the unit requirements.

### English Literature Courses

First-Year Seminars and Writing Courses First Year Seminars are limited to 12 first-year students only. No student may take more than one. Writing courses are limited to 15, but are open to all students. All count as writing courses.

### ENGL 009A. First-Year Seminar: Literature and Law

In this course we will explore the forms law and literature take as they work through similar concerns, determining how social systems should function and puzzling over the moments when they don't. When does fiction appropriate the law's penchant for articulating rights and defining relationships? And when does the legal imagination draw from literature? We will read works of tragedy, detection, confession and evasion as we sort through these questions, supplementing our conversation with critical legal theory, trauma studies, and case law. Humanities.

1 credit. Fall 2017. Patnaik.

#### ENGL 009E. First-Year Seminar: Narcissus and the History of Reflection

Narcissism seems at once reprehensible and an unavoidable part of personhood. This course investigates how, over the course of many centuries, the story of Narcissus has been reworked as a way to think about process of creative reflection and how we see ourselves in relation to others. At stake are questions of desire, gender, racial identities, and language. Authors include Ovid, Milton, Wilde, Freud, and Fanon; also visual art and film. Humanities.

Writing course.

1 credit. Fall 2017. Song.

### ENGL 009M. First-Year Seminar: The Wizard of Oz in Context

Wonderland. Oz. Neverland. Narnia. These realms speak to a familiar plot device: the discovery of a portal, capable of granting individuals passage to a parallel universe. But how did this tradition originate? "Oz in Context" provides an introduction to books that helped build this tradition from the 17th-19th centuries. Humanities. Writing course. 1 credit. Fall 2017. Staff.

### ENGL 009N. First-Year Seminar: Philadelphia Poets

What's happening in poetry today? We'll explore that question through Philadelphia's vibrant literary scene, from the intellectual avant garde to the Spoken Word movement; from Daniel Hoffman's Brotherly Love to Sebastian Agudelo's Each Chartered Street; from Sonia Sanchez's Black Arts lyricism to Nzadi Keita's biography-inverse of Frederick Douglass's wife Anna; from alumnus WD Ehrhart's wrenching evocations of the Viet Nam war to alumna Daisy Fried's bracing face-slapping satires.

Humanities. Writing course. 1 credit. Fall 2017. Anderson.

### ENGL 009Z. First-Year Seminar: Close **Reading and Its Discontents**

What is close reading? How do we do it? What is its (unexpectedly complex) history? And what might it mean for us to reject it? We will study close readings of all kinds of text (from John Donne poems and Jane Austen novels to car advertisements and Tweets), practice traditional and experimental forms of close and distant reading, and write in several genres. Humanities. Writing course.

Writing course.

## **English Literature**

1 credit. Spring 2018. Buurma.

### ENGL 011. Comedy

The 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 plays by Plautus, Shakespeare, Wilde, and Churchill, Hollywood romantic comedies, television comedy, and materials on minstrelsy, genre theory and performance studies.

A version of this course has been offered in the past as a First-Year Seminar, English 009G, but this new version is open to any student, without any prerequisite. If you have taken English 009G, you are not able to enroll in English 011. GATEWAY English Literature.

Humanities. Writing course. 1 credit. Spring 2018. Johnson.

### Medieval and Renaissance Courses

### ENGL 010. Survey: "Beowulf" to Milton

A historical and critical survey of poetry, prose, and drama from **Beowulf** to Milton. This will include British literature from the following periods: Anglo-Saxon, Middle English, Renaissance, and 17th century. Med/Ren. GATEWAY English Literature. Humanities. 1 credit. Fall 2017. Williamson.

### 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, changing phonology and morphology, wordplay in Chaucer and Shakespeare, pidgins and creoles, and global English.

Med/Ren. GATEWAY English Literature.

Prerequisite: 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.

Humanities. 1 credit. Eligible for MDST Spring 2018. Williamson.

### ENGL 016. Chaucer

Readings in Middle English of most of Chaucer's poetry with emphasis on **The Canterbury Tales** and **Troilus and Criseyde**. The course attempts to place the poetry in a variety of critical and cultural contexts which help to illuminate Chaucer's art.

Medieval cultural readings include Boethius' Consolation of Philosophy, and Andreas Capellanus' The Art of Courtly Love. Med/Ren Humanities. 1 credit. Eligible for MDST Spring 2018. Williamson.

### ENGL 020. Shakespeare

Topics in this survey of Shakespeare's plays, including kingship, comedy and tragedy, family, sexuality, race, performance, language, and the rewriting of history. We will frequently return to the question of theater's place in early modern England, while also examining the place Shakespeare holds in the cultures we inhabit. The list of plays may include *Taming of the Shrew*, *Henry V, Midsummer Night's Dream, Twelfth Night, Measure for Measure, Hamlet, Othello, Lear*, and *The Tempest*. Med/Ren Humanities.

1 credit. Fall 2017. Johnson.

## ENGL 022. Literature of the English Renaissance

This course will begin with More's **Utopia** and end with selections from **Paradise Lost**, paying particular attention to literature's political contexts, gender, genre, and the relation of women's writing to the male canon. Among the other writers included will be Wyatt, Surrey, Philip Sidney, Mary Herbert, Mary Wroth, Spenser, Elizabeth Cary, Jonson, Bacon, Donne, Herrick, George Herbert, and Marvell. Med/Ren. Humanities. 1 credit.

### ENGL 023. Renaissance Sexualities

The study of sexuality allows us to pose some of the richest historical questions we can ask about subjectivity, the natural, the public, and the private. This course will explore such questions in relation to Renaissance sexuality, examining several sexual categories-the homoerotic, chastity and friendship, marriage, adultery, and incest-in a range of literary and secondary texts. Med/Ren

Humanities. 1 credit. Eligible for GSST

## ENGL 024. The Revolutionary Seventeenth Century!

This course traces how English writers anticipated, participated in, and made sense of the civil wars that led to the execution of Charles I (1649) and a failed attempt at non-monarchical government (1649-1660). Authors include William Shakespeare, Ben Jonson, John Milton, and Aphra Behn, as well as less familiar but important writers

## **English Literature**

of both imaginative texts and polemics. Med/Ren. Humanities. 1 credit.

# ENGL 025. Christopher Marlowe: Works, Life, and Afterlives

We'll be studying the works of Christopher Marlowe, with attention to his mysterious biography and to his influence on drama and poetry. Humanities. 1 credit.

Fall 2017. Song.

### ENGL 026. Allegory and Allegoresis in the English Renaissance

Allegory designates a mode of writing and of interpreting narratives. The decline of allegory marks a shift from medieval to modern culture, eventually giving way to realism. Yet allegory has never left us, as we continue to read allegorically to some degree. This course turns to the English Renaissance as a literary turning point. Readings from The Faerie Queene, Paradise Lost, and Pilgrim's Progress; theoretical work by Walter Benjamin, Paul de Man, and others. Med/Ren

Humanities.

1 credit.

## ENGL 027B. Performing Justice on the Renaissance Stage

Courtroom spectacles-tragic injustices or the satisfying punishment of villains-have become familiar sources of entertainment. This course will examine how Shakespeare, Jonson, and their contemporaries turn repeatedly to the law for dramatic energy. Their plays compel a number of questions: what does it mean to take pleasure in injustice? What is the relationship between human and divine justice? These questions often demand historical answers, and our class will examine how dramatic works think through specific developments in legal thinking and practice.

Med/Ren Humanities.

1 credit.

### ENGL 028. Milton

Study of Milton's poetry and prose with particular emphasis on *Paradise Lost*. Med/Ren Humanities. 1 credit. Spring 2018. Song.

### ENGL 046. Tolkien and Pullman and Their Literary Roots

A study of 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 *Sir Gawain and the Green Knight*. 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. Med/Ren or 20th/21st Humanities. 1 credit. Eligible for MDST Spring 2018. Williamson.

### 18th and 19th Century Courses

### ENGL 033. The Romantic Sublime

"The essential claim of 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. 18th/19th c. Humanities. 1 credit. Eligible for GSST

### ENGL 035. The Rise of the Novel

The long history of the novel, stretching from its eighteenth-century origins to its Victorian and Modernist incarnations through its post-colonial and post-modernist reconfigurations. Includes close attention to landmark canonical novels and authors (like Defoe, Richardson, Burney, Austen, Dickens, Gaskell, James, Joyce, Naipaul), a survey of the main critical and theoretical approaches to the novel, investigation of printing and publication history, and introductory text-mining techniques. 18th/19th c.

GATEWAY English Literature. Humanities. 1 credit. Eligible for GSST, INTP Fall 2017. Buurma.

### ENGL 036. Jane Austen

Mingling stylistic precision with an uncanny eye for social foibles, Austen's novels off 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 18th-century fiction, politics, and philosophy to which she was responding; we'll also consider recent critical views on Austen and the ways films of the1990s 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 addressing one or more of the novels in a broader historical or stylistic context. 18th/19th c.

GATEWAY English Literature. Humanities. 1 credit. Eligible for GSST

### ENGL 038. Regency Skepticism, 1812-1832

Skepticism and critique, rather than prophecy and transformation, define the later Romantics and those who respond to them, transforming wry cynicism into art and a tool of inquiry. Texts include *Emma and Clueless, Frankenstein, Prometheus Unbound*, Byron's *Don Juan* and *Don Juan deMarco*, J.M. Coetzee's *Disgrace*. 18th/19th c. Humanities. 1 credit.

#### ENGL 040. Victorian Literature and Victorian Informatics

A broad survey of canonical Victorian literature, including Charlotte Brontë, John Stuart Mill, Charles Darwin, George Eliot, Christina Rossetti, Alfred Tennyson, Oscar Wilde, and others. This class focuses on developing techniques of close, middle-distance, and distant reading, with an emphasis on exploring digital tools for organizing, curating, decompasing, and remaking literary texts, including some treatment of theories of knowledge organization and literary histories of information.

Pre-1830 or 18th/19th c. Humanities. 1 credit.

# ENGL 041. The Victorian Poets: Eminence and Decadence

From Tennyson's mythic moralizing to Robert Browning's vivid ventriloquism, from Elizabeth Barrett Browning's sharp-eyed social commentary to Oscar Wilde's tragic outrageousness, from the "fleshly school" of Dante Gabriel Rossetti to the provocative nonsense of Lewis Carroll, this course examines the responses of Victorian poets to the stresses peculiar to their era.

18th/19th c. Humanities.

1 credit.

#### ENGL 050. Hemispheric American Literature

This course explores the emergence of American literature as a fundamentally transnational process. From the London publication of Washington Irving's Sketch Book to the popularity of travel narratives and dime novels about Spanish America to the oceanic scope of Melville's Moby-Dick, even the most insistently nationalist works emerged from and circulated within a much more expansive network. In this course, we will examine a wide variety of genres and media, including not only novels and poetry, but also newspapers, maps, personal narratives, and indigenous literacies. We will work with these texts in both physical and digital formats, spending one class session at Penn's Kislak Center for Special Collections, Rare Books & Manuscripts and another in a lab learning to manipulate data on American fiction. There will be a total of four digital assignments that will introduce you to

various methods of computational analysis for literary studies, including mapping, text analysis, working with metadata, and 3D printing. No previous experience with digital methods is required. 18th/19th c. GATEWAY English Literature.

Humanities. 1 credit. Eligible for DGHU

## ENGL 051. Mariners, Renegades, and Castaways: Early American Literature

This course examines American literature from its earliest recorded oral traditions to the Civil War by focusing on outsiders, or what Trinidadian critic C.L.R. James, writing about Moby-Dick, called "mariners, renegades, and castaways." Our readings will include not only Melville's once neglected, now famous novel, but also a wide range of less familiar texts, including origin stories, captivity narratives, poetry, and manifestoes.

18th/19th c.

GATEWAY English Literature. Humanities. 1 credit.

## ENGL 051M. Medicine, Disability and Narrative

This course explores what it means to translate the experience of disease and disability into art. Readings will cover historical representations of everything from rabies, phobias, and melancholia to phantom limb syndrome and syphilis. As an introduction to disability studies, we'll also read important works by Helen Keller, Leo Bersani, and Audre Lorde.

For majors and minors, this course can count either as an 18th/19th or as a 20th/21st century course, depending on the topic of the final research paper.

GATEWAY English Literature. Humanities. 1 credit. Fall 2017. Staff.

### ENGL 059. 19th Century American Novels

When we think of 19th century American literature, we tend to think of novels: Herman Melville's *Moby-Dick*, Harriet Beecher Stowe's *Uncle Tom's Cabin*, James Fenimore Cooper's *The Last of the Mohicans*, and so on. But the novel was still a new and somewhat dubious genre in the nineteenth-century U.S., and its identity was not yet settled. In this course, we will read some of the "big" books of the period, but we will try to read them as they might have been read at the time, as experimental controversial works. Texts may include Hawthorne's *The House of the Seven Gables*, William Wells Brown's *Clotel*, and Helen Hunt Jackson's *Ramona*, in addition to those listed above. 18th/19th c. Humanities. 1 credit.

# ENGL 060. Early African American Print Cultures

African American literature has traditionally been defined in terms of authorship, but how might we expand this definition to consider editing, illustration, printing, circulation, and reading? And how might this expanded definition change our understanding of the field? This course will examine a wide variety of 18th- and 19th-century African American print culture, including poetry, sermons, manifestos, newspapers, slave narratives, and novels.

18th/19th c. Humanities. 1 credit. Eligible for BLST

### ENGL 062. Classic Black Autobiography

An introduction to the origins of African American autobiography, examining criminal confessions, slave narratives, and other personal narratives from the Revolutionary period to the early Jim Crow era. Emphasizing the significance of autobiography as a practice rather than simply a document, we will consider the key features of an emerging autobiographical tradition, the textual strategies that black narrators have employed, and the contextual concerns that have shaped them. 18th/19th c.

Humanities. 1 credit. Eligible for BLST

### ENGL 093. Early American Media Cultures

This course borrows some of the methods of new media studies to look anew at the multimedia culture of the 18th- and 19th-century United States. We will study newspapers, maps, wampum, photographs, songbooks, advertisements, and counterfeit money, alongside literary texts that thematize this rich media culture. 18th/19th c. Humanities.

1 credit.

### 20th and 21st Century Courses

### ENGL 045. Modern British Poetry

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 20<sup>th</sup>-century life. 20th/21st c. Humanities. 1 credit.

#### ENGL 046. Tolkien and Pullman and Their Literary Roots

See previous listing

### 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. 20th/21st c.

Humanities. 1 credit. Eligible for GSST Spring 2018. 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. 20th/21st c.

Humanities.

# ENGL 051M. Medicine, Disability and Narrative

Exploration of what it means to translate the experience of disease and disability into art. Readings will cover historical representations of everything from rabies, phobias, and melancholia to phantom limb syndrome and syphilis. As an introduction to disability studies, we'll also read important works by Helen Keller, Leo Bersani, and Audre Lorde.

For majors and minors, this course can count either as an 18th/19th or as a 20th/21st century course, depending on the topic of the final research paper.

GATEWAY English Literature. Humanities. 1 credit. Fall 2017. Staff.

### ENGL 052A. U.S. Fiction, 1900-1950

A focus on well-known and newly recognized novelists important for this period: Baum, London, Wharton, Cather, Hemingway, Hurston, Loos, Hammett, McCullers, and Steinbeck. 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, particularly regarding issues of immigration, race, community, and redefinitions of gender roles and the meaning of "American."

## **English Literature**

20th/21st c. 1 credit.

## ENGL 052B. U.S. Fiction, 1945 to the Present

Major authors and emerging figures, with attention to innovations in the novel as a literary form and the ways in which writers engage with their historical context, both within the U.S. and globally. The list of authors varies, but may include Eudora Welty, James Agee, Philip Roth, Gish Jen, Lorrie Moore, Sandra Cisneros, Richard Powers, Justin Torres, Gary Shteyngart, Patricia Highsmith, Neil Gaiman (American Gods). 20th/21st c. Humanities. 1 credit.

Fall 2017. Schmidt.

### ENGL 053. Modern American Poetry

An introductory survey of the full range of 20thcentury American poetry, but we will commence with Whitman and Dickinson, two key predecessors and enablers. The emphasis will be on particular poets and poems, but a recurrent theme will be poetry's role in a democracy: is poetry really an esoteric art for the "educated" few, as some imply, or has poetry in the 20th century played a crucial role in shaping both democratic citizens and a sense of democratic culture? 20th/21st c.

Humanities. 1 credit. Spring 2018. Schmidt.

# ENGL 053R. Research Topics in U.S. Literature

A limited-enrollment, research-oriented colloquium for students who have done well in a previous U.S. literature course and would like to do advanced work. We will focus on readings and research materials to learn some basic methods and theory relevant for contemporary archival research using print and online resources. Later in the semester students will be able to propose, design, and present their own research project to the class. Students will conclude the course by writing a research thesis on a topic of their choice approved by the professor; they will also write a short paper on the earlier materials. 20th/21st c.

Prerequisite: English 52 (either A or B) or English 53, or an equivalent mid-level course covering U.S. or colonial literature taught by the Swarthmore English department. Enrollment limited to 15. Humanities.

### ENGL 061. Fictions of Black America

A survey of significant novels and short fiction by African American writers since the Harlem Renaissance. We will examine the textual practices, cultural discourses, and historical developments that have shaped a black literary tradition, paying close attention to the dynamic interaction among artist, culture, and community. 20th/21st c. Humanities. 1 credit. Eligible for BLST

#### ENGL 063. Contemporary Black Autobiography

Since 1965, African American autobiography has been characterized by both formal innovation and a thematic concern with the meaning of blackness after the Civil Rights Movement; this course examines these developments. Authors may include Malcolm X, Angela Davis, James Baldwin, John Edgar Wideman, Adrienne Kennedy, and Audre Lorde. 20th/21st c. Humanities. 1 credit. Eligible for BLST Spring 2018. Foy.

## ENGL 064. The New Negro Versus Jim Crow

What is the relationship between the birth of a "New Negro" and the birth of Jim Crow? This advanced course focuses closely on the florescence of African American literature from the late 19th century through the Harlem Renaissance, even as the strictures and structures of Jim Crow hardened. 20th/21st c.

Humanities. 1 credit. Eligible for BLST Fall 2017. 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. Authors include Maxine Kingston, Chang-Rae Lee, David Henry Hwang, and Theresa Hak-Kyung Cha. 20th/21st c. Humanities. 1 credit. Eligible for ASIA

#### ENGL 068. Black Culture in a "Post-Soul" Era

Since the 1970s, younger generations of African American writers, artists, and intellectuals have struggled over the meaning of Blackness in the wake of the Civil Rights and Black Power movements that preceded them. Supported by a handful of historical and critical studies, we will

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examine how black novelists, playwrights, and poets in the 'post-soul' era have dealt with a complex of shifting and interconnected concerns, including the imperatives of racial representation in a society increasingly driven by mass consumption and global media, the contentious discourses of sexual politics, and the polarization of classes within Black America. 20th/21st c. Humanities. 1 credit.

Eligible for BLST Spring 2018. Foy.

### ENGL 071C. The Short Story

As we read widely in the 19th- and 20th-century 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.

20th/21st c. Humanities. 1 credit.

### ENGL 071K. Lesbian Novels Since World War II

Examination of a wide range of novels by and about lesbians since World War II. Of particular concern will be the representation of recent lesbian history. How, for instance, do current developments in cultural studies influence our understanding of the lesbian cultures of the '50s, '60s, and '70s? What is at stake in the description of the recent lesbian past? 20th/21st c.

Humanities. 1 credit. Eligible for GSST

# ENGL 071S. Contemporary Life Writing: Form and Theory

Exploration of contemporary forms of life writing. The term "writing" will be used flexibly to encompass self-representation in visual forms (including graphic memoir, photography, and video). Our topics will include the intersections among autobiography, biography, and fiction; selfnarration as a public and political form; and how life writing has become intertwined with theoretical explorations of gender, sexuality, race, and biopolitics. Authors include Gloria Anzaldúa, Alison Bechdel, Theresa Hak Kyung Cha, Jamaica Kincaid, Maggie Nelson, and Paul B. Preciado. Assignments will include a creative life-writing project as well as academic essays with close textual analysis and scholarly argument. Humanities. 1 credit.

Eligible for INTP

### ENGL 072. Global Modernisms

Survey of global fiction from the twentieth- and twenty-first centuries, tracing an arc of modernist literary practices that extends beyond the largely American and European coterie of high modernists. We will put pressure on the geopolitics of literary modernism(s), exploring how historical currents and theoretical frameworks breed new critical lenses for modernist form. And we will ask: what does it mean to be modernist? 20th/21st c.

GATEWAY English Literature. Humanities. 1 credit.

## ENGL 076. The World, the Text, and the Critic

Introduction to critical approaches in contemporary global literatures. We will explore how literature represents the relationship between "the West and the Rest," and examine our own relation to colonial and postcolonial histories. Novels include **White Teeth**, **The God of Small Things, and Heart of Redness.** 20th/21st c.

Humanities.

### ENGL 077. South Asians in America

Survey of a century of migration from the Indian subcontinent to the United States. Two questions will guide our readings and discussion: First, what does it mean to identify as South Asian? Second, how do new ethnic identities expand our understanding of what it means to be American? In this interdisciplinary class, we'll read Pulitzer Prize winning authors Jhumpa Lahiri and Ayad Akhtar; discuss what it means to identify as "brown" or "Muslim" after 9/11; and explore the lives of South Asian teenagers in Silicon Valley; political activists in New York City; and workers and artists nationwide. Throughout our readings, we will explore how ethnicity is shaped by differences of gender, religion, sexuality and class. 20th/21st c. Humanities.

1 credit.

Eligible for ASIA, GSST

### ENGL 078. Modernism

Introduction to high modernism, a period of literary experimentation that spanned the first half of the twentieth century. We will be interested in innovative forms, failed experiments, inner lives, social movements, and the looming shadow of history. Expect to encounter authors such as Conrad, Forster, Woolf, Joyce, Barnes, and Faulkner. 20th/21st c. Humanities. 1 credit. Spring 2018. Patnaik.

### ENGL 079. What is Cultural Studies?

What in the world is cultural studies? Focusing on film, art, fashion and music, we'll explore how to read and write about culture and power. Literary close reading will go hand in hand with ethnography, historiography, cinema studies, and aesthetic theory. Highlighting how race, class, sexuality and gender intersect in the production and consumption of cultural texts, the class emphasizes how what we read is part of the world in which we live. 20th/21st c.

GATEWAY English Literature. Humanities. 1 credit. Eligible for INTP

ENGL 082. Transnational Feminist Theory

Introduction of 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.

Humanities. 1 credit. Eligible for GSST

### ENGL 083. On Violence

A dark lexicon emerged out of the 20th century: total war, genocide, and collateral damage were new terms invented to describe "new" versions of atrocity. But does our ability to name violence mean that we understand it any better? This course explores the aesthetic and narrative structures of violence in modern fiction, film, critical theory, and law. Even as we recognize texts as pertaining to distinct modes (modernism, postmodernism, contemporary literature) we will explore how histories of colonialism and racism condition formal innovation. 20th/21st c.

Humanities. 1 credit.

#### ENGL 087. American Narrative Cinema (Cross-listed as FMST 021)

#### ENGL 089. Race, Gender, Class and Environment

(Cross-listed as SOAN 020M)

This course explores how ideologies and structures of race, gender, sexuality, and class are embedded in and help shape our perceptions of and actions in the "environment." Drawing on key social and cultural theories of environmental studies from anthropology, sociology, feminist analysis, and science and technology studies, we will examine some of the ways that differences in culture, power, and knowledge construct the conceptual frameworks and social policies undertaken in relation to the environment. The course draws on contemporary scholarship and social movement activism (including memoir and autobiography) from diverse national and international contexts. Topics addressed include, for example, ideas/theories of "nature," toxic exposure and public health, environmental perception and social difference, poverty and natural resource depletion, justice and sustainability, Indigenous environmentalisms, eco-imperialism, and disparate impacts of global climate change. The course offer students opportunities for community-based learning working in partnership with local organizations. Humanities. 1 credit.

Eligible for ENVS, GSST

#### ENGL 089B. Materials that Matter: Environmental Literature in the Anthropocene

(Cross-listed as ENVS 044)

Coal. Oil. Plastic. Plutonium. Carbon Dioxide. These are materials that matter; in very real ways, these materials structure our lives-they impact our health, our politics, and may even threaten the existence of life itself. Ironically, because these materials permeate nearly every aspect of our existence, the human mind can struggle to comprehend them. In this course, we will read literature that helps us bring humans' relationship to these materials into focus. Scientific, historical, and economic studies of these materials tend to focus on their scale and widespread impact. Reading poetry, plays, short stories, and novels will allow us to imagine these materials more intimately-through individual, cultural, and aesthetic perspectives. In this course, students will ask: How can literature help us to understand our material, economic, and social environments? How has our relationship to materials changed over time? How do environmental and material realities impact cultural production and imagination? Primary texts might include Upton Sinclair's Oil! (1926-27); Rachel Carson's Silent Spring (1962); Terry Tempest Williams' Refuge (1991); Leslie Marmon Silko's Ceremony (1977); Mark Nowak's Coal Mountain Elementary (2009); Andrew Bovell's When the Rain Stops Falling (2012); and Adam Dickinson's The Polymers (2013). Course requirements include participation; an oral presentation; a close-reading paper or midterm project; and a final paper. All students are welcome.

GATEWAY English Literature. Humanities. 1 credit. Fall 2017. Price.

### ENGL 090. Queer Media

(Cross-listed as FMST 046)

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. Challenging 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.

20th/21st c. Humanities. 1 credit. Eligible for GSST, INTP

# ENGL 092. Marxist Literary and Cultural Studies

This course begins with key works by Marx and Engels and goes on to investigate how a range of theorists have built upon their ideas, using and revising them to understand how class, the state, race, gender and sexuality play out in various cultural forms. We will try out interpretive approaches on primary texts including pop music, advertisements, poetry, radical newspapers, and films.

20th/21st c. Humanities. 1 credit. Eligible for INTP

### ENGL 095A. The Art of the American Musical

(Cross-listed as THEA 005B, MUSI 005D) The triumph of Hamilton: An American Musical, by Lin-Manuel Miranda, over Shuffle Along, or, the Making of the Musical Sensation of 1921 and All That Followed, by George C. Wolfe, at the 2016 Tony Awards is a metaphor for the racial amnesia concerning art by and about blacks who are not useful to neoliberal public policy. This course applies #blacklivesmatter to the American musical--between the all-black-cast revival, Beyoncé, biological versus social origins of race, black culture in a "post-soul" era, blackface versus black-on-black minstrelsy, the chitlin circuit, color-blind versus conceptual casting, genre, gospel, and reviews of Porgy and Bess, by George Gershwin, Ira Gershwin, and DuBose Heyward, in black daily newspapers and black monthly and weekly magazines--taking seriously Wolfe's claim about intellectual history that "given the dynamics of this country, you may find yourself at a point where your story is no longer valuable, acute or attractive, and if it hasn't been recorded, if you haven't recorded it or if you haven't put into motion people to record it, then it won't be there." These topics require students to conduct research into the African-American experience in the

musical as well as listen to sound recordings of Broadway, Off-Broadway, regional/tour, and West End stage works and watch film, television, video, and video clips on YouTube. Humanities. 1 credit. Eligible for BLST Fall 2017. Glover.

#### ENGL 095B. Performance and Performativity

(Cross-listed as THEA 005C) The broad spectrum of performance; embodiment; mediation; presence; resistance; textuality; transgression. This course is designed to survey the most important paradigms for performance and performativity as methods of theater and performance studies research and objects for study. Representative authors include but are not limited to Philip Auslander, J. L. Austin, Kenneth Burke, Judith Butler, Marvin Carlson, Erving Goffman, Richard Schechner, and Victor W. Turner. Humanities. 1 credit. Eligible for BLST

Spring 2018. Glover.

### **Creative Writing Workshops**

Regular creative writing workshops are limited to 12 and require the submission of writing samples in order for students to apply for them. 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 courses do not count as pre- or post-1830 classes.

### ENGL 070A. Poetry Workshop

This workshop emphasizes each individual's distinctive voice within the context of contemporary poetics as students work through formal exercises and thematic experiments, reading and commenting on each other's writing. Attendance at readings required. Limited to 12 students; writing sample due immediately after fall break. Admission and credit determined by instructor. Graded CR/NC.

Humanities. 1 credit. Spring 2018. Anderson.

### ENGL 070B. Fiction Workshop

This workshop emphasizes development of character, voice, and narrative structure. Students will read and comment on each other's writing as they work to hone their own styles. Readings from published authors will suggest strategies and points of departure. Attendance at readings (outside of class hours) is required. Limited to 12 students, accepted on the basis of a writing sample (maximum of 15 double-spaced pages) due immediately after fall break.

Graded CR/NC. Humanities.

Humanitie

1 credit.

### ENGL 070C. Advanced Poetry Workshop

Poetry books often represent their authors' conscious statements, made through selection, organization, and graphic presentation. In this workshop, students design and complete their own volumes. Attendance at readings required. Graded CR/NC.

Prerequisite: ENGL 070A, 070D, ENGL 070E, 070G, or ENGL 070J, or similar workshop elsewhere. Limited to 12. Admission and credit determined by instructor. Humanities.

1 credit.

# ENGL 070D. Grendel's Workshop (New Texts From Old)

John Gardner rewrote the ancient epic **Beowulf** in modern idiom from the monster's viewpoint. Tom Stoppard showed us what Rosencrantz and Guildenstern were up to offstage in Shakespeare's **Hamlet**. Angela Carter's Beauty liked the Beast better than the Prince. Students will study old texts and their modern revisions and then, using these models as starting points, reshape their own beautiful or beastly visions. This course is open to first year students.

Humanities. 1 credit.

Fall 2017. Williamson.

### ENGL 070E. Lyric Encounters

Matthew Arnold called it "a criticism of life"; Dylan Thomas, "a naked vision." Emily Dickinson, a blow, "If I feel physically as if the top of my head were taken off." Students examine lyrics through literary analysis, then shape their own criticisms, visions, cerebral explosions. Attendance at readings required. Prerequisite: any W course. Limited to 15. Humanities. 1 credit.

### ENGL 070H. Advanced Fiction Workshop

Students will experiment with established writers' methods of illuminating characters and narratives as well as revising to produce polished work. Attendance at readings required.

Graded CR/NC. Limited to 12. Admission and credit determined by instructor.

Prerequisite: ENGL 070B or similar workshop elsewhere. Limited to 12. Admission and credit determined by instructor. Humanities.

1 credit. Fall 2017. Staff. literary-supported by focused research. This course examines poetry based on research, a

and Development

course examines poetry based on research, and students explore archival resources to write poems suggested by their own researches. Attendance at readings required.

ENGL 070J. The Poetry Project: Research

Behind the poem's eloquence, there's often a

structure-scientific, historical, philosophical,

20th/21st c. Prerequisite: any W course. Limited to 15. Humanities. 1 credit.

### ENGL 070K. Directed Creative Writing Projects

Supervised individual work in fiction or poetry for course or Honors students. Candidates submit proposals the semester before the project is undertaken. A limited number of proposals can be accepted. Students must consult with creative writing faculty before applying. See the department's creative writing page for more information. Graded CR/NC.

Humanities. 1 credit. Fall 2017. Staff. Spring 2018. Staff.

### ENGL 070L. Creative Writing Outreach

(Cross-listed as EDUC 073) Where do arts, education and activism meet? In this course students will explore artistic affinities through creative writing activities and consider arts education and advocacy through diverse texts. Students will cultivate skills necessary to becoming Teaching Artists in imaginative writing at the elementary level through coursework as well as through volunteer placement in local schools. Topics covered include: creative curriculum development and presentation, educational climate for grades K-5 and teaching pedagogy. Humanities.

1 credit.

Eligible for CBL

# ENGL 070P. Novel Beginnings / Beginning Novels: Master Class in Fiction

This fiction workshop will address the challenge of constructing the first chapter of a novel. Students will consider first chapters from twelve novels, and in tandem develop their own first chapters, rewriting in light of these different approaches, whether it be Sterne's taking the reader back to the very beginning, Austen's oblique wry introduction of the main characters, or Amis' roadmap for the novel ahead.

Graded CR/NC. Limited to 12. Writing samples due April 1. Admission and credit determined by instructor.

Prerequisite: ENGL 070B or similar workshop elsewhere.

Humanities. 1 credit.

## ENGL 071S. Contemporary Life Writing: Form and Theory

In this course, we will explore contemporary forms of life writing. The term "writing" will be used flexibly to encompass self-representation in visual forms (including graphic memoir, photography, and video). Our topics will include the intersections among autobiography, biography, and fiction; self-narration as a public and political form; and how life writing has become intertwined with theoretical explorations of gender, sexuality, race, and biopolitics. Authors include Gloria Anzaldúa, Alison Bechdel, Theresa Hak Kyung Cha, Jamaica Kincaid, Maggie Nelson, and Paul B. Preciado. Assignments will include a creative life-writing project as well as academic essays with close textual analysis and scholarly argument. Humanities.

1 credit. Eligible for INTP

#### Independent Study, Method, and Culminating Exercises

### ENGL 096. Methods

In this course, we will both investigate and apply some of the methodologies that have shaped the study of English literature over the last half century. We will, for example, practice close reading while investigating the rationales of New Criticism; we will think about the possibilities and limitations of historicism through (and after) the so-called New Historicism. The course concludes with attention to current and nascent methodologies in our academic discipline. Humanities.

1 credit. Eligible for INTP Fall 2017. Song.

### 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 before the semester in question. Normally limited to juniors and seniors and available only if a professor is free to supervise the project. 0.5 - 1 credit. Fall 2017. Staff.

Spring 2018. Staff.

### ENGL 098. Senior Thesis

Course majors may pursue a thesis for 1 (40-50 pages) or 2 (80-100 pages) credits. A proposal for the project must be submitted in April of the junior year. Before submitting this proposal, course majors must consult with a prospective faculty supervisor. This work does not replace ENGL 099, required of every course major. Available only if a professor is available to supervise the project. 1 - 2 credits.

Fall 2017. Staff. Spring 2018. Staff.

## ENGL 099. Senior Course Majors Colloquium

This colloquium is open to senior course majors in English Literature. Focusing on the senior essay required to complete the major, this class features guest lectures by faculty and critical readings on literary theory and methodology. Short writing assignments in this class will build towards the senior essay, as students work in peer-centered environments as well as individually with the instructor. Students will complete their senior essays by the end of the fall semester. See professor to establish credit category. Humanities. 1 credit.

Spring 2018. Foy.

### **Honors 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.

#### Medieval and Renaissance Honors Seminars

### 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. Students who have taken ENGL 020 may take this seminar for 2 credits. Med/Ren Humanities.

2 credits.

Spring 2018. Song.

# ENGL 102. Chaucer and Medieval Literature

A study of medieval English literature with an emphasis on Chaucer. Texts will include **Beowulf**, Old English poems, **Sir Gawain and the Green Knight**, Chaucer's **Canterbury Tales** and **Troilus and Criseyde**, Margery Kempe's autobiography, selected mystery plays and **Everyman**, and Arthurian materials. Some works will be in Middle English; others, in translation. Med/Ren Humanities. 2 credits.

### 18th and 19th Honors Seminars

### 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.

## **English Literature**

18th/19th c. Humanities. 2 credits. Eligible for GSST

### ENGL 111. Victorian Literature and Culture

This research-intensive seminar on the Victorian novel as a genre and a material object asks how literature can be both product and producer of its historical moment. Readings include novels by authors like George Eliot, Anthony Trollope, Elizabeth Gaskell, Wilkie Collins, George Meredith, Thomas Hardy, Bram Stoker, and Margaret Oliphant. 18th/19th c. Humanities. 2 credits. Eligible for INTP Spring 2018. Buurma.

### ENGL 114. Early American Media Cultures

This course borrows some of the methods of new media studies to look anew at the multimedia culture of the 18th- and 19th-century United States. We will study newspapers, maps, wampum, photographs, songbooks, advertisements, and counterfeit money, alongside literary texts that thematize this rich media culture. 18th/19th c. Humanities.

2 credits.

### 20th and 21st Honors Seminars

#### ENGL 116. Redefining US Southern Literature

(Cross-listed as BLST 116)

Our focus this year will be on the long, grand, and problematic tradition of U.S. Southern literature especially fiction in both comic and tragic modes as it developed after the Civil War to the present. 20th/21st c. Special note: for fall 2017 only, this course may be taken as a 18th/19th c. credit with the permission of the professor. Humanities.

2 credits.

Fall 2017. Schmidt.

#### ENGL 117. Theories and Literatures of Globalization

This seminar examines the literary and cultural dimensions of globalization. Pairing novels and short stories by major global writers with ethnographic and historical texts, 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 new politics of nationalism, race, and sexuality. 20th/21st c.

Humanities.

2 credits.

### 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. 20th/21st c. Humanities. 2 credits. Fall 2017. Anderson.

### ENGL 119. Black Cultural Studies

How have black writers both represented and theorized a series of tensions characterizing African American culture since the end of slaverybetween past and present, roots and routes, folk and modern, sound and vision, city and country, nation and diaspora, culture and capital, people and power? Motivated by such concerns, this seminar will examine approaches to African American literature that are historical, cultural, and theoretical. Prior work in African American literature and/or Black Studies is recommended. 20th/21st c.

Humanities. 2 credits. Eligible for BLST

### ENGL 121. Modernism and Forgetting

This course is an advanced research seminar on the literatures, cultures, and theories of modernism. Central questions include: How do aspects of psychic life, such as mourning and trauma, exert pressure on literary form? Why do memory's material traces (the archive, the photograph) enthrall the modernist imagination? What ethical or political values attend literary projects of remembering? Of forgetting? We will situate modernist literary practice alongside psychoanalytic, postcolonial, queer, and feminist critique.

20th/21st c. Humanities. 2 credits. Eligible for INTP

### Honors Thesis and Independent Study

### 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.

1 - 2 credits.

### 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.

### 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)

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.

This course is open only to those selected as WAs. Meets distribution requirements but does not count toward the major. It is a credit/no credit course. Humanities.

Writing course. 1 credit.

### ENGL 001D. Writing Tutorial

Students enrolled in ENGL 001F or 001H, 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 on writing for the course or other courses. Students take the tutorial in conjunction with ENGL 001F or ENGL 001H, or they may take it in a subsequent semester.

Humanities. 0.5 credit. Fall 2017. Staff. Spring 2018. Staff.

#### ENGL 001F. First-Year Seminar: Transitions to College Writing

Introduction of 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. Meets distribution requirements but does not count toward the major. Students may take ENGL 001F and an English Literature first-year seminar (ENGL 008 A-Z and 009A-Z). Humanities. Writing course. 1 credit. Fall 2017. Newmann Holmes, Staff. Spring 2018. Newmann Holmes, Staff.

# ENGL 001H. Insights into Argument and Research Writing Across the Disciplines

This course investigates the scholarly and rhetorical strategies that shape academic inquiry. Students will undertake research and writing projects that draw upon qualitative, quantitative and textual research traditions. The course will provide instruction in framing research questions, writing research proposals, developing a methodology or theoretical approach, conducting research, evaluating sources, and structuring a substantial essay. This course is useful for students preparing to write a thesis. Humanities.

Writing course. 1 credit. Spring 2018. Newmann Holmes.

# 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. Humanities.

Writing course. 1 credit.

### 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. 0.5-1 credit.

### ENGL 005. Journalism Workshop

An introduction to news gathering, news writing, and journalism ethics. Students learn the values, skills, and standards crucial to high-quality journalism. They write conventional news stories, narratives, profiles, non-deadline features, trend stories, and point-of-view articles on a beat of their choosing. Guest speakers include award-winning reporters and editors. This course 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. Humanities. Writing course.

1 credit.

### **Environmental Studies**

ERIC JENSEN (Physics and Astronomy), Coordinator Cassy Burnett (Administrative Coordinator)

Committee: Elizabeth Bolton (English Literature)3 Timothy Burke (History) Giovanna Di Chiro (Environmental Studies) Erich Carr Everbach (Engineering) Christopher R. Graves (Chemistry and Environmental Studies) José-Luis Machado (Biology)<sup>3</sup> Arthur McGarity (Engineering)<sup>3</sup> Rachel Merz (Biology) Carol Nackenoff (Political Science) Elizabeth Nichols (Biology) Gustavo Oliveira (Environmental Studies) Jennifer Peck (Economics and Environmental Studies) Jennifer Pfluger (Environmental Studies) Christine Schuetze (Anthropology) Mark Wallace (Religion)

3 Absent on leave, 2017-2018.

#### Why Environmental Studies? Why now?

Profound anthropogenic changes are occurring in the land, water, and air around us, with the result that human societies face greater changes and environmental challenges than we have ever known. Global population is expected to exceed nine billion by 2040; global energy consumption is rising sharply while even present-day carbon emissions intensify global warming. Along with global warming, trends such as deforestation, mass extinctions, and eutrophication threaten the finelybalanced marine and terrestrial ecosystems on which we rely for food, water, shelter, and more. Sea-water rise along with increasing heat and drought will create climate refugees and resource conflicts on unprecedented scales. Responding to these crises requires all the creativity and rigor and compassion we can gather-including the cultivation of intellectual skills that until recently were housed in discrete and disparate disciplines. Environmental studies brings together the natural sciences and engineering, the humanities, and the social sciences to tackle environmental issues of great complexity and socio-political importance. In relation to climate change, for instance, natural scientists provide data to understand the scope of the problem and the processes that result in global warming, social scientists help to understand and craft policies around human behaviors that cause climate change, and humanists provide the moral and historical framework to understand our obligation to action and the tools to communicate environmental values. Only an integrated, interdisciplinary approach can address the extremity and complexity of the challenges we face: students must learn to think across and through disciplines in order to become the kinds of problem-solvers our societies so urgently need.

### **Course Major**

Students majoring in Environmental Studies will complete twelve credits in the program, including Introduction to Environmental Studies; 2 Environmental Science and Technology credits, including at least 1 lab course; 2 Environmental Social Science credits; 2 Environmental Arts and Humanities credits; a 4-credit topical or disciplinary focus designed by the student in conversation with the faculty coordinator; the Environmental Studies Capstone or a thesis.

#### **Overview of the Curriculum**

1) ENVS 001: Introduction to Environmental Studies. This is a team-taught, interdisciplinary introduction to the field of Environmental Studies. Faculty instructors are drawn from the natural sciences and engineering on the one hand and from social sciences and humanities on the other in order to ensure cross-disciplinary perspectives and connections.

2-3) Two Environmental Social Science courses. We expect our students to grasp the fundamentals of economic policies, environmental histories, and socio-cultural formations; we also want them to be able to design, conduct, and analyze empirical research.

4-5) Two Environmental Arts and Humanities courses. We want our students to be able to analyze rhetorical strategies of individual texts and broader discourse communities (e.g. climate justice movements as well as climate denial). We want them to question the assumptions underlying existing cultural structures and explore alternatives. When possible, we want them to develop creative skills to help them inspire and motivate others.

6-7) Two Environmental Science and Technology courses, including at least one lab course. We

expect our students to be able to conduct inquirybased science, working with raw data as well as understanding data produced by others.

8-11) A four-course topical or disciplinary focus, including elements of methodological development and practical engagement (praxis). This focus offers our students the opportunity to develop their own areas of expertise while also developing greater depth and breadth in interdisciplinary problem-solving. Sample thematic and disciplinary foci are listed below.

12) Environmental Studies Capstone or thesis. The capstone brings graduating seniors back together to work on collaboration and to share their diverse talents and backgrounds in tackling a shared topic or challenge. The professor of the capstone may choose to allow students to write a thesis in place of and/or in conjunction with the capstone. The capstone or thesis meets the requirement for the senior comprehensive experience. The President's Sustainability Research Fellowship can also serve as a senior comprehensive experience by permission of the Environmental Studies chair. Environmental Studies courses at Bryn Mawr and Haverford can also be applied to the major with the agreement of the Faculty Coordinator of Environmental Studies.

### Sample thematic foci:

Food: ENVS/BIOL 009 Our Food; ENVS 032/SOAN 060C Brazil, China, and the Global Food Environment; ENGR 010 Fundamentals of Food Engineering; ENVS 052/CHIN 086 Food, Culture, and Farming in China.

**Disasters:** ENVS 006 Visions of the End; ENVS 026 Environmental History of the Soviet Union; ENVS 031/PEAC 055/SOCI 055C Climate Disruption; ENVS 051/JPNS 035 Narratives of Disaster and Rebuilding in Japan.

Sustainability: ENVS 004 Urban Environmental Community Action; ENVS 089 Sustainability Research Methods [2 credits]; ENVS 092A: UNFCCC COP; Independent Study Project.

Asia (courses developed through Luce Initiative on Asian Studies and the Environment): CHIN 089 Tea Culture; CHIN 087/POLS 087 Water Policies, Water Issues: China & US; POLS 088 Environmental Governance in China; ENVS 052/CHIN 086 Food, Culture, and Farming in China.

### Sample disciplinary foci:

**Environmental Biology**: BIOL 036 Ecology; BIOL 037 Conservation Biology; BIOL 137 Biodiversity and Ecosystem Function [2 cr]

Environmental Economics: ECON 055 Behavioral Economics; ECON 081 Economic Development; ECON 176 Environmental Economics [2 cr]

Environmental Engineering: ENVS 075/ENGR 063 Water Quality and Pollution Control; ENVS 076/ENGR 066 Environmental Systems; ENVS

077/ENGR 035 Solar Energy Systems; ENVS 078/ENGR 057 Operations Research

Environmental Literature: ENVS 042/ENGL 89E Ecofeminism(s); ENVS 043/ENGL 089/SOAN 020M Race, Gender, Class, and Environment; ENVS 044/ENGL 089B Materials that Matter; ENVS 045B River Stories or ENVS 040/RELG 022 Religion and Ecology.

### **Course Minor**

Students minoring in Environmental Studies take at least six credits in the program, consisting of the Introduction to Environmental Studies; 2 Environmental Science courses; 2 Environmental Social Science or Humanities courses; and the Environmental Studies capstone. Environmental Studies courses at Bryn Mawr and Haverford can also be applied to the minor.

### **Special Honors Major**

Honors special majors complete four related preparations (constituting at least 8 units of credit). These may include seminars, course combinations, a course plus attachment, a thesis, etc. The rubric for relating these preparations has been devised by the student and approved by the ENVS faculty. One of the preparations may be used toward a cognate major or minor if the other departmental requirements have been met. Honors special majors must either write a thesis examined by examiners from at least two departments or be examined orally by a panel of their four examiners (or both).

### **Honors Minor**

Honors minors in Environmental Studies must complete all requirements of the course minor while also proposing an honors preparation which will normally be either a seminar or a combination of the capstone and an earlier ENVS course.

### **Off-Campus Study**

#### Swarthmore's Central European Programs in Brno, Czech Republic and Krakow, Poland

Swarthmore operates closely related environmental study abroad 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 the website: www.swarthmore.edu/ceurope/.

### 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.

### **Environmental Studies Courses**

### ENVS 001-019 Introductory Courses

## ENVS 001. Introduction to Environmental Studies

Built around four case studies, this course provides a broad introduction to the inherently interdisciplinary work of environmental studies by providing historical background and examining options for action using tools from a variety of perspectives, chiefly from the sciences and social sciences. Course themes include tragedy of the commons issues, and rights and environmental justice; sustainable development, including increasing urbanization of humanity, population growth, and Kuznets curve; global climate change science and debate; feedback loops and tipping points; and community adaptation and resilience. Non-distribution.

1 credit.

Spring 2018. Graves, Peck.

# ENVS 002. Human Nature, Technology and the Environment

This course examines the relationships among the environment, human cultures, and the technologies they produce. The continually accelerating pace of technological change has had effects on both the local and global environment. Although technology may be responsible for environmental degradation, it may also serve as an important societal mechanism that can help us evolve toward a sustainable society. This course investigates how humans evolved, what tools they employed, and what the consequences of new technologies were for human kind and the surrounding environment. Special attention is given to how the problems of the 21st century relate to circumstances of the past. 1 credit.

### ENVS 003. Environmental Policy and Economics

This course examines the role of government in the regulation of the environment from an economics perspective. The course will introduce the basic tools used to compare the costs and benefits of improving environmental quality and the methods used in the valuation of environmental goods. The last part of the course will focus on how government policies can be used to improve environmental outcomes. Students may not receive credit for both ENVS 003 and ECON 076 except with special permission. Students who have already taken Econ 001 may only register for this course with permission from the instructor. Non-distribution. 1 credit

### ENVS 009. Our Food

(Cross-listed as BIOL 009)

The scale and efficiency of our food system is one of the marvels of the modern world. Yet in many ways this system is broken. This course will address the current state of our agricultural food system from a scientific perspective, focusing on the U.S. Each student will grow and maintain a micro-garden plot as part of the class, as well as develop educational signage for the public that conveys information about agriculture or their crop. Three hours of lecture/discussion/lab and one floating hour of fieldwork per week. One field trip. 1 credit.

Eligible for ENVS. Spring 2018. Pfluger.

# BIOL 002. Organismal and Population Biology

PHYS 024. The Earth's Climate and Global Warming

### ENVS 020-039 Social Sciences

## ENVS 031. Climate Disruption, Conflict, and Peacemaking

(Cross-listed as PEAC 055, SOCI 055C) The course will examine several ways in which climate change is a driving force of violent and nonviolent conflict and creates opportunities for peacemaking and social justice. Already, climate change has been identified by the U.S. military as a threat to national security, offering a new rationale for expanding the military industrial complex. Demands on scarce resources generate and exacerbate regional conflicts and drive mass movements of refugees. Behind these dramatic manifestations of climate stress lie extensive corporate and national interests and hegemonic silences that emerging conflicts often reveal. Conflict also brings new opportunities for peacebuilding, cooperation, and conflict resolution. Climate crises have renewed and expanded local and global movements for

environmental justice and protection, many of which have historical connections with the peace movement. In support of the college's carbon charge initiative, we will dedicate part of the course to understanding what constitutes the social cost of carbon and how it is represented in carbon pricing, particularly with respect to increasing frequencies of armed conflict and extension of the military industrial complex.

Non-distribution. 1 credit. Eligible for ENVS, PEAC Fall 2017. Smithey.

# ENVS 032. China, Brazil, and the Global Food Environment

Food and agriculture sit at the intersection of the some of the most significant ecological, economic, social, and political transformations of our times. In turn, China and Brazil are two of the most crucial nodes of an emerging new world order, marked by dramatic agrarian transformations within and booming agro industrial trade between them. In this course, we examine the increasingly interconnected development of food and agriculture in these two emerging economies through the lens of political ecology. Topics addressed include the origins and modernization of agriculture, the integration of China and Brazil through European imperialism and US neocolonialism, rural-urban migration and agroindustrialization, deforestation and environmental protection, transgenic seeds and agrochemicals, soil and water contamination, investments and land struggles, food security and food safety, shifting dietary habits and climate change. Non-distribution 1 credit.

Eligible for ASIA, ENVS, LALS Fall 2017. Oliveira.

### ENVS 035. Environmental Justice: Theory and Action

(Cross-listed as POLS 043B) Examines historical, political, and activist roots of the field of environmental justice. Using interdisciplinary approaches from political ecology, environmental science, history, geography, cultural studies, and social movement theory, we analyze diverse environmental justice struggles and community activism in contemporary environmental issues such as: air quality and health, toxic contamination and reproductive issues, sustainable agriculture and food security, fossil energy-coal, oil, hydrofracking and livelihoods, climate change and climate justice. Course incorporates a communitybased learning component.

1 credit.

Eligible for CBL, ENVS, PEAC

ANTH 023C. Anthropological Perspectives on Conservation

**ECON 076. Environmental Economics** 

HIST 033. Environmental History of the Soviet Union

HIST 089. The Environmental History of Africa

POLS 043. Environmental Policy and Politics

POLS 043B. Environmental Justice: Theory and Action

POLS 087. Water Policies, Water Issues: China/Taiwan and the U.S.

POLS 088. Governance and Environmental Issues in China

SOAN 020M. Race, Gender, Class and Environment

SOAN 030P. Introduction to Geographic Information Systems (M)

SOCI 006H. Down But Not Out: The Social Problems of Philadelphia

SOCI 055C. Climate Disruption, Conflict, and Peacemaking

### ENVS 040-059 Humanities and Arts

## ENVS 042. Ecofeminism(s): Perspectives and Strategies

An introduction to the central themes and histories of ecofeminist theories and praxis. We will study ecological feminisms/feminist environmentalisms from global perspectives, and examine how these transdisciplinary discourses and movements develop social and cultural critiques of systems of domination, and construct alternative visions for more just and sustainable human-earth relationships. Topics include ecofeminist approaches to: human rights, environmental and climate justice, food and agriculture, animal politics, health and bodies, queer ecologies, economies of "care," militarism and imperialism, and sustainable development. Readings and course materials draw on the works of Vandana Shiva, Donna Haraway, Laura Pulido, Octavia Butler, Joni Seager, Rachel Carson, Winona LaDuke, Julie Sze, Rosi Braidotti, Jael Silliman, Starhawk, Eli Clare, Audre Lorde, Silvia Federici, Wendy Harcourt, Betsy Hartmann, Wangari Maathai. Non-distribution.

1 credit.

Eligible for CBL, ENVS, GSST Fall 2017. Di Chiro.

#### ENVS 044. Materials that Matter: Environmental Literature in the Anthropocene Gateway

(Cross-listed as ENGL 089B) Coal. Oil. Plastic. Plutonium. Carbon Dioxide. These are materials that matter; in very real ways, these materials structure our lives-they impact our health, our politics, and may even threaten the existence of life itself. Ironically, because these materials permeate nearly every aspect of our existence, the human mind can struggle to comprehend them. In this course, we will read literature that helps us bring humans' relationship to these materials into focus. Scientific, historical, and economic studies of these materials tend to focus on their scale and widespread impact. Reading poetry, plays, short stories, and novels will allow us to imagine these materials more intimately-through individual, cultural, and aesthetic perspectives. In this course, students will ask: How can literature help us to understand our material, economic, and social environments? How has our relationship to materials changed over time? How do environmental and material realities impact cultural production and imagination? Primary texts might include Upton Sinclair's Oil! (1926-27); Rachel Carson's Silent Spring (1962); Terry Tempest Williams' Refuge (1991); Leslie Marmon Silko's Ceremony (1977); Mark Nowak's Coal Mountain Elementary (2009); Andrew Bovell's When the Rain Stops Falling (2012); and Adam Dickinson'sThe Polymers (2013). Course requirements include participation; an oral presentation; a close-reading paper or midterm project; and a final paper. All students are welcome. Non-distribution. 1 credit. Eligible for ENVS Fall 2017. Price.

#### ENVS 052. True Organic Food: Agriculture, Industry in China-Sustainability & Health (Cross-listed as CHIN 086, LITR 086CG) While the challenging problem of feeding one fifth of the world's population with only seven percent of the world's arable land remains a priority in Chinese agricultural policy, extensive environmental degradation and innumerable food scandals have shifted the primary concern of food supply to issues of food safety, from quantity to quality. The class will focus on the challenges and successes of such a turn to a more ecologically friendly agricultural production and food processing industry. In addition, rapid changes in food preferences displace more traditional diets and redirect agricultural production, especially towards production of meat, bringing in foreign private equity firms like KKR and US food conglomerates like Tyson Foods. These changes also affect traditional regional food cultures. This interdisciplinary class (Environmental Studies, Economics, Sociology, Biology, humanities and

Chinese Studies) will explore the following key topics:

From food security to food safety - the ecological turn in China's agriculture

Organic farming in China - challenges and successes of state and private organic farm initiatives

Ministry plans and China's new farmers

Regional food traditions

The role of restaurants in Chinese culture

Prerequisite: The course has no prerequisite; some knowledge of Chinese culture or language is preferred but not required. Non-distribution. 1 credit. Eligible for ENVS, ASIA

Spring 2018. Kong, Werlen

#### CHIN 086. Food in China: Agriculture, Industry and Economy in China-Sustainability and Health

CHIN 087. Water Policies, Water Issues: China/Taiwan and the U.S.

CHIN 088. Governance and Environmental Issues in China

CHIN 089. Tea in China: Cultural and Environmental Perspectives.

ENGL 089. Race, Gender, Class and Environment

ENGL 089B. Materials that Matter: Environmental Literature in the Anthropocene

JPNS 035. Narratives of Disaster and Rebuilding in Japan

PHIL 035. Environmental Ethics

RELG 022. Religion and Ecology

RUSS 086. Nature and Industry in Russian Literature and Culture

#### ENVS 060-079 Natural Sciences

BIOL 036. Ecology

**BIOL 037. Conservation Biology** 

**BIOL 039. Marine Biology** 

BIOL 137. Biodiversity and Ecosystem Functioning

CHEM 015. Environmental Chemistry

ENGR 003. Problems in Technology

ENGR 004A. Environmental Protection

ENGR 035. Solar Energy Systems

ENGR 063. Water Quality and Pollution Control

ENGR 066. Environmental Systems

MATH 056. Modeling

PHYS 024. The Earth's Climate and Global Warming

### ENVS 080-089 Project-based Learning

### ENVS 085. Urban Environmental Community Actions

This course explores the theories and methods of social action and community engagement focusing on social and environmental change. Drawing on the work of scholars and activists from a wide variety of disciplines in the social sciences, natural sciences, and humanities, we critically examine the conceptual divisions between "nature and society," "knowledge and action," the "local and the global," and the "community and the planet." We will analyze the history and diffusion of the widely used concept of "sustainability" focusing on the diverse ways it has been embraced, transformed, and implemented in different social and cultural contexts. Exploring the relationship between theory and practice, the course includes a community-based learning component working in collaboration with a local organization or action research project. Non-distribution.

1 credit. Eligible for CBL Fall 2017. DiChiro.

#### ENVS 089. Sustainability Research Methods

This course helps students develop skills in a wide range of research-related skills, ranging from theories of change and content-specific research strategies, through self-management, project management, communication, engagement, and presentation skills. Guest presenters will help students understand the growing field of sustainability from a variety of different perspectives. This course supports the President's Sustainability Research Fellowship. By permission of instructor only. 1 credit. Eligible for CBL, ENVS

Eligible for CBL, ENVS Fall 2017. Crossan, Everbach.

### ENVS 090-099 Directed Reading, Independent Project, Capstone

### ENVS 091. Capstone Seminar

Non-distribution. 1 credit. Spring 2018. Staff.

### ENVS 092A. UNFCCC COP

Swarthmore student delegates to the annual Conference of the Parties to the United Nations Framework Convention on Climate Change join faculty delegates in preparing for the conference by reading materials generated by the Intergovernmental Panel on Climate Change, academic analyses of the conference structure (strengths and limitations), and analyses of current issues under discussion. As a part of this course, student delegates will maintain a UNFCCC blog and also engage the campus community in the work of the UNFCCC through presentations, workshops, and/or other events. 0.5 credit.

Fall 2017. Staff.

### ENVS 100+ Seminars

BIOL 135. Parasite Ecology and Conservation

BIOL 136. Molecular Ecology and Evolution

BIOL 137. Biodiversity and Ecosystem Functioning

ECON 176. Environmental Economics

ENGL 110. Romanticism

## Film and Media Studies

BOB REHAK, Associate Professor, Chair Logan Tiberi-Warner, (Administrative Assistant)

Core Faculty: PATRICIA WHITE, Eugene Lang Research Professor<sup>3</sup> SUNKA SIMON, Professor and Associate Provost for Faculty Development RODNEY EVANS, Visiting Assistant Professor Affiliated Faculty: Timothy Burke (History) William Gardner (Modern Languages and Literatures, Japanese) Haili Kong (Modern Languages and Literatures, Chinese) Maya Nadkarni (Sociology and Anthropology) Carina Yervasi (Modern Languages and Literatures, French)<sup>3</sup>

3 Absent on leave, 2017-2018.

Media is a crucial and pervasive dimension of contemporary culture. The development of formal understanding, historical knowledge, and critical literacy in media technologies and practices is central to a liberal arts education in the twentyfirst century. The Department of Film and Media Studies explores the history, theory, language, and social and cultural aspects of media forms including cinema, television, online video, digital games, and media arts, exploring their history, theory, language, and social and cultural aspects; introducing research and analytical methods; teaching digital production skills and approaches; and encouraging cross-cultural comparison of media aesthetics, audiences, and institutions. Our hybrid curriculum blends critical studies with production, often within the same course.

### The Academic Program

The Film and Media Studies Department offers a range of courses in critical studies and production, cross-lists film and media courses with other departments, and awards credit for majors and minors taking approved offerings from other departments and programs. Students may major or minor in film and media studies, including in the Honors Program. FMST 001 is the prerequisite for advanced work in the major or minor and is recommended preparation for any course in the department except first-year seminars. In addition to class meetings, most courses require weekly evening screenings. Production courses are limited to 10 students and may not be taken pass/fail.

### **Course Major**

### Requirements

Majors must take a minimum of 10 credits, among which the following are required:

FMST 001 Introduction to Film and Media Studies FMST 020 Critical Theories of Film and Media

FMST 090 Senior Capstone

1 production course (FMST 002: Digital Production Fundamentals; FMST 011: Advanced Digital Production; FMST 015: Screenwriting; a hybrid critical studies/production class numbered 30-39; or an approved course taken at another institution or in another department).

1 course that offers historical depth in a national or transnational cinema tradition (FMST 21 or FMST 22, any class numbered 50-60)

Remaining courses and seminars should be selected to achieve breadth and depth in the discipline and balance between critical studies and production courses. Courses in a major may include no more than three approved credits drawn from film and media offerings at Bryn Mawr, Haverford, or the University of Pennsylvania; courses in the discipline taken abroad or at other U.S. institutions; or approved offerings from other Swarthmore departments and programs.

### Acceptance Criteria

To be accepted as a major, students must have completed FMST 001 and have completed or be currently enrolled in at least one additional FMST course. Haverford and Bryn Mawr students may apply for the Swarthmore major only after consulting with advisors at Swarthmore as well as their home institution.

### **Course Minor**

Students may add a minor in Film and Media Studies to any major.

### Requirements

All minors must take a minimum of 5 credits, which may be selected from the courses and seminars listed or from approved courses taken abroad, at Bryn Mawr, Haverford, or University of Pennsylvania. The 5 credits must include FMST 001: Introduction to Film and Media Studies and FMST 090: Capstone, normally taken in the senior year. No more than two credits taken outside FMST 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. Haverford students may apply for the minor only after consulting with advisors at Swarthmore as well as their home institution, and must supply a rationale explaining why their intended plan of study can only be completed in FMST.

### **Honors Major**

Students in the Honors Program may major in Film and Media Studies by meeting the requirements for the major and by preparing for and taking three external exams. The exam preparations should include FMST seminars numbered 100 and higher, if offered, and FMST 090 plus a 1-credit honors attachment. Other 2credit honors preparations may incorporate a 1- or 2-credit thesis or creative project or other course or seminar work with the approval of the film and media studies chair. Senior honors study (SHS) consists of a revised essay and/or short film submitted for a course or seminar in the preparation. No SHS is required for a thesis or creative project.

### 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 exam preparation usually consists either of a 2-credit FMST seminar or FMST 090 plus a 1-credit honors attachment; however, the 2-credit honors preparation may incorporate a 1- or 2-credit thesis or project or other course or seminar work with the approval of the film and media studies chair. Senior honors study (SHS) consists of a revised essay or short film 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 the honors minor must have received a grade of 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. Occasionally senior majors may be permitted to write a 1- or 2-credit thesis or to make a thesis film 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 the department chair to determine eligibility of AP or IB work.

### Transfer Credit

Students may apply two approved transfer credits to their FMST major.

### **Off-Campus Study**

Students in any major may apply to receive film and media studies credit for courses in critical media studies or production taken abroad or on other campuses. Please consult with your advisor as you plan your study abroad for recommended programs. Two approved credits may be applied to the FMST major or minor.

### **Film and Media Studies Courses**

# FMST 001. Introduction to Film and Media Studies

Introduction to forms and histories of film and other moving-image media, as well as to key concepts, theories, and methods in the discipline of film and media studies. We begin with analysis of the elements of film form; explore narrative, documentary, experimental and genre formats; and conclude with perspectives on authorship, national cinema, historiography, and topics in film and media theory. Emphasis is on developing writing, analytical, and research skills. Required weekly evening screenings of works from diverse periods, countries, and traditions. FMST 001 is the prerequisite for most upper-level FMST classes. Humanities. 1 credit.

Eligible for FMST, DGHU Fall 2017. Rehak.

### FMST 002. Digital Film Fundamentals

Introduction to the expressive possibilities and rigors of the film medium while offering a sound technical foundation in digital production and post-production. 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. Prerequisite: FMST 001 or Instructor Permission. Humanities. 1 credit. Eligible for FMST, DGHU

Spring 2018. Staff.

### FMST 011. Advanced Production Workshop

An advanced filmmaking workshop for students with prior production experience. Through practical workshops in pre-production, sound production, cinematography, and editing, students advance their technical, aesthetic, and storytelling skills beyond the fundamentals. Through reading, discussion, and exposure to a variety of creative practices within film and video, the course promotes a critical understanding of these media. Production coursework includes collaborative exercises and the completion of a short filmdocumentary, narrative, or experimental culminating in a final project screening. This course is designed to help students develop their voice as filmmakers through the creation of highquality works and is strongly recommended for students interested in producing a senior film project.

Prerequisite: FMST 001, and FMST 002 or equivalent production experience with instructor's approval.

Humanities. 1 credit. Eligible for FMST Spring 2018. Evans.

### FMST 015. Screenwriting

Introduction to the fundamentals of screenwriting while enabling them to explore their unique sensibility as writers. We consider how screenplays differ from other dramatic forms and understand what makes good cinematic storytelling. By looking at short and feature-length scripts and films, we examine issues of structure, character development, effective use of dramatic tension and dialogue, tone, and theme. Through inclass exercises and discussions, students flesh out their ideas and grapple with their writing in a supportive workshop atmosphere. Coursework includes screenings, short assignments, and the completion of several drafts of a short screenplay. No previous writing experience required. Prerequisite: Instructor's approval. Humanities.

1 credit. Eligible for FMST Spring 2018. Evans.

#### FMST 016. The Director/Actor Collaboration

This course focuses on the importance of the relationship between the director and the actor and the use of improvisation in rehearsal and production to create more powerful performances for film and television. Texts and films we will examine in the first half of the course will include The Improvised Play: the Work of Mike by Paul Clements, Directing Actors by Judith Weston, The Cool World by Shirley Clarke, Vera Drake by Mike Leigh and Old Cats by Sebastian Silva. The second half of the semester will include in-class exercises, open rehearsals with professional actors and individual student films that put some of the examined techniques into practice. The course will also include special workshops and Q&A's with guest filmmakers. Prerequisite: FMST 001 Eligible for FMST

# FMST 020. Critical Theories of Film and Media

Film critic André Bazin's famous question, "What is cinema?" gained new relevance with the advent of digital media. This course introduces classical film theory (theories of modernity and perception, montage, realism), contemporary film theory (theories of film language, ideology, the cinematic apparatus, and spectatorship), approaches that cut across media (authorship, genre, stardom, semiotics, narratology, feminism, production and reception studies, cognitivism), and theorizations of new media. Through readings and weekly screenings, we explore the significance of film and other media in shaping and expressing our identities and cultural experiences. Strongly recommended for FMST majors and minors. Prerequisite: FMST 001. Humanities 1 credit.

Eligible for INTP, FMST, DGHU Spring 2018. Rehak.

### FMST 021. American Narrative Cinema

(Cross-listed as ENGL 087)

This course surveys U.S. narrative film history with an emphasis on the Hollywood studio era. We consider 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. Film is understood as narrative form, audiovisual medium, industrial product, and social practice. Classical Hollywood is approached as a national cinema, illuminated by attention to independent narrative traditions ("race movies," New Queer Cinema).

Humanities. 1 credit.

Eligible for FMST, ENGL

#### FMST 022. Cinema and Modernity, 1894-1934

This course explores the first decades of film history in the context of global modernity and artistic modernism. In form and content, silent-era cinema functioned as both a vector and a reflection of the transformative subjective and social experiences of modernity. Urbanization, immigration, consumerism, and women's participation in the labor force were refracted in silent movie genres and stars. 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 as well as the U.S. and Europe. Field trips and guests will address key topics of film historiography including archives and preservation and film music. Humanities. 1 credit.

Eligible for FMST

# FMST 023. Documentary: The Art of the Real

Contextualizing a range of documentary practices within the history of nonfiction film and television and in the landscape of contemporary media culture, this course explores the aesthetic and rhetorical strategies of documentary form. Topics include: activist media; the essay film; critical and sensory ethnographic film; reenactment; television documentary; and witnessing. Humanities.

Eligible for FMST

### FMST 025. Television and New Media

This course introduces students to 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 formal concepts of broadcast and digital TV, examining our ongoing cultural adaptation to emerging screen technologies and their attendant narrative and audiovisual forms. Coursework includes weekly blogging, one analytical paper, presentations, and the production of a creative TVrelated project.

Prerequisite: FMST 001. Humanities. 1 credit. Eligible for FMST, DGHU

### FMST 036. Theory and History of Videogames

This course investigates the video game medium from its earliest incarnation in hackers' prankish exploits to the latest in AAA and indie publishing, drawing on a variety of texts and perspectives as well as on play, analysis, and creation of video games themselves to build a portrait not just of games, gamers, and gaming, but of a unique moment in the evolution of contemporary digital media. After establishing a basic conceptual vocabulary for thinking, speaking, and writing about video games, we will shift our attention to the broader contexts and cultural functions of video gaming - as commercial and transmedia entities; as spaces for the forging of identity and sociality; and as objects of fandom and instruments of ideology. As this is a hybrid course that emphasizes making as learning, our final project will involve creating games that make critical arguments. Required weekly out-of-class gaming and viewing assignments. Humanities. 1 credit.

Eligible for FMST, DGHU

# FMST 037. Gender and Genre on Television

This course will explore genre in American television from the 1950s to today through the lens

of gender and sexuality. Students will learn about genre theory and media specific historical, aesthetic, economic conventions of television genres. We will discuss how macro and micro genres intersect with gender in target and niche audience composition and viewing habits and practices. How ideas and social rituals of leisure and labor figure into generic representations of gender and sexuality and vice versa. How race, class and gender form intersectionalities explored, exploited and expanded differently by televisual flow than in our current convergence era of streamed content. Each week students are responsible for screening at least two assigned episodes and blogging on one episode of a classic TV show they commit to for the semester. One analytical paper. Every student has to give one presentation analyzing selected clips in the context of critical scholarly articles. Midterm and Final exams.

Prerequisite: FMST 001 or instructor permission. Humanities.

1 credit. Eligible for FMST, GSST Fall 2017. Simon.

### FMST 038. Reality TV

This advanced Television Studies course explores the history and practices of the television medium in its connections to concepts and theories of realism.

Prerequisite: FMST 001, FMST 025 or FMST 054 Humanities.

1 credit.

Eligible for FMST Spring 2018. Simon.

### FMST 041. Fan Culture

Explores the history, philosophy, and impact of fandom in film, television, and new media. Drawing on methodologies including reception and audience studies, feminism, performance, cultural studies, ethnography, and convergence theory, we will consider topics such as the evolution of celebrity and "cult" status; the creation and sharing of fan fiction and vids; gendered, queer, and cis identities in fan culture; relationships between fandom and industry; and fans' use of digital social media. Screenings include serial and episodic TV, camp and "trash" cinema, narrative and documentary films, and fangenerated content.

Eligible for GSST credit if all papers and projects are focused on GSST topics.

Humanities.

1 credit.

Eligible for FMST, GSST Fall 2017. Rehak.

### FMST 042. Animation and Cinema

This course examines the forms, technologies, and history of animation in film and other media. Screenings include short- and feature-length animated films, narrative and experimental

## Film and Media Studies

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. Humanities. 1 credit.

Eligible for FMST

### FMST 044. Poverty and Precarious Lives on Screen

The cinema and the mainstream film industry have been well suited to depicting glamour, opulence, and wealth. But what about the widespread condition of being poor and living on the brink of being even worse off? In this course, we will explore cinematic depictions of poverty and inequality to ask whether and how films can go beyond romanticizing poverty or merely rehearsing rags-to-riches narratives. How does the awareness of poverty shape aesthetic form in film? What are the social and political implications of how cinema treats the condition of being poor? Topics to explore include the Great Depression and Hollywood; the documentary impulse; neorealism and surrealism; logics of late capitalism; and imagining precarity in the 21st century.

Prerequisite: FMST 001 or instructor permission. Humanities.

1 credit. Fall 2017. Bryant.

### FMST 045. Feminist Film and Media Studies

(Cross-listed as GSST 020)

This course explores theories and methods at the intersection of film and media and gender and sexuality studies, including representation and self-representation, historiography and canon formation, intersectionality and transnational politics, gender performativity and sexual dissidence, cultural production and critique. Required weekly screenings feature films and programs from a range of historical periods, national production contexts, and styles: mainstream and independent, narrative, documentary, video art, and experimental. Readings in feminist film theory will address questions of authorship and aesthetics, spectatorship and reception, image and gaze, and current media politics.

Humanities.

1 credit.

Eligible for FMST, GSST, INTP

### FMST 046. Queer Media

(Cross-listed as ENGL 090, GSST 020) The history of avant-garde and experimental media has been intertwined with that of gender non-conformity and sexual dissidence. Queer theory has developed in relation to queer film texts

### and cultures. How do

lesbian/gay/bisexual/transgender (lgbt) filmmakers queer sexual norms and standard media forms? 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. Humanities.

1 credit.

Eligible for FMST, GSST, INTP, DGHU

# FMST 050. What on Earth Is World Cinema?

Is there such a thing as world cinema, or is the concept a naïve or imperialist one? 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. Special attention to how film festivals, journalism, and cinephile culture confer value. Humanities. 1 credit.

Eligible for FMST

### FMST 051. European Cinema

(Cross-listed as LITR 051G)

Setting out from the cornerstones of aesthetics, history and memory, this course introduces you to post-war directors from Italian Neo-Realism, British and French New Waves, Eastern European Cinema, Post-New Wave Italian auteurs, Spanish cinema after Franco, New German Cinema, Swedish and Danish cinema. 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.

Humanities. 1 credit. Eligible for FMST, GMST

# FMST 052. Postwar France: French New Wave

(Cross-listed as LITR 073F)

This course is an in-depth exploration of the development and evolution of the French New Wave in postwar France. We will concentrate on the history of the New Wave in France from the 1950s through the late 1960s by the close study of the styles of individual filmmakers, the "film movement" as perceived by critics, and the New Wave's contribution to modernizing France. The primary emphasis will be on the stylistic, sociopolitical, and cultural dimensions of the New Wave, and the filmmakers and critics most closely associated with the movement. Directors, who were once all film critics for the magazine *Cahiers du Cinéma*, will be studied alongside other important filmmakers of the era. Fulfills national cinema requirement for FMST. Humanities.

1 credit.

Eligible for FMST

### FMST 055. Contemporary Chinese Cinema

(Cross-listed as CHIN 055) Cinema has become a special form of cultural

China has become a special of nonitor 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. Humanities.

1 credit.

Eligible for ASIA, CHIN, FMST Fall 2017. Lee.

### FMST 057. Japanese Film and Animation

(Cross-listed as LITR 024J, JPNS 024) An 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. Humanities.

1 credit.

Eligible for ASIA, FMST Spring 2018. Gardner.

### FMST 059. Re-Envisioning Diasporas

(Cross-listed as LITR 059FG) An interdisciplinary collaboration with international, digitally facilitated segments. It addresses the historical, cultural, representational, and theoretical specificities of diasporas through examining how 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. Commitment to cross-cultural dialogue and collaboration a must. Film studies background helpful but not required. Seminar-style class taught in English.

Humanities. 1 credit. Eligible for BLST, FMST, GSST

### FMST 082. Studies in Genre: Horror

Considering horror entertainment across different eras and media platforms, this course introduces students to the study of genre through a survey of the many forms taken by fear, disgust, and the uncanny as narrative and spectacle in twentiethand twenty-first-century moving-image culture. We will draw on approaches ranging from psychoanalysis and gender studies to affect, abjection, and political allegory to explore subtopics such as monstrosity, perversion, and the grotesque; representations of the supernatural and paranormal; body horror and "torture porn"; and the alien as other and self. Required weekly screenings and in-class viewing include movies, television, and video games. Warning: course content may be disturbing and upsetting. Prerequisite: FMST 001 or instructor's permission. Humanities. 1 credit.

Eligible for FMST

### FMST 090. Film and Media Studies Capstone

Topic for spring 2016: Trans-Media Theories and Practices

Exploration of theories and practices of adaptation and remediation in and across film, television, videogames, event tourism, theater and online environments. Working with leading critics like Linda Hutcheon, G.P. Landow, Jay Bolter, Henry Jenkins, Jill Rettberg, Elizabeth Evans, Katherine Hayles and others, we will investigate case studies driven largely by student interests and research foci. The course has an optional production component for modules and/or the final project and will culminate in an installation/exhibit. Required for FMST senior majors and minors. Humanities. 1 credit.

Eligible for FMST, GMST Spring 2018. Rehak.

### FMST 097. Independent Study

Students must apply for preregistration approval in writing. 0.5 to 1 credit. Eligible for FMST

### FMST 098. Thesis

For a limited number of majors. Requires approval. Writing course. 1 credit. Eligible for FMST

### FMST 099. Creative Project

For a limited number of majors. Requires approval. Humanities. 1 credit. Eligible for FMST

### FMST 102. Convergence

Exploration of 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. Humanities.

2 credits.

Eligible for FMST, DGHU

### **Gender and Sexuality Studies**

GWYNN KESSLER (Religion), Coordinator Anna Everetts (Administrative Assistant)

Committee: Farid Azfar (History) Shelley Costa (Gender and Sexuality Studies) James Blasina (Music) Amy L. Graves (Physics) Alexandra Gueydan-Turek (Modern Languages and Literatures, French) Tamsin Lorraine (Philosophy) Madalina Meirosu (German Studies, Gender and Sexuality Studies)

Affiliated Faculty: Tariq al-Jamil (Religion)<sup>3</sup> Nathalie Anderson (English Literature) Sa'ed Atshan (Peace and Conflict Studies) Elizabeth Bolton (English Literature) Pallabi Chakravorty (Dance) Yvonne Chireau (Religion) Giovanna DiChiro (Environmental Studies) Allison Dorsey (History) Bruce Dorsey (History) Sibelan Forrester (Modern Languages and Literatures, Russian)<sup>3</sup> Farha Ghannam (Sociology and Anthropology)<sup>3</sup> Marjorie Murphy (History) Joseph Nelson (Education) Nora Johnson (English Literature) Bakirathi Mani (English Literature)3 Maya Nadkarni (Sociology and Anthropology) Bob Rehak (Film and Media Studies) Sunka Simon (German, Film and Media Studies) Patricia White (Film and Media Studies)<sup>3</sup>

3 Absent on leave, 2017-2018.

The Gender and Sexuality Studies Program (GSST) facilitates the interdisciplinary study of social relations of power in a variety of texts, practices, and cultural, historical and national contexts. The program emphasizes the interrelationships among gender and sexuality, race, class, nation, and ability and connects such inquiry to local and global politics. Gender and sexuality studies brings feminist and queer theory in conversation with research in the humanities, social sciences, and natural sciences through courses offered across the three academic divisions of the College.

Students may design a special major in gender and sexuality studies in consultation with the program's coordinator and by following the guidelines below. 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 who intend to pursue gender and sexuality studies should consult with to the coordinator as they prepare their sophomore applications. 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.

### **Application Process Notes**

Students interested in pursuing a special major or minor in GSST are required to complete the applicable GSST application form and submit it to the Programs Office, Trotter 107, in conjunction with their online sophomore application.

### **Course Minor**

1. Course minors must take 5 courses and/or seminars, which must be selected from at least two different divisions. Two-credit seminars count as one course toward program requirements.

2. GSST minors are required to complete GSST 001: Introduction to Gender and Sexuality Studies, and to take GSST 091: Seminar in Gender and Sexuality Studies in their senior year.

3. 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 Gender, Sexuality, and Women's Studies program at UPenn in their program.

4. Only one relevant course taken abroad may count toward fulfillment of the minor.
5. Only one course counted for GSST may overlap with the student's major or other minor.
6. With advance 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**

All requirements and options for the GSST minor apply to students wishing to complete the Honors minor.

Students must have a B average in GSST coursework at the College in order to be accepted into Honors.

Honors minors must consult with the GSST Coordinator in spring of their junior year regarding their Honors preparations and submit an application for Honors with their sophomore plan by the spring of their junior year. The Honors examination preparation usually consists of GSST 091 and a 1-credit Honors attachment. Students may propose an alternative preparation of at least two credits, such as an Honors seminar eligible for GSST, a thesis, or a combination of two GSST courses. In consultation with the instructor of the preparation, honors minors will assemble a senior honors study portfolio, which may include materials such as independent essays, seminar papers, additional reading lists, or research projects.

Honors minors may apply one GSST-related study abroad credit toward their minor.

Honors minors must complete the written and oral external examinations for their preparation at the end of their senior year.

### **Special Major**

Students have the option of completing a Gender and Sexuality Studies special major.

1. Special majors must successfully complete the program requirements - GSST 001 and GSST selected courses from at least two different divisions.

2. Majors are required to complete GSST 001: Introduction to Gender and Sexuality Studies and to take GSST 091: Seminar in Gender and Sexuality Studies in their senior year 3. Majors should consult with the Coordinator to identify and include courses in their program that place significant emphasis on the theories and methods specific to Gender and Sexuality Studies as an academic inquiry.

4. The senior culminating exercise in the major is the GSST capstone (GSST 91).

5. 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 Gender, Sexuality, and Women's Studies program at U. Penn in their program.

6. Up to two courses taken abroad may count toward fulfillment of the special major. In order to receive credit, the GSST Coordinator must pre-approve the course. If the institution offering 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.

7. Only one credit may overlap with the student's minor. Two credits may overlap with a second major.

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 other major or minor. Students must have adequate GSST disciplinary background to carry out independent study or write a thesis.

### **Special Honors Major**

In exceptional cases, students can pursue a special major in GSST in the Honors Program. Interested students should consult with the GSST Program coordinator.

### 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 have the courses preapproved by the GSST Coordinator. If the institution that offers the course has a Women's or Gender and Sexuality Studies Program, or a 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 toward their program, 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.

### **Summer Funding Opportunities**

GSST students are eligible to apply through the appropriate divisions (Humanities, Social Sciences, Natural Sciences and Engineering) for a summer stipend of \$4,500 in order to allow them to devote a substantial period of time and effort to the pursuit of a creative scholarly project, internship, work or research leading to thesis, honors, or major project preparation, or immersion in the creative arts during the summer months. The work is intended to substantially expand the research engagement or professional exposure of students. Deadline is in early February.

The Lang Center for Civic & Social Responsibility offers funding opportunities for internships, projects, and engaged scholarship. The Richard Sager Internship, administered through the Lang Center, supports one student interested in working with a non-profit organizational host whose mission focuses on LGBTO issues. Students applying as a result of their academic involvement in the GSST program may also be funded through a Nason grant, which funds students who are proposing to do work which relates to their academic studies. All students will be required to apply through the Lang Center Common Application. Students do not have to select the Sager Internship in the application process, but will be notified on receipt of the grant if they do receive the named award. Summer funding deadline in early February. Students should contact Hana Lehmann (hlehman1), to schedule a required advising appointment.

### Gender and Sexuality Studies Courses

The program offers the following courses and seminars:

#### GSST 001. Introduction to Gender and Sexuality Studies

This interdisciplinary core course provides 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, including discussion of social construction of gender identities and expressions, as well as LGBTQ identities, texts, theories, and issues. Course materials will include "classic" and contemporary gender and sexuality studies scholarship from a variety of disciplines. We will explore gender and sexuality in relation to topics such as media representation, embodiment, economics, health and reproduction, technology, activism, social movements, and violence. Required course for GSST minors and special majors. Required course for GSST minors and special

majors. Non-distribution. 1 credit. Eligible for GSST Fall 2017. Meirosu.

### GSST 025. Gender, Race, and Science

The first half of this course doubles as a survey in the history of science, evaluated through the lens of gender. In this portion, we cover essential themes from the Renaissance through 18th-century Newtonianism. After midterm, we shift to multicultural topics, incorporating perspectives from philosophy, sociology, anthropology, and cultural studies. By the end of this course, you will be conversant in many powerful themes that cut across time periods. These include science and faith; how objectivity and genius have been gendered and racialized; the key role of institutions in shaping science and its participation; the role of biography in grasping gender, race and science; and - last but certainly not least - how concepts of the human body have shifted across time according to changes in science and culture. Non-distribution.

1 credit. Eligible for GSST Fall 2017. Costa.

## GSST 035. Against the Norm: (Im)Perfect Bodies and (Dis)Ability Studies

This course draws attention to shifting constructions of body normativity and disability from an interdisciplinary perspective and is informed by fields such as philosophy, ethnology, psychology, anthropology, political science, and literature. Students will explore ways in which the field of disability studies both draws from, as well as informs and expands, the fields of gender and sexuality studies and queer studies. The theoretical framework of the course focuses on the mechanisms that allow definitions, social constructions, and stigmas associated with disability to contribute to a larger system of power that oppresses individuals who fall short of the norm. We will orient ourselves by asking the following questions: How is disability socially constructed? How does disability intersect with other identities? How do various definitions of disability shape and affect advocacy agendas?

What are some institutional and social challenges faced by those with non-conforming bodies? Texts include disability studies theory, critical and theoretical essays, articles by disability rights scholars and activists, first-person accounts, films, art, and newspaper articles.

Non-distribution. 1 credit. Eligible for GSST Spring 2018. Meirosu

### GSST 048. Gender and Psychopathology

(Cross-listed as PSYC 048)

Why are certain clinical syndromes, such as depression, overrepresented among women, while others, such as aggression, are more common among men? This course explores gender differences in emotion socialization, coping styles, and mental illness, including depression, eating disorders, post-traumatic stress, aggressive disorders, and substance abuse. It also critiques definitions of sex and gender and methodological approaches to the study of group differences. Prerequisite: PSYC 001 and PSYC 038 Eligible for GSST

### GSST 091. Seminar in Gender and Sexuality Studies: New Feminisms

An advanced seminar emphasizing theoretical and methodological questions that occur when gender and sexuality are placed at the center of study. This class is required of, and normally limited to, students with minors or special majors in GSST and is required for seniors. Others may take the course with instructor's permission. Prerequisite: GSST 001 and GSST 020 or permission of instructor. Non-distribution. 1 credit. Eligible for GSST Spring 2018. Azfar

### GSST 092. Thesis

1 credit. Fall 2017. Staff.

GSST 093. Directed Reading 1 credit.

### GSST 180. Senior Honors Thesis

For students completing a special major in honors (1 credit must be taken each semester of the senior year). 1 credit. Fall 2017. Staff.

Spring 2018. Staff.

### Courses Eligible for Gender and Sexuality Studies Credit

For up-to-date course offerings, please visit http://www.swarthmore.edu/gender-sexualitystudies/courses.The following courses have been approved for credit toward the Gender and Sexuality Studies Program:

### Anthropology

ANTH 002D. First-Year Seminar: Culture and Gender ANTH 002F. Anthropology of Childhood and the Family ANTH 020J. Dance and Diaspora ANTH 040J. Social Movements in Latin America: Gender & Queer Perspective ANTH 049B. Comparative Perspectives on the Body ANTH 072C. Memory, History, Nation\* Biology BIOL 024. Developmental Biology\* Dance DANC 025A. Dance and Diaspora DANC 038. Performing Ecstasy Dancing the Sacred DANC 079. Dancing Desire in Bollywood Films Economics ECON 073. Race, Ethnicity, and Gender in Economics Education EDUC 045. Literacies and Social Identities\* EDUC 061. Gender and Education English Literature ENGL 023. Renaissance Sexualities ENGL 033. The Romantic Sublime ENGL 035. The Rise of the Novel ENGL 036. Jane Austen ENGL 048. Contemporary Women's Poetry ENGL 071K. Lesbian Novels Since World War II ENGL 077. South Asians in America ENGL 082. Transnational Feminist Theory ENGL 089. Race, Gender, Class and Environment ENGL 110. Romanticism **Environmental Studies** ENVS 042. Ecofeminism(s): Perspectives and Strategies Film and Media Studies FMST 037. Gender and Genre on Television FMST 041. Fan Culture\* FMST 045. Feminist Film and Media Studies FMST 046. Queer Media FMST 059. Re-Envisioning Diasporas French FREN 041. Guerre et paix dans la littérature française FREN 057. Bande dessinée, nouvelle Manga et romans graphiques FREN 111. Le Désir colonial: représentations de la différence dans l'imaginaire français FREN 109. Queering North African Subjectivities History HIST 001K. First-Year Seminar: Engendering Culture HIST 014. Friars, Heretics, and Female Mystics: Religious Turmoil in the Middle Ages

HIST 021. London Beyond Control

HIST 052. History of Manhood in America HIST 053. Black Women in the Civil Rights

Movement

HIST 080. History of the Body HIST 090Q. The Queer Theory of Empire

### **Gender and Sexuality Studies**

HIST 131. Gender and Sexuality in America HIST 145. Women and Gender in Chinese History Latin American and Latino Studies LALS 040. Social Movements in Latin America: Gender and Queer Perspective Literatures LITR 015R. First Year Seminar: East European Prose in Translation\* LITR 017R. First-Year Seminar: Love and Sex in Russian Literature LITR 059FG. Re-Envisioning Diasporas LITR 074S. Queer Issues in Latin American Literature & Cinema Music MUSI 005B. Popular Music and Masculinities from Rock 'n' Roll to Boy Bands MUSI 027. Divas Peace and Conflict Studies PEAC 043. Gender, Sexuality, and Social Change Political Science POLS 013. Political Psychology and Moral Engagement POLS 046. Lesbians and Gays in American Politics Psychology PSYC 048. Gender and Psychopathology PSYC 055. Family Systems Theory and Psychological Change\* Religion RELG 003. The Bible: In the Beginning ... RELG 007B. Women and Religion RELG 025. Black Women, Spirituality, Religion RELG 032. Queering God: Feminist and Queer Theology RELG 033. Queering the Bible RELG 037. Sex, Gender, and the Bible RELG 040. Rape, Slavery, and Genocide in Bible and Culture RELG 053. Gender, Sexuality, and the Body in Islamic Discourses RELG 114. Love and Religion Russian RUSS 015. First-Year Seminar: East European Prose in Translation\* RUSS 017. First-Year Seminar: Love and Sex in Russian Literature Sociology SOCI 007C. Sociology Through African American Women's Writing SOCI 010J. War, Sport, and the Construction of Masculine Identity SOAN 020M. Race, Gender, Class and Environment Spanish SPAN 066. Escritoras españolas: una voz propia SPAN 074. Queer Issues in Latin American Literature & Cinema SPAN 104. La voz de la mujer a través de los siglos

\*All papers and projects must focus on gender and sexuality studies.

## History

DIEGO ARMUS, Professor STEPHEN P. BENSCH, Professor TIMOTHY J. BURKE, Professor and Chair ALLISON DORSEY, Professor BRUCE DORSEY, Professor MARJORIE MURPHY, James C. Hormel Professor in Social Justice<sup>1</sup> ROBERT E. WEINBERG, Isaac H. Clothier Professor of History and International Relations<sup>1</sup> FARID AZFAR, Assistant Professor MEGAN BROWN, Assistant Professor BUYUN CHEN, Assistant Professor<sup>3</sup> AHMAD SHOKR, Assistant Professor SELDA ALTAN, Visiting Instructor JEN MOORE, Administrative Assistant

<sup>1</sup> Absent on leave, fall 2017.

3 Absent on leave, 2017-2018.

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 history of ideas, sexuality, and gender. 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 foreign study. 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 zoological exhibition and spectacle in nineteenth-century France,

Mennonites in imperial Germany, African American abolitionists in New York City during the 1830s, the history of queer activism at Swarthmore, and Quaker relations with Native Americans.

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 and Latino Studies, and Peace and Conflict Studies, 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 only first-year students 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 upper-level 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 Ancient History courses: 016, 023, 030, 031, 032, 034, 035, 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 B+ in at least two history courses taken at Swarthmore and a record of active and informed participation in class discussions are normally 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: They complete at least 6 of their 9 credits at Swarthmore. Only one credit from AP/IB will count toward the 9 credits required for the major.

They take at least one course or seminar at Swarthmore from each of the following categories: (a) before 1750 (including ANCH 016, 023, 030, 031, 032, 034, 035, 042, 044, 056, or 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

All 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. Juniors are also strongly encouraged to apply for summer research fellowships through the Division of Social Sciences.

### 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 an Honors Thesis (HIST 180) for one of their seminars. Students wishing to write an Honors Thesis (HIST 180) should declare their intention to the Department and secure an advisor by May 1 of their junior year. They will develop their proposal in the summer with the help of their advisor and submit it upon returning to school in September. Honors majors will also be required to complete the Senior Research Seminar (HIST 091). 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.

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 Plans. 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 Plan 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 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 foreign study courses do not count). Two of the five credits must be from courses above the introductory level (course numbers 011 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 (ANCH 016, 023, 030, 031, 032, 034, 035, 042, 044, 056, or 066). Honors minors will complete one doublecredit 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 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.

# 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 twosemester, 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(s) to complete their onecredit senior research paper or two-credit thesis.

### Acceptance Criteria

Admission to the department as a special major follows similar requirements as course majors. Advisors 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 ANCH 016, 023, 030, 031, 032, 034, 035, 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. 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

### Off-Campus Study

requirements.

to help fulfill the College's distribution

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 foreign study, 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.

### **History Courses**

#### HIST 001P. First Year Seminar: Latin America through the Lens: Photography, History and the Present

This course uses photographs as visual resources to explore key processes in the making of modern Latin America. Each week, selected photographs will allow us to explore a different topic, such as urbanization, industrialization, migration, labor, race, ethnicity, gender, disease, sports, leisure, music, food, politics, religion, and the environment. We will inform our reading of the photographs through a discussion of relevant books and articles. Social sciences.

Writing course. 1 credit. Eligible for LALS Fall 2017. Armus.

#### HIST 001R. First-Year Seminar: Remembering History

Explores the relationship between the creation of personal and collective memory and the production of history. The seminar will examine the tensions between memory and history in U.S. history, using some of the most acclaimed recent history books. Students will think critically about memoirs and autobiographies, oral histories and personal reminiscences, festivities and holidays of commemoration, historical memory in popular culture, and family lore and stories. What receives the privilege of being remembered and what gets deliberately forgotten constitutes the essence of what we know as history. Social sciences. Writing course. 1 credit. Fall 2017. B. Dorsey.

#### HIST 001T. First-Year Seminar: Cross and Crescent: Muslim-Christian Relations in Historical Perspective

The seminar will selectively explore the interaction of Muslim and Christian communities from the emergence of Islam to contemporary Bosnia. Themes revolving around tolerance, persecution, conversion, identity formation, trade, and travel will be stressed. As a writing intensive seminar, students will learn to write analytic essays through a process of organizing, writing, and rewriting papers on historiographical issues. Social sciences.

Writing course. 1 credit. Eligible for ISLM, MDST Spring 2018. Bensch.

#### HIST 001U. First-Year Seminar: Defining an "Us": Nationalism, Culture and Identity in Modern Europe

This course examines how populations have come to see themselves as part of a single community. We will examine the emergence of cultural and national identities in Europe through thematic investigations of four of the ways such identities might be forged: land, language, symbols, and blood. By the end of the semester, students will have a wider vocabulary for analyzing nationalism, identity, citizenship, and political culture.

Social sciences.

1 credit.

Spring 2018. Brown.

#### HIST 001V. First Year Seminar: History in the Making: Autocrats, Activists, and Artists in a Changing Middle East

This course will explore recent political, social, and cultural transformations in the Middle East and the various historical developments that have led to them. Through an exploration of the current landscape of the region, we will use contemporary events as a window onto the past, exploring how history has shaped our world today. Social sciences.

Writing course. 1 credit. Fall 2017. Shokr.

### HIST 002A. Medieval Europe

The course will explore the emergence of Europe from the slow decline of the Roman world and the emergence of new Germanic and Celtic peoples (3rd to the 15th century). Topics will include the rise of Christianity, the emergence of Western government, the articulation of vernacular culture, and the invention of romance. Social sciences. 1 credit. Eligible for MDST Fall 2017. 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 15th and 18th centuries. Social sciences. 1 credit.

#### HIST 003A. Modern Europe, 1789 to 1918: Revolutionaries, Citizens, and Subjects in Europe's Long 19th Century

This course surveys European history's "Long 19th Century," a periodization we may challenge throughout the semester. We will begin with the French Revolution and the First French Republic and end with the Russian Revolution and the emergence of the Weimar Republic. We will see other revolutions foment, ideals of republicanism espoused, citizenship bestowed (and revoked), and the borders of Europe expand and contract both on the continent of Europe and much further afield during waves of colonial expansion. Recommended for teacher certification.

Social sciences.

1 credit.

Spring 2018. Brown.

#### HIST 003B. Modern Europe, 1918 to the Present: Hot Wars, Cold Wars, Culture Wars

In this survey of 20th century Europe, students examine key historical actors and important years (Stalin, 1945, 1989...), as well as broader themes and ideas (decolonization, sexuality, postwar retribution). Primary source readings and film screenings will give us a deeper understanding of the (conflicting) cultures in this short century. Recommended for teacher certification. Social sciences. 1 credit.

### HIST 004. Latin American History

Drawing on literature, cinema, newspapers, cartoons, music, official documents, and historical essays, this survey course examines the colonial incorporation of the region into the Atlantic economy; the neo-colonial regimes of the 19th and 20th centuries and their diverse and also convergent historical paths; and the challenges and opportunities of earlier and current globalization trends. Emphasis on changes and continuities over five centuries exploring revolutionary, reformist, and conservative agendas of change as well as gender, class, racial and religious issues. Social sciences. 1 credit. Eligible for LALS

Spring 2018. Armus.

### HIST 005A. Early American History

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. Social sciences. 1 credit. Fall 2017. B. Dorsey.

### HIST 005B. Modern American History

American society, culture, and politics from Reconstruction to the recent past. Recommended for teacher certification. Social sciences. 1 credit.

#### HIST 006A. The Formation of the Islamic Near East

An introduction to the history of the Near East from the time of Muhammad to the rise of the Ottomans. The course will examine the life of Muhammad, the political dimensions of Islam, and the diversification of Islamic civilization through shari'a, mysticism, philosophy, and the religious sciences.

Social sciences. 1 credit. Eligible for ISLM, MDST Fall 2017. Bensch.

### HIST 006B. The Modern Middle East

This survey class will introduce students to the broad contours of Middle Eastern history since the eighteenth century. The goal is to build a basic knowledge of the major political, social, and cultural developments in the history of the region, as well as to think about how Middle Eastern societies and cultures have been represented over the last two centuries and how different kinds of knowledge about the Middle East have shaped its history.

Social sciences. 1 credit. Eligible for ISLM Spring 2018. Shokr.

## HIST 007A. African American History, 1619 to 1865

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, and cultural contributions of enslaved peoples. Recommended for teacher certification. Social sciences. 1 credit. Eligible for BLST

## 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. Recommended for teacher certification. Social sciences. 1 credit. Eligible for BLST Fall 2017. A.Dorsey.

## 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. This course will use an experimental format in which students and the professor will work together inclass to refine and answer the questions, "Why did West and Central African societies become involved in the Atlantic slave trade? What were the consequences of their involvement?" Social sciences. 1 credit.

Eligible for BLST Spring 2018. Burke.

#### 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. Social sciences.

1 credit. Eligible for BLST

### HIST 008C. History of East Africa

This survey course examines historical relationships between the Indian Ocean, the East African coast, the "great lakes" region of interior East Africa, and the Horn of Africa. Social sciences. 1 credit.

Eligible for BLST

### HIST 009A. Premodern China

This course surveys the history of premodern China. Thematic focus and content will vary. Social sciences. 1 credit. Eligible for ASIA

## HIST 009B. Modern China: Reformers, Revolutionaries, and Rebels

This course is an introduction to the intellectual, social, and economic forces that shaped the history of modern China. We will rely heavily on primary sources as we try to reconstruct the plural, contradictory, and fluid ways in which Chinese intellectual and political leaders viewed themselves as "modern." Social sciences. 1 credit. Eligible for ASIA Fall 2017. Altan.

## 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. Social sciences. 1 credit.

Eligible for MDST

#### HIST 014. Friars, Heretics, and Female Mystics: Religious Turmoil in the Middle Ages

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. Social sciences.

1 credit. Eligible for GSST, MDST

#### HIST 015. From Classical Rome to Renaissance Florence: The Making of Urban Europe

The course will explore the emergence of Western towns from the decline of the ancient city to burgeoning of Western urban forms. Were medieval towns the seedbeds of distinctive communal organization and capitalism? To answer this question, students will explore the material foundations, family structures, communal expression, commercial structures, and architectural projection of Western urbanism. Social sciences.

1 credit. Eligible for MDST Spring 2018. Bensch.

### HIST 021. London Beyond Control

This course will explore the cultural history of London. Special focus will be paid to sex, crime, empire, and politics in the age of Enlightenment. Social sciences.

Writing course. 1 credit. Eligible for GSST

#### HIST 022. The Global Enlightenment: Cosmopolitanism between Theory and Practice

Is cosmopolitanism just a utopic ideal or is it possible, in practice, to live and breathe it? This course will investigate this question by focusing on the age of the Enlightenment, considering topics such as European-Islamic interactions, Barbary pirates, antislavery movements, and canonical works by Enlightenment philosophers. We will approach the complexities of cosmopolitanism by engaging questions of culture, nation, humanity, justice, difference, violence, and progress that lie at the heart of modern thought and

## History

culture. Social sciences. 1 credit. Fall 2017. Azfar.

## HIST 025. Colonialism and Nationalism in the Middle East

This upper-level course will explore the vast and ever-growing scholarly literatures on colonialism and nationalism in the Middle East. It will cover both key theoretical works that have helped to shape this body of historical writing as well as important monographs that exemplify particular approaches to the topic.

Social sciences. 1 credit. Fall 2017. Shokr.

### HIST 026. Histories of Capitalism in the Middle East

This course will approach capitalism in the Middle East as an uneven set of historical processes in which geographic, social, and cultural difference is a produced feature of capitalist environments. We will read older traditions of social scientific inquiry and newer scholarship advancing a renewed interest in the study of political economy. Social sciences.

1 credit.

Spring 2018. Shokr.

## HIST 027. Living with Total War: Europe, 1914-1919

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. Social sciences.

1 credit. Eligible for PEAC

### HIST 028. Aux Armes! History and Historiography of the French Revolution

We will examine the different sites of the Revolution and its afterlives. Assignments will include primary source readings and analyses of the visual record, such as political cartoons and household objects. We will explore a wide range of interpretive schools and ways of practicing history. This will prepare students for larger discussions of nationalism and identity, rights regimes based on gender or race, and inequalities stemming from material or legal conditions. Social sciences.

1 credit. Fall 2017. Brown.

## HIST 030. Glory Days? Western Europe's Postwar 1945-1975

This course explores the first thirty years of the postwar in Western Europe. We will examine key events and themes of this period, including rebuilding and the Marshall Plan, decolonization, justice and retribution, student protest, and economic integration. We will interrogate how to define a Western European space, with an eye toward the borders of empires, the emergence of the precursors to the E.U., and the Cold War's intensification. Social sciences. 1 credit.

Fall 2017. Brown.

## HIST 031. France in Algeria, France and Algerians, 1830-present

The histories of France and Algeria are intertwined, not least because of the colonial project on which France embarked in 1830. Through student-led discussions, critical examinations of secondary texts, and primary source analysis, students will interrogate that linked history, from the period of conquest through to the identity politics making headlines today.

Social sciences.

1 credit.

### HIST 032. Holidays in the Empire

This course tackles how Europeans "experienced" empire through travel, including safaris, sex tourism, and mission work. We will embark on an extended case study of European adventure tourism: a car race across Africa during the era of decolonization. Assignments include reading literature, watching films, and (as a class) producing a GIS map. Prerequisite: Not open to first-year students. Social sciences.

1 credit.

## HIST 033. Environmental History of the Soviet Union

This course focuses on the impact of ideology and politics on the environment in twentieth-century Russia. Readings include short stories, novels, monographs, articles, and documents. Social sciences. 1 credit. Eligible for ENVS

### HIST 035. The Modern Jewish Experience

This course focuses on the history of European Jewry from the beginning of emancipation in the late 18th century to the Holocaust. Social sciences or humanities. 1 credit. Eligible for GMST, PEAC

### HIST 037. History and Memory: Perspectives on the Holocaust

This course explores 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. Social sciences. 1 credit. Eligible for PEAC

### HIST 038. Russia in the 20th Century

This course explores the Bolshevik seizure of power, the consolidation of communist rule, the rise of Stalin, de-Stalinization, and the collapse of the Soviet Union. Social sciences. 1 credit.

HIST 039. Picking up the Pieces: Rebuilding Russia after the Collapse of Communism

This course explores the legacy of communism in Russia after the dissolution of the Soviet Union in 1991. Social sciences.

1 credit.

### HIST 041. The American Colonies

A history of European colonies in North America from 1600 to 1760. Social sciences.

1 credit.

### HIST 042. The American Revolution

Revolutionary developments in British North America between 1760 and 1800. Social sciences. 1 credit. Spring 2018. B. Dorsey.

### HIST 043. Antislavery in America

A research seminar in which students explore the history of antislavery, abolitionist, and emancipationist movements in North America. Social sciences. Writing course. 1 credit. Eligible for BLST

### HIST 044. American Popular Culture

The history of entertainment and cultural expression in the United States from the nineteenth century to the present. This course challenges students to ask: What is "culture" and cultural history? What is the relationship between cultural creators and audiences? Topics may include: theater, minstrelsy, side shows, dime novels, amusement parks, Wild West shows, vaudeville, movies, radio, TV, sports, zoot suits, popular music (Blues, Jazz, Rock-and-roll, Punk, and Hip Hop), and digital entertainments. Social sciences. 1 credit.

Eligible for FMST Spring 2018. B. Dorsey.

### HIST 045. The United States Since 1945

This course is a survey of social, political, and cultural history of the United States since 1945.

Social sciences. 1 credit.

### HIST 046. The American Civil War

The social, cultural, and political history of the event often called "the Second American Revolution." Social sciences. 1 credit.

## HIST 050. The Making of the American Working Class

Work, community, race, and gender are examined in the context of class relations in the United States from early America to the present. Social sciences. 1 credit.

### HIST 051. Black Reconstruction

This course recounts the struggle for freedom and national citizenship rights in the post-Civil War era. Black courage and determination secured hard won successes despite "splendid failures." History, fiction, and film treatments will help students gain insights into "America's second Revolution." Social sciences.

1 credit. Eligible for BLST

### HIST 052. History of Manhood in America

Meanings of manhood and various constructions of masculine identity in America since the 18th century. Social sciences. 1 credit.

Eligible for GSST

#### 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. Social sciences. I credit. Eligible for BLST, GSST

## HIST 056. The Modern American West, 1850 to the Present

This course explores the American West from the Dawes Act to the rebellion at Wounded Knee, agricultural/environmental transformation, federal power and corporate influence on the economy and politics of the region.

Prerequisite: An introductory history course. Social sciences.

1 credit.

Spring 2018. A.Dorsey.

### HIST 057. History v. Hollywood

A history course focused on analyzing the narrative of American History as imagined and created by Hollywood cinematographers. Students will view Hollywood films, classics and contemporary features, as well as work by black

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and other independent film makers. Assigned readings will address themes of nationality, race, labor, gender, and political activism. Attendance at film screening is required.

This course is not open to first year students. Social sciences.

1 credit.

### HIST 058. Africa in America: Gullah/Geechee Life and Culture

This course traces the history of the Gullah/Geechee from West Africa, through enslavement and emancipation to contemporary political struggles culminating in a field school research trip to the NPS Gullah/Geechee Cultural Heritage Corridor.

This course is not open to first-year students. Social sciences.

1 credit. Eligible for BLST Spring 2018. A.Dorsey.

#### HIST 060. The East India Company, 1600-1857

The course explores the history of the East India Company, paying special attention to the 18th century and attending to how the history of the East India Company engages questions of capitalism, empire, race, justice, and modernity. Prerequisite: A history course at Swarthmore. Social sciences. 1 credit.

Eligible for ASIA

### 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. After an in-depth discussion of key works in the field and an initial exposure to specific methodologies, each student will develop his/her oral history research project. Social sciences.

Eligible for LALS

### HIST 065. Cities of (Im)migrants: Buenos Aires, Lima, Miami, and New York

Why do people move? Who participates in the migration process? Do people migrate alone or as part of complex networks? How do local political, cultural, and economic conditions as well as broader global capitalist forces shape individual/family decisions to migrate? What forces mold (im)migrants' adjustments to the new cities? When do (im)migrant groups become communities? How do (im)migrants maintain and feed, if at all, a link to their areas of origin? This course explores the adjustment of European immigrants in Buenos Aires, internal migrants in Lima, and Latinos in Miami and New York and their roles in the making of modern metropolis. Social sciences. Writing course.

1 credit. Eligible for LALS

# HIST 066. Disease, Culture, and Society in the Modern World: Comparative Perspectives

Discussing Latin American, European, African, Asian, and North American cases, this course examines public health strategies in colonial and neocolonial contexts; disease metaphors in media, cinema, and literature; ideas about hygiene, segregation and contagion; outbreaks and the politics of blame; the medicalization of society; and alternative healing cultures. Social sciences.

1 credit.

Eligible for INTP, LALS

### HIST 067. Digging Through the National Security Archive: South American "Dirty Wars" and the United States' Involvement

Focusing on 1970s Latin American dictatorships, this course's aims are twofold: firstly, a critical examination of the available scholarship on the socalled "Dirty Wars" that produced the disappearance of thousands of citizens-particularly young people-in the context of state terrorism; secondly, an exploration of the relations between those Latin American dictatorships and the United States through a rigorous research exercise using the National Security Archive and other primary sources.

Social sciences. Writing course. 1 credit. Eligible for LALS, PEAC Fall 2017. Armus.

## HIST 068. The Self-image of Modern Latin America

Latin America as it was discussed by Latin American intellectuals and political actors vis a vis agendas for social, national, and regional change. Social sciences. 1 credit.

Eligible for LALS

## HIST 073. Writing China, Picturing Chineseness

This course surveys the vast literature of American and European accounts of China, ranging from early travel accounts to contemporary non-fiction works. Our goal is to reconstruct a European/American-centered genealogy of knowledge about "China" - defined as a nation, a culture, and an identity - through close readings of textual and visual representations. 1 credit.

Eligible for ASIA

### HIST 074. The Consuming Passions: Visual and Material Cultures of East Asia

This course looks at the visual and material forces that shaped the production of social, political, and

gender identities in East Asia during the 15th to 18th centuries.

Prerequisite: A history course or permission of the instructor.

Social sciences.

1 credit.

Eligible for ASIA

### HIST 075. Thinking Hands: Work and Craft in Premodern China

This seminar explores the practices and meanings associated with "work" and "craft" from the 15th through 18th centuries. Tracing the development of multiple craft industries, we will examine how the process of making objects constituted a distinct form of knowledge production that occurred at the intersection of mind and hand.

Prerequisite: A history course or permission of the instructor.

Social sciences. 1 credit. Eligible for ASIA

### HIST 076. Women's Work in Premodern China

This seminar explores the practices and meanings associated with "women's work" in premodern China. Topics will include reproductive work, household work, textile work, and intellectual work.

Prerequisite: A history course or permission of the instructor.

Social sciences. 1 credit Eligible for ASIA, GSST

### HIST 077. Fashion: Theory and History

This course traces the historical development of fashion systems and fashion theory, with a special focus on East Asia. Using textual, visual, and material sources, we will explore historical representations of dress, the politics of dress, fashion and the body, and consumption and modernity.

Prerequisite: A history course or permission of the instructor.

Social sciences. 1 credit. Eligible for ASIA

### HIST 078. China, Capitalism, and Their Critics

This course examines the creation of discourse centered on the relationship between China, a nation with distinct cultural characteristics, and capitalism, conceived of as an economic system specific to European social formation. Prerequisite: A history course or permission of the instructor.

Social sciences. 1 credit Eligible for ASIA

### HIST 080. History of the Body

Bodies make history and bodies are subject to history's movements. The history of the body, a relatively recent field of inquiry, encompasses the histories of science, gender, sexuality, race, and empire. This course will explore different chapters of that history, with a focus on Europe and the Atlantic World.

Prerequisite: This course is not open to first year students.

Social sciences. 1 credit. Eligible for GSST, INTP Spring 2018. Azfar.

### 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. Social sciences. 1 credit. Fall 2017. A.Dorsey.

### HIST 083. What Ifs and Might-Have-Beens: Counterfactual Histories

The course will focus on debates about and within the writing of counterfactual histories. Social sciences.

1 credit.

Eligible for INTP

### HIST 084. Modern Addiction: Cigarette Smoking in the 20th Century

This course examines the worldwide transformation of the habit of smoking into a medicalized and regulated practice. Emphasis on research projects based on primary sources. Social sciences. 1 credit.

Eligible for LALS

### HIST 089. The Environmental History of Africa

This course examines African history from an ecological and environmental perspective. Social sciences. 1 credit.

Eligible for BLST, ENVS

### HIST 090B. Irish History

Settlement from Ancient Ireland to the Celts, the rise of the McNeill Kingship, the arrival of St. Patrick, the Norman invasion, and the Flight of the Earls. We examine the darkest hours of Irish History: Cromwell, the Potato Famine, the Easter Uprising, Irish Independence, up to Bloody Sunday in Derry, 1972. Social sciences. 1 credit.

## HIST 090C. Women in Late Imperial and Republican China

This is a thematic course exploring the multiplicity of female experiences in late imperial and Republican China. The course aims to situate the changes in the social status and daily lives of Chinese women in their broader sociopolitical contexts and to depict the multifarious character of Chinese women's lives. With this purpose, the students will learn about women from different social classes and ethnic backgrounds, emphasizing their contribution to social and political life.

Social sciences. 1 credit. Spring 2018. Altan.

## HIST 090D. A Global History of Chinese Labor

This course is a survey of Chinese labor history, analyzing how Chinese workers have influenced the course of history on a global scale by mass migrations and participation in social and political movements since the nineteenth century. Some of the topics include Chinese labor migrations to European plantations, the role of workers in China's anti-colonial struggle, Mao Zedong's theory of class struggle, and gender-labor relations in the post-1978 Reform period.

Social sciences. 1 credit. Spring 2018. Altan.

### HIST 090E. On the Other Side of the Tracks: Black Urban Community

The study of the black community in the United States, from the end of the American Revolution to the end of the 20th century. Social sciences. 1 credit. Eligible for BLST Spring 2018. A.Dorsey.

#### HIST 090I. Technologies of the Cold War in Africa

Students will examine the material, institutional and political histories of three major technologies associated with the Cold War in Africa between 1945 and the 1990s. Social sciences. 1 credit. Eligible for PEAC

### HIST 090Q. The Queer Theory of Empire

What does queer theory have to do with imperial history? This course will examine how queer theorists have engaged with problems of empire and the ways in which historians of empire have engaged with the relationship between imperial politics and queer desire.

This course is not open to first year students. 1 credit.

Eligible for GSST, INTP

### HIST 091. Senior Research Seminar

Students write a 25-page paper based on primary sources.

Required of all majors, including honors majors. Writing course. 1 credit.

Fall 2017. Azfar. Burke.

### 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. The thesis should be 10,000 to 15,000 words in length (50-75 pages), and a brief oral examination will be conducted upon completion of the thesis. Students may not register for HIST 092 credit/no credit.

1 credit.

### 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.

0.5 credit.

### Seminars

## HIST 111. Muslims, Christians, and Jews in the Medieval Mediterranean

Beginning with common Roman traditions, the Mediterranean during the Middle Ages became divided into three great civilizations: Byzantium, Islam, and Western Christendom. The course will examine the interchange and friction among these three cultures as the sea passed from Islamic to Christian control from the seventh to the 14th century. Social sciences. 2 credits.

Eligible for ISLM, MDST Fall 2017. Bensch.

## HIST 116. European Intellectual History: Pathways to the Enlightenment

This honors seminar will explore European intellectual history from the Renaissance to the post-moderns, with the Enlightenment as the central historical problem. Where did the Enlightenment come from, and what did it result in? We will examine scholarship that has engaged this question in different ways, exploring intersections between the history of European ideas and cultural history, the history of revolutions, the history of sexuality, and the history of Empire. Social sciences. 2 credits.

## HIST 128. Russia in the 19th and 20th Centuries

This 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. Social sciences. Writing course. 2 credits. Spring 2018. 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.

Social sciences. 2 credits.

### HIST 131. Gender and Sexuality in America

A social and cultural history of gender and sexuality in the United States from the early republic to the present. Social sciences. 2 credits. Eligible for GSST Spring 2018. B. Dorsey.

### 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. Social sciences. 2 credits.

Spring 2018. 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 community formation. Social sciences.

2 credits. Eligible for BLST

### HIST 140. The Colonial Encounter in Africa

Students focus on the social, economic, and cultural dimensions of the colonial era in modern Africa. Social sciences. 2 credits. Eligible for BLST, DGHU, INTP, PEAC Fall 2017. Burke.

## HIST 145. Women and Gender in Chinese History

This seminar traces the creation and transmission of feminist discourses and practices in China. We will explore the dynamics of gender relations, changing views of the body, self, and sex, and institutional change to understand how women as mothers, workers, teachers, nuns, and rulers negotiated power.

Social sciences. 2 credits. Eligible for ASIA, GSST

## 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. Topics include the neocolonial condition of the region, nation and state building processes, urbanization, industrialization, popular and elite cultures, modernities in the periphery, and race, class, and gender conflicts. Social sciences

Social sciences.

2 credits. Eligible for LAL

Eligible for LALS

#### HIST 149. Reform and Revolutions in Modern Latin America

The historical problem of change -political, economic, social, and cultural-in peripheral Latin America. It emphasizes on nation-building capitalist ideas, populist experiences that produced deep reformist transformations, and revolutionary processes that started very radical and over time became moderate. Social sciences. 2 credits. Eligible for LALS Spring 2018. Armus.

### HIST 180. Honors Thesis

2 credits.

### **Interpretation Theory**

MAYA NADKARNI (Sociology and Anthropology), Coordinator Anna Everetts (Administrative Assistant)

Committee: Farid Azfar (History) Jean-Vincent Blanchard (Modern Languages and Literatures, French) Timothy Burke (History) Rachel Buurma (English Literature) Sibelan Forrester (Modern Languages and Literatures, Russian)<sup>3</sup> Richard Eldridge (Philosophy)<sup>3</sup> Grace Ledbetter (Classics, Philosophy)<sup>3</sup> Tamsin Lorraine (Philosophy) Rosaria Munson (Classics) Patricia Reilly (Art History) Olivia Sabee (Dance) Eric Song (English Literature) Mark Wallace (Religion) Patricia White (English Literature)<sup>3</sup>

3 Absent on leave, 2017-2018.

The Interpretation Theory Program provides students and faculty with an interdisciplinary forum for exploring the nature, ethics, and politics of representation. Reaching widely across the disciplines, work done in the minor reflects a longstanding drive to cultivate self-consciousness in the use of a significant range of interpretive methods. Students use this course of study to develop a flexible, comparative, critical, historicized grasp of theories of the production of meaning in and through cultural life. 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 who minor in Interpretation Theory take a total of 6 courses that build on a combination of classic and current hermeneutic methods. Three general rules guide the selection:

All minors are required to successfully complete the one-credit capstone seminar, team-taught by two faculty members from different departments, in spring of their senior year. Juniors may enroll upon approval of the instructors, but the seminar must be taken in the spring of senior year in order to receive capstone credit. First-years are not permitted in the seminar.

The three remaining courses are elective but must draw upon at least three different departments. At

least 4 of the 6 interpretation theory credits must be outside the major.

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 an Honors minor in interpretation theory. Students must complete one preparation for external examination. This 2-credit preparation can be:

- -one 2-credit Honors seminar;
- -the INTP Capstone seminar plus a reading attachment or a thesis;
- -a combination of two eligible courses in
- different departments;
- -one 2-credit thesis;
- -or a combination of a thesis plus a related 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.

### **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 2 different areas to explore theories of knowledge and questions of interpretation and representation. For example, past capstone seminars have brought together professors from French literature and biology, political science and religion, anthropology and English, philosophy and art, classics and linguistics, and other interdisciplinary combinations.

Current and past capstone titles include: Cultural Dimensions of Scientific Thought; Corporality in Storytelling; Rituals and Spectacles of Violence; Hero Time Travel; Mind, Body, Machine; Interpretation and the Visual Arts; Beyond Reason: Nietzsche, Levinas and the Kabbalah; Mapping the Modern; and Visionaries of Spirit, and Masters of Suspicion.

### Life After Swarthmore

Respondents to an Interpretation Theory Program alumni survey in 2013 indicated that approximately 54% went on to graduate school and of those, approximately 67% pursued a Ph.D. or other doctorate.

Occupations of interpretation theory graduates are diverse and include: physicians, professors, editors, grant writers, and civil rights activists.

### Interpretation Theory Courses

Currently offered courses relevant to the program include the following:

### INTP 090. Directed Reading

1 credit. Fall 2017. Staff.

### INTP 091. Capstone: Cultural Dimensions of Scientific Thought

#### (Cross-listed as ANTH 091B)

This seminar will explore the deep and often overlooked connections between physical and cultural ways of understanding the universe. To that end, we will be taking a historical and crosscultural view of scientific forms of thought in order to examine the multiple, complex relationships that obtain between individual human agents and their social milieus in the processes of creating and advancing scientific theories of the universe. How, for example, do we take the measure of what we don't know? How do we ascribe differential values to scientific questions and solutions? In other words, what makes one question more important than another? What makes a scientific theory "elegant" or "beautiful," and why do (Western) scientists place epistemological value on such aesthetic

considerations? Potential course topics include: the role of myth in the oral transmission of astronomical knowledge among aboriginal Australians; the materialization of astronomical knowledge in ancient Mesoamerican architecture; early cultures of number and numerology; the technological conditions for advances in scientific thought; the role of social desire in scientific discovery and invention (of the infinitesimally small, of photography, or of relativity, for example); and the role of intercultural interaction in the creation of new approaches to scientific problems. Non-distribution.

1 credit. Eligible for INTP Spring 2018. Fraga, Smith

### INTP 092. Thesis

2 credits. Fall 2017. Staff.

The following courses may be counted for credit in the Interpretation Theory Program. Descriptions of the courses can be found in each department's course listing in this catalog.

### Anthropology

ANTH 032D. Mass Media and Anthropology ANTH 049B. Comparative Perspectives on the Body ANTH 116. Anthropology of Capitalism Art History ARTH 164. Modernism in Paris and New York Classics CLST 020. Plato and His Modern Readers CLST 036. Classical Mythology **Comparative Literatures** LITR 047R. Russian Fairy Tales LITR 070R. Translation Workshop LITR 072F. French Literature in Translation LITR 075S. Borges: Aesthetics & Theory Dance DANC 023. Contemporary Performance English ENGL 035. The Rise of the Novel ENGL 071S. Contemporary Life Writing: Form and Theory ENGL 079. What is Cultural Studies? ENGL 090. Queer Media ENGL 092. Marxist Literary and Cultural Studies ENGL 096. Methods ENGL 111. Victorian Literature and Culture ENGL 121. Modernism and Forgetting Film and Media Studies FMST 020. Critical Theories of Film and Media FMST 046. Queer Media French FREN 116. La Pensée géographique History HIST 001K. First-Year Seminar: Engendering Culture HIST 066. Disease, Culture, and Society in the Modern World: Comparative Perspectives

HIST 080. History of the Body HIST 083. What Ifs and Might-Have-Beens: Counterfactual Histories HIST 090Q. The Queer Theory of Empire Linguistics LING 002. First-Year Seminar: The Linguistic Innovation of Taboo Terms and Slang LING 063. Supporting Literacy Among Deaf Children Peace and Conflict Studies PEAC 043. Gender, Sexuality, and Social Change PEAC 135. Social Movements and Nonviolent Power Philosophy PHIL 019. Philosophy and Literature and Film PHIL 020. Plato and His Modern Readers PHIL 039. Existentialism PHIL 049. Marx, Nietzsche, and Freud PHIL 069. Phenomenology-Then and Now PHIL 079. Poststructuralism PHIL 106. Aesthetics and Theory of Criticism PHIL 114. Nineteenth-Century Philosophy PHIL 139. Phenomenology, Existentialism, and Poststructuralism **Political Science** POLS 011. Ancient Political Theory POLS 012. Modern Political Thought POLS 100. Ancient Political Theory: Plato to Hobbes POLS 101. Modern Political Theory Religion RELG 015B. Philosophy of Religion RELG 027. Radical Jesus RELG 032. Queering God: Feminist and Queer Theology RELG 037. Sex, Gender, and the Bible RELG 112. Postmodern Religious Thought Russian RUSS 047. Russian Fairy Tales RUSS 070. Translation Workshop Spanish SPAN 078. Laberintos borgeanos SPAN 108. Jorge Luis Borges Note: Any courses attached to the program, at the time taken, will be counted toward requirements for the minor in interpretation theory.

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.

### **Islamic Studies**

TARIQ al-JAMIL (Religion), Coordinator Anita Pace (Administrative Assistant)

Committee: Tariq al-Jamil (Religion) Khaled Al-Masri (Modern Languages and Literatures, Arabic) Stephen Bensch (History) Farha Ghannam (Sociology and Anthropology) Alexandra Gueydan-Turek (Modern Languages and Literatures, French) Steven Hopkins (Religion)

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 art history, dance, film and media studies, gender and sexuality studies, history, modern languages and literatures, political science, religion, and sociology and anthropology. 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; Cultural 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 five Islamic Studies Program credits. Students must follow the guidelines below regarding the required five courses.

### Requirements

The five required courses must cross at least three different academic departments.

Only one of the total five credits required by the Islamic studies minor may overlap with the student's major.

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.

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-Campus Study 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 reevaluated 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 2-credit thesis under program supervision that will count toward the

## **Islamic Studies**

minimum of five credits required for the interdisciplinary minor or take a 2-credit Islamic Studies honors seminar. Students normally enroll for the thesis (ISLM 180) in the fall semester and in the spring semester of the senior year. The honors examination will address the themes explored in the 2-credit thesis or the 2-credit Islamic Studies honors seminar.

### **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.

### **Islamic Studies Courses**

### ISLM 180. Honors Thesis

1 credit each semester. Eligible for ISLM Fall 2017. Staff. Spring 2018. Staff.

The following courses may be applied to an academic program in Islamic studies. See individual departments to determine specific offerings in 2017 - 2018.

#### Anthropology

ANTH 009C. Cultures of the Middle East ANTH 123. Culture, Power, Islam Arabic ARAB 004. Intermediate Modern Standard Arabic П ARAB 011. Advanced Arabic I ARAB 011A. Arabic Conversation ARAB 012. Advanced Arabic II ARAB 012A. Advanced Arabic Conversation ARAB 021. Introduction to Modern Arab Literature ARAB 022. Discourses of Oppression in Contemporary Arabic Fiction ARAB 025. War in Arab Literature and Cinema ARAB 029. Arabs Write the West ARAB 045. Contemporary Thought in the Arab World Dance DANC 046. Dance Technique: Kathak DANC 049F. Dance Performance Repertory: Kathak French FREN 045B. Le Monde francophone: France and the Maghreb: Postcolonial Writing in a Transnational Context FREN 109. Queering North African Subjectivities FREN 111. Le Désir colonial: représentations de la différence dans l'imaginaire français History HIST 001T. First-Year Seminar: Cross and Crescent: Muslim-Christian Relations in Historical Perspective

HIST 006A The Formation of the Islamic Near East HIST 006B. The Modern Middle East HIST 111. Muslims, Christians, and Jews in the Medieval Mediterranean Peace and Conflict Studies PEAC 003. Crisis Resolution in the Middle East PEAC 053. Israeli-Palestinian Conflict Religion RELG 001C. Religion and Terror in an Age of Hope and Fear 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 India RELG 029. Is God a White Supremacist? 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 Russian RUSS 023. The Muslim in Russia

CHRISTOPHER FRAGA (Anthropology), Coordinator Anna Everetts (Administrative Assistant)

Committee: Elaine Allard (Educational Studies) Diego Armus (History) Nanci Buiza (Spanish) Désirée Díaz (Spanish) Christopher Fraga (Anthropology) Jose Luis Machado (Biology)<sup>3</sup> Milton Machuca-Galvez (Latin American and Latino Studies) Edwin Mayorga (Educational Studies)<sup>3</sup> Braulio Muñoz (Sociology)<sup>3</sup> Kenneth Sharpe (Political Science) Roberto Vargas (McCabe Library)<sup>3</sup>

3 Absent on leave, 2017-2018.

Swarthmore's Latin American and Latino Studies Program explores the rich diversity - as well as the similarities - among and within Latin American countries and cultures. The program also investigates the broad dynamics shaping Latino experiences in the United States. Students 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, immigrant, and diasporic experiences; politics; socioeconomic conditions; religion; social structures; architecture; and political borders are all considered in this farranging and inclusive course of study. Students may add a minor or special major in Latin American and Latino studies. Courses from art history, history, modern languages and literatures, political science, religion, sociology and anthropology contribute to this exciting interdisciplinary program.

Most of our students spend one semester in Latin America. Studying beyond the traditional classroom walls provides students with invaluable opportunities for enriching intellectual experiences and personal growth.

### The Academic Program

Students interested in the Latin American and Latino Studies Program are invited to consult with the program coordinator and members of the LALS Committee before developing a proposal. The proposal should establish how Latin American and Latino Studies relates to the overall program of undergraduate study and to the departmental major. The minor is open to students of all divisions.

### **Course Minor**

Latin American and Latino Studies minors must complete the following requirements:

### Language:

LALS requires the successful completion of SPAN 004 Intensive Advanced Spanish or its equivalent. This requirement is waived for native speakers of Spanish and for students who demonstrate sufficient competence in this language, as determined by the Latin American and Latino Studies Committee. Note: LALS credit is not offered for language courses.

### Courses:

Students must complete a minimum of five Latin American and Latino Studies approved courses and seminars.

1. These five courses must span the two divisions Humanities and Social Sciences.

2. In order to develop a basic introduction to Latin America, students must complete one of the following three courses by their sophomore year: LALS 005: Introduction to Latino Studies, HIST 004: Introduction to Latin American History, or SPAN 010: En busca de Latinoamérica.

3. Only one of the total five courses required by the Latin American and Latino Studies minor may overlap with a student's major or other minor.

4. To graduate with a minor in Latin American and Latino Studies, a student must maintain a minimum grade of "B" in the program, and a "C" average in any other course work.

### Study Abroad

Students are required to spend a minimum of one semester abroad in a program approved by both the Latin American and Latino Studies Program and the Off-Campus Study Office. The experience of living and studying abroad in any Latin American Spanish-speaking country is strongly encouraged by Latin American studies faculty. By extending learning beyond the traditional

classroom, students have distinctive opportunities for enriching intellectual experiences and unique opportunities for personal growth. Students are welcome to choose from a selection of approved programs available in other locations throughout Latin America.

Students may apply two courses from work taken abroad in Latin America to their Latin American and Latino Studies academic program.

Courses taken abroad must have a clear Latin American focus and must be preapproved by the appropriate department in order to count for the LALS minor.

Study abroad must be pursued in Spanish. Students must complete Spanish 004, or its equivalent, before going abroad.

Language courses are not eligible for study abroad credit.

Students are strongly encouraged to complete the introductory course requirement (see above).

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 being considered for the minor.

Only in exceptional cases, with the support of a faculty member and the approval of the LALS Committee, will a semester's internship or a community service project in Latin America fulfill this requirement.

### **Honors Minor**

To complete an honors minor in Latin American and Latino Studies, students must have completed all requirements for the interdisciplinary minor. From within these offerings, they may select for outside examination a seminar taken to fulfill the interdisciplinary minor's requirements. However, the seminar chosen may not be an offering within their major department.

### **Special Major**

Students may plan a Latin American and Latino Studies special major that includes closely related work in one or more departments. Students must have completed at least two LALS-related courses with grades of B or better to be accepted into the major. Students also have the possibility of designing an individualized special major in coordination with other departments.

Special majors consist of at least 10 courses and no more than 12 courses.

Latin American and Latino Studies special majors and individualized special majors must complete the major comprehensive requirement of a 1 or 2credit thesis or other written research project designed to integrate the work across departmental boundaries, or a comprehensive examination. Any student interested in pursuing an individualized special major must meet with the LALS program coordinator.

### Life After Swarthmore

Swarthmore graduates who have taken part in the Latin American and Latino 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.

# Latin American and Latino Studies Courses

## LALS 005. Introduction to: Latino/a Studies

This course will provide an introduction to the major concepts, issues, and debates in the field of Hispanic/Latino Studies utilizing an interdisciplinary approach to the study of Hispanic/Latin@ communities in the United States, namely those of Mexican, Puerto Rican, Cuban, Caribbean, Central American and South American origin. The course presents a basic intellectual map for understanding both the similarities and the differences between contemporary Hispanic/Latin@ communities, i.e., what internal and external, affect them. Major themes include: the politics of labeling and subsequent questions of identity; immigration, migration, and communities formation histories; gender; race and racial constructions; language/bilingualism; educational experiences; media representation; labor markets; and demographic trends. Non-distribution. 1 credit.

Eligible for LALS

## LALS 006. Ethnic and Latino Studies: Me, Myself, and the Otro

This course introduces students to Ethnic and Latino Studies with an emphasis on the centrality of race and racism in contemporary society. Topics will include: the impact of racialization upon social identities, social structure and institutions; social behavior and culture; the roots of contemporary social/cultural issues within historical constructions of race, racism and white supremacy; resistance and protest movements; theories of race, ethnicity and racial oppression; issues of domination and subordination; immigration and acculturation experiences; comparison of Latina/Latino experiences to those of other racial, ethnic and immigrant groups; and the potential for a pan-ethnic identity. Through weekly readings, written reflections, autoethnographic memos, and discussions, students will have a deeper understanding of how social

identities inform perspectives. Non-distribution.

### LALS 025. In Quest of God: The Latin American Religious Arena

(Cross-listed as RELG 043)

This course explores distinct historical, sociocultural contexts, political and economic processes in which historical varieties of Catholicism have emerged in Latin America. Understanding religion as generative, this course will examine the foundations, theological themes, and processes of pre-Hispanic indigenous practices, and Spanish Colonial Catholicism, the public role of the Catholic Church in struggles for justice and human rights in the 1960 to-1990 period expressed by Liberation Theology, the recent growth of Protestantism with a focus on Pentecostalism, the "end of revolutionary utopias," the contemporary praxis of Catholicism, the public emergence of native spiritualities, and diaspora religions of the Caribbean, Brazil and Latinos in the United States.

Social Sciences. 1 credit. Eligible for LALS, RELG Spring 2018. Machuca-Galvez

## LALS 030. Drugs, Gangs, and U.S. Imperialism

Increasing levels of violence are one of the most persistent problems faced by many Latin American countries in the last two decades. The optimistic regional movement towards democratization has been tarnished by the inability of the State to minimally guarantee public security. This course will examine the origins, nature of this situation as well as possible solution by foregrounding the social, political, economic and social factors -both global (U.S. foreign policy) and local (gangs and drugs). Non-distribution. 1 credit. Eligible for LALS Fall 2017. Machuca-Galvez

#### LALS 040. Social Movements in Latin America: Gender and Queer Perspective (Cross-listed as ANTH 040J)

(cross-instet as ArVIII 0400) Since the 1980s, the contemporary forces of neoliberalism, re-democratization and globalization have profoundly reshaped the societies of Latin America. Against this backdrop of change, people who have long been politically marginalizedindigenous groups, women, peasants, gays, Blacks-have struggles to assert their rights and make their voices heard. In this course we will focus on gender and queer identities in Latin America through a social movements lens. Non-distribution. 1 credit.

Eligible for GSST, LALS

## LALS 045. Sounds and Identities: Rhythms of Latin America

This course explores the roots and evolution of Latin American musical styles from their origins in the cultures of Mediterranean Europe and its mixing with Indigenous and African cultures during colonial times beginning in the 15th century. The focus will be on the popular musical styles that emerged in the late 19th century, eventually, developing into distinctive regional styles - e.g., Argentine tango, Brazilian samba, Cuban son and salsa, Dominican merengue/bachata, Mexican rancheras/corridos, and many others. We will examine each musical style and social context in lecture-discussion format with film and performance demonstrations, and assess the varying degrees of success Latin American sounds have in the major world musical markets today. Enrollment limited to 15 students. Humanities. 1 credit.

Eligible for LALS

## LALS 050. Indigenous People of Mexico and Central America

In 1492, Native American isolation from Europe and Africa ended in the region of the Americas now known as Latin America. This course offers an introductory survey of past and present indigenous cultures of Mesoamerica, i.e., Mexico and Central America beginning with pre-Columbian cultures, and then considering the major transformations during the period of European colonialism, which led eventually to different contemporary Indigenous population configurations and concentrations in each country in the Mesoamerican area. Despite 500 years of colonial and nation-state domination, indigenous peoples in Mesoamerica continue to assert their basic human right to resist cultural hegemony. The remainder of the course will be devoted to contemporary Mesoamerican indigenous populations with particular attention to issues of cultural resistance, gender, land and resource rights, health, religion, and economic selfdetermination. Students will gain familiarity with the diversity of indigenous Mesoamerica and to understand how indigenous peoples in the region have persisted, changed, and negotiated in political, economic and social contexts. Social sciences. 1 credit.

Eligible for LALS

## LALS 080. Mexican Pennsylvania: The Making of a Transnational Community

A large flow of urban service workers have arrived in Philadelphia in the last 20 years. In spite of the economic downturn and aggressive law enforcement, an unprecedented number of Mexican immigrants are still at work in the United States. What are the legislative proposals to end or rationalize their migration? What obstacles do they

face as they look at the future of their children? How are their ties to Mexico maintained? We will look for answers to these and other questions. Taught in English, students must be fluent in Spanish. Enrollment limited to 15. Non-distribution. 1 credit. Eligible for LALS

### LALS 090. Thesis

1 credit. Eligible for LALS Fall 2017. Staff.

### LALS 093. Directed Reading

Non-distribution. 1 credit. Eligible for LALS

### LALS 097. Independent Study

Non-distribution. 1 credit. Eligible for LALS

LALS 180. Senior Honors Thesis 2 credits. Eligible for LALS

The following courses may be counted for credit in the Latin American and Latino Studies Program. Descriptions of the courses can be found in each department's course listing in this catalog.

### Anthropology

ANTH 031C. Hispanics, Mestizos, Latinxs ANTH 040J. Social Movements in Latin America: Gender & Queer Perspective ANTH 041B. Visions of Latin America ANTH 041C. Visual Cultures of Mexican and Aztlan ANTH 051B. Drugs and Governance in the Americas Art History ARTH 155. Picturing Colonialism Education EDUC 045. Literacies and Social Identities EDUC 048. From the Undercommons: Ethnic Studies and Education EDUC 053. Educating Emergent Bilinguals EDUC 068. Urban Education EDUC 153. Latinos and Education **Environmental Studies** ENVS 032. China, Brazil, and the Global Food Environment History HIST 001P. First Year Seminar: Latin America through the Lens: Photography, History and the Present HIST 004. Latin American History HIST 051, Black Reconstruction HIST 063. Voices of the Past: Between Oral History and Memory

HIST 065. Cities of (Im)migrants: Buenos Aires, Lima, Miami, and New York HIST 066. Disease, Culture, and Society in the Modern World: Comparative Perspectives HIST 068. The Self-image of Modern Latin America HIST 084. Modern Addiction: Cigarette Smoking in the 20th Century HIST 067. Digging Through the National Security Archive: South American "Dirty Wars" and the United States' Involvement HIST 148. Issues and Debates in Modern Latin America HIST 149. Reform and Revolutions in Modern Latin America Linguistics LING 053. Language Minority Education in the U.S.: Issues and Approaches Literatures LITR 015S. First Year Seminar: Introduction to Latinx Literature and Culture LITR 040S. Colonial Latin America and its New World LITR 054S. Contemporary Cuba: Utopia, Revolution and Reform LITR 075S. Borges: Aesthetics & Theory LITR 074S. Queer Issues in Latin American Literature & Cinema **Political Science** POLS 057. Latin American Politics POLS 109. Comparative Politics: Latin America Religion RELG 043. In Quest of God: The Latin American Religion RELG 109. Afro-Atlantic Religions Sociology SOCI 024B. Latin American Society and Culture SOCI 024C. Latin American Society Through Its Novel Spanish SPAN 010. En busca de Latinoamérica SPAN 023. Introducción a la literatura latinoamericana SPAN 040. Colonial Latin America and its New World SPAN 050. Afrocaribe: literatura y cultura visual SPAN 051. Cuba contemporánea: utopía, revolución y reforma SPAN 053. Memorias a la deriva. El Caribe y sus diásporas SPAN 054. Contemporary Cuba: Utopia, Revolution and Reform SPAN 070. Género, diversidad y minorías en Latinoamérica SPAN 073. El cuento latinoamericano SPAN 076. La novela latinoamericana SPAN 079. García Márquez y su huella SPAN 080. Los hijos de la Malinche: Representaciones culturales de la Revolución Mexicana SPAN 082. México lindo y maldito: representaciones culturales de la Ciudad de México

SPAN 084. México, 1968: La violencia de ayer y hoy SPAN 087. Cruzando fronteras: migración y transnacionalismo en el cine mexicano SPAN 088. Pasados desgarradores: trauma y afecto en la literatura centroamericana de posguerra SPAN 101. Alejo Carpentier SPAN 103. Horacio Castellanos Moya: Centroamérica en las venas SPAN 108. Jorge Luis Borges

\* All papers and projects for affiliated courses must focus on topics relation to Latin American and Latino Studies THEODORE B. FERNALD, Professor <sup>3</sup> K. DAVID HARRISON, Professor DONNA JO NAPOLI, Professor BROOK D. LILLEHAUGEN, Assistant Professor (Tri-College) JAMIE A.THOMAS, Assistant Professor JONATHAN NORTH WASHINGTON, Assistant Professor EMILY A. GASSER, Visiting Assistant Professor PATRICIA L. IRWIN, Visiting Assistant Professor PETER KLECHA, Visiting Assistant Professor JEREMY FAHRINGER, Laboratory Instructor MELANIE DROLSBAUGH, Instructor, American Sign Language DOROTHY KUNZIG, Administrative Assistant

3 Absent on leave, 2017-2018.

#### What is Linguistics?

There are 7,000 languages in the world. Linguistics is the scientific study of language-we 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 students will get from studying Linguistics

Because the very nature of modern linguistic inquiry is to build arguments for particular analysis, 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 Linguistics Department is a constituent in the Tri-College Linguistics Department, which includes courses at Bryn Mawr College and Haverford College. Linguistics courses at Swarthmore College regularly include students from all three schools.

### The Academic Program

The Linguistics Department offers a course major, a course minor, an honors major, and an honors minor. In addition, a special course major and a special honors major are offered in linguistics and languages.

# 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.

### **Course Major: Linguistics**

The course major in linguistics consists of at least eight credits in linguistics, including all of the following:

1. One course in sounds from the following: LING 045, 052.

2. One course in forms: LING 050.

3. One course in meanings from the following: LING 026, 040.

4. One course in the Structure of a Non-Indo-European Language: LING 061, 062, 64, 067 and at Haverford College: LINGH282, and LING215.

5. LING 100, in which students complete and defend a one or two-credit (honors only) senior thesis. This course constitutes the comprehensive requirement for the major.

6. Two electives in linguistics. LING 001, Introduction to Language and Linguistics, may be included in the major at the student's option.

# Special Course Major: Linguistics and Languages

The special course major in linguistics and languages consists of at least twelve credits: six credits in linguistics and three credits in each of two languages\*. The languages can be ancient or modern. Students must complete each of the following:

1. One course in sounds from the following list: LING 045, 052.

2. One course in forms: LING 050.

3. One course in meanings from the following list: LING 026, 040.

4. One course in the Structure of a Non-Indo-European Language: LING 061, 062, 64, 067 and at Haverford College: LINGH282, and LING215.

5. LING 100, in which students complete and defend a one or two-credit (honors only) senior thesis. This course constitutes the comprehensive requirement for the major.

Please consult with the Linguistics dept for the Modern Languages requirement. Please contact the Classics Department to get the necessary courses to complete the language part of this special major.

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.

### **Course Minor**

Four minors are 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**

The honors major in linguistics consists of at least eight credits in linguistics, and includes all of the following:

1. One course in sounds from the following list: LING 045, 052.

2. One course in forms: LING 050.

3. One course in meanings from the following list: LING 026, 040.

4. One course in the Structure of a Non-Indo-European Language: typically LING 061, 062, or 064.

5. LING 195, in which students complete and defend a two-credit senior thesis. This course constitutes the comprehensive requirement for the major.

6. Two electives in linguistics.

7. Complete and defend an honors major portfolio as explained below.

### Honors Major Portfolio requirements:

**Thesis**: Students are required to write a two-credit 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 and Comparative

Sociolinguistics

Students will take LING 199 (Senior Honors Study) for one credit in the spring of their senior year. 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 forty-five 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

The special honors major in linguistics and languages consists of at least twelve credits: six credits in linguistics and three credits in each of two languages. The languages can be ancient or modern. Students must complete each of the following:

1. One course in sounds from the following list: LING 045, 052.

2. One course in forms: LING 050.

3. One course in meanings from the following list: LING 026, 040.

4. One course in the Structure of a Non-Indo-European Language: typically LING 061, 062, or 064.

5. LING 195, in which students complete and defend a two-credit senior thesis. This course constitutes the comprehensive requirement for the major.

6. Complete and defend an honors major portfolio as explained below.

### Honors Special Major Linguistics and Languages portfolio requirements:

**Thesis:** Students are required to write a two-credit 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 complete one honors examination 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 and 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. 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 consist of a forty-five 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 Minor**

If a student is a course major in Linguistics as well as an honors minor in Linguistics, the thesis required for the course major constitutes the portfolio for the honors minor.

Honors minors who are not course majors in linguistics will satisfy the course minor and complete and defend their honors minor portfolio as explained below.

### 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 and 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.

### 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**

Students who special major in linguistics and languages and who focus on two modern languages 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 advisor 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 students to talk with their advisors to find the one that is best suited to their 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-Indo-European Language, we also recommend satisfying this requirement by the end of the junior year. Syntax (LING 050) and Phonetics and Phonology (LING 045) are prerequisites for the Structure of a Non-Indo-European Language (LING 061, 062, 064), the faculty urge students to take these courses by the end of the fall semester of the junior year.

### Linguistics 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.

Social sciences. Writing course. 1 credit. Fall 2017. Thomas. Irwin. Spring 2018. Staff

#### LING 002. First-Year Seminar: The Linguistic Innovation of Taboo Terms and Slang

Taboo terms vary in topic across language communities: religion, sex, disease and death, and bodily effluents are common, but other topics can appear, often depending on nonlinguistic factors (community size, demographics, and cultural beliefs). Taboo terms also vary in how they are used: exclamations, name-calling, and maledictions are common, but other uses can appear, such as modifiers and predicates. Over time less common uses tend to semantically bleach, so that historical taboo terms can be used without hint of vulgarity or rudeness. These less common uses can fall together with slang in exhibiting linguistic behavior unique within that language, 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. Social sciences.

Writing course. 1 credit. Eligible for INTP Fall 2017. Napoli.

#### LING 003A. First-Year Seminar: The Meaning of "Meaning" in Post-Truth America

This class will introduce the fields of semantics and pragmatics -- the study of meaning in grammar and in practice -- by examining it specifically through the lens of society and mass media, especially focusing on advertising and on political and activist discourse, but touching on some other topics as well. Some topics include: communities of linguistic norms, the use of accents and dialects in constructing identity, literal and non-literal meaning in corporate, political, and activist discourse, presupposition in advertising, performative language and its role in society, and the role of intonation and prosody in information structure. We'll discuss phenomena like dogwhistles, gendered language, the slogans "Black/Blue/All Lives Matter", and vocal fry/uptalk, among others. Social sciences 1 credit. Spring 2018. Klecha.

### LING 007. Hebrew for Text Study I

(Cross-listed as RELG 057) This course counts for distribution in humanities under the religion rubric and in social sciences under the linguistics rubric. Social sciences. 1 credit. Spring 2018. Plotkin.

### LING 008A. Russian Phonetics

(Cross-listed as RUSS 008A) 0.5 credit.

### LING 010. Hebrew for Text Study II

(Cross-listed as RELG 059) Social sciences. 1 credit. Fall 2017. Plotkin.

### LING 011. American Sign Language I

Introduction to learning and understanding American Sign Language (ASL), and the cultural values and rules of behavior of the American Deaf community. Includes receptive and expressive readiness activities; sign vocabulary; grammatical structure; facial expressions (emotional & grammatical), body/spatial movement, gestures; receptive and expressive fingerspelling; and deaf culture do's and don'ts. Specific concepts/topics include the number/letter basics, identifying people, activities, places, and family. Social sciences. 1 credit. Fall 2017. Drolsbaugh.

Spring 2018. Drolsbaugh.

## LING 014. Old English/History of the Language

(Cross-listed as ENGL 014) This course counts for distribution in humanities under the English rubric and in social sciences under the linguistics rubric. Social sciences. 1 credit. Spring 2018. Williamson.

### LING 020. Computational Linguistics: Natural Language Processing

(Cross-listed as CPSC 065) Prerequisite: CPSC 035 (or the equivalent). Social sciences. 1 credit. Eligible for COGS

## LING 025. Sociolinguistics: 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 real-life speech. Social sciences. 1 credit.

Fall 2017. Thomas.

### LING 023. Japanese Language and Multilingual Society in the 21st Century.

(Cross-listed as (JPNS 023) This course counts for distribution in humanities under the chinese rubric and in social sciences under the linguistics rubric. Social sciences. 1 credit

Eligible for ASIA Spring 2018. Imamura.

### LING 028. Philosophy of Language

(Cross-listed as PHIL 028) This course counts for distribution in humanities under the philosophy rubric and in social sciences under the linguistics rubric. Social sciences. 1 credit. Eligible for COGS

### LING 033. Introduction to Classical Chinese

(Cross-listed as CHIN 033) This course counts for distribution in humanities under the chinese rubric and in social sciences under the linguistics rubric. Social sciences. 1 credit. Eligible for ASIA, MDST Spring 2018. Staff.

### LING 034. Psychology of Language

(Cross-listed as PSYC 034) Social sciences. 1 credit. Fall 2017. Grodner.

## LING 039. Language Learning: Science, Ethnography, Pedagogy

How are languages learned? What cognitive and social factors contribute to development in first, second, and additional languages? How can immersion and study abroad be used most effectively by students? This course is an introduction to theories and methods in investigating the process and achievement of using new language. We will explore common myths about second language acquisiton and how improvisational skills are gained in new systems of culture, vocabulary, and grammar. We will also examine how age, race, ethnicity, gender, sexuality, and other social factors mediate language development. Students will learn how to examine their own experiences through methods in participant observation and autoethnography, and gain an understanding of how researchers contribute to textbook development and instructional approaches such as communicative language teaching. Social sciences.

1 credit.

Spring 2018. Thomas.

### 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.

Social sciences. Writing course. 1 credit. Eligible for COGS Fall 2017. Klecha. Spring 2018. Klecha.

### 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 LING 045. Social sciences.

1 credit. Eligible for COGS Spring 2018. Gasser.

### 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. Social sciences. 1 credit.

Eligible for COGS Fall 2017. Washington. Spring 2018. Irwin.

### 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.

Social sciences. Writing course. 1 credit. Eligible for COGS Fall 2017. Napoli. Spring 2018. Irwin.

## LING 052. Historical and Comparative Linguistics

This course is an introduction to the study of linguistic change. Various models of language change are explored to seek to understand how and why languages change. This will be done by drawing from a wide range of languages to explore changes at all levels of the grammar (phonology, morphology, syntax, semantics, etc.) and the various factors that can contribute to linguistic change. We will learn how it is possible to reconstruct linguistic systems that we have no direct record of, and will consider what it means for languages to diverge and converge. Major themes of the course will be the comparative method and the relationship between sociolinguistics and historical linguistics. The topics of language shift, language endangerment and death, language birth, and language planning will also be addressed, and assigned work and projects will develop the skills to conduct historical linguistics research through exploitation of electronic and library resources.

Prerequisite: LING 001 or LING 045 or permission of the instructor. Social sciences. 1 credit. Spring 2018. Lillehaugen.

## LING 053. Language Minority Education in the U.S.: Issues and Approaches

(Cross-listed as EDUC 053) Social sciences. 1 credit. Eligible for CBL, LALS

## LING 055. Say what? Syntactic variation in dialects of English

This course is an introduction to the analysis of syntactic and semantic variation across dialects of English. The course will consider both big picture questions about how to model syntactic variation in language, and it will review key concepts in syntactic analysis. We will apply these concepts to data from varieties of English such as African American English, Appalachian English, Canadian English, Belfast English, and Indian English. In addition to reading primary literature on syntactic and semantic variation, students will be encouraged to bring new data to class for discussion and analysis. Prerequisite: LING 001 or LING 050 or permission of the instructor. Social sciences. 1 credit. Fall 2017. Irwin.

### 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. Prerequisite: LING 050 and LING 045 or LING 052 or permission of the instructor. Social sciences. 1 credit.

Eligible for COGS

## 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 encouraged to gain a rudimentary knowledge of ASL, or to register for LING 011 if your ASL level is beginner. Prerequisite: LING 050 and LING 045 or LING 052 or permission of the instructor.

Social sciences. Writing course. 1 credit. Eligible for COGS

Spring 2018. Napoli.

### LING 063. Supporting Literacy Among Deaf Children

In this course, we will develop ebooks for young deaf children. Adults can "read" these books with the children regardless of their knowledge of American Sign Language (or lack thereof). Working from beloved picture books, we will add video clips of actors signing the stories as well as voice-overs and questions about sign language that the interested reader can click on to find information.

Students must have a rudimentary knowledge of American Sign Language or concurrently take an attachment in ASL language. A background in linguistics, theater, film, early childhood development, or education would be helpful. Students from Gallaudet University will join Swarthmore College students in this jointly taught course. We will travel to Gallaudet University three times and students from Gallaudet University will travel to Swarthmore College three times over the semester.

Social sciences. 1 credit. Eligible for INTP Fall 2017. Napoli.

### LING 067. Structure of Wamesa

Wamesa is a member of the under-studied South Halmahera-West New Guinea subgroup of the Austronesian language family, with roughly 5000 speakers in West Papua, Indonesia. It has a number of typologically rare morphological and syntactic features, such as infixation and Noun-Adj-Det-Num word order. This course will investigate the major phonological, morphological, and syntactic structures of the language using both primary data and published sources. We will also look at the history of the language and its cultural/political context.

Prerequisite: LING 050 and LING 045 or permission of the instructor. Social sciences. 1 credit. Fall 2017. Gasser.

### LING 070R. Translation Workshop

(Cross-listed as LITR 070R, RUSS 070) This course counts for distribution in humanities under the literature and russian rubric and in social sciences under the linguistics rubric. Social sciences. 1 credit. Eligible for INTP

## LING 073. Computational Linguistics: Symbolic approaches

This course is an introduction to symbolic computational models of language, or the application of computer science to the study of human language. The focus will be on creating nuanced symbolic representations of human language that can be employed by computers, to the benefit of both language researchers who wish to test grammatical models, and language communities which lack the social capital to benefit from corporately developed resources. Topics to be covered include input methods and spell-checking, morphological analysis and disambiguation, syntactic parsing, building corpora, and machine translation. No prior computer science experience is necessary. This course is an introduction to symbolic computational models of language, or the application of computer science to the study of human language. The focus will be on creating nuanced symbolic representations of human language that can be employed by computers, to the benefit of both language researchers who wish to test grammatical models, and language communities which lack the social capital to benefit from corporately developed resources.

Topics to be covered include input methods and spell-checking, morphological analysis and disambiguation, syntactic parsing, building corpora, and machine translation. No prior computer science experience is necessary. Social Sciences. 1 credit.

Eligible for COGS Spring 2018. Washington.

#### 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: Any two of: LING 001, LING 025, LING 040, LING 043, LING 045, LING 050, or permission of the instructor. Social sciences. 1 credit. Fall 2017. Gasser.

### LING 080. Syntax II

This course builds on the concepts and tools of syntactic analysis from Ling 050 by closely examining a single topic in the primary literature in syntactic theory. This semester we explore the notion of subjecthood in syntactic theory. As we read classic and recent papers on how subjecthood has been defined, we will ask questions such as: How do we know when a constituent is the subject of a sentence? Why do only some languages seem to have restrictions on subjects? Are restrictions on subjecthood relevant to syntax, semantics, or to discourse? Is it possible for a sentence to have no subject? If a constituent has some properties of subjecthood but not others, is it appropriate to call this constituent a "subject"? This course will deepen critical reading and writing skills and as well as students' familiarity with syntactic phenomena in languages other than English. Prerequisite: LING 050 Social sciences. 1 credit.

## LING 082. Sociolinguistics II: Deviance, Dystopia, and Democracy.

This course builds upon foundational concepts in sociolinguistic theory to examine discourses of news and entertainment media, across science fiction and politics. Drawing upon contributions in applied linguistics, media studies, cultural studies, and animal studies, we ask which realities are mirrored in our everyday language and in the fictional and sensationalized worlds we engage in through the media we consume. What role does science fiction play in our explorations of social difference, deviance, control, disability, sexuality, and normativity? Can science fiction assist the goals of social justice and democracy? How does language surface in the biopolitics of human and non-humans? Together, we will explore key film and television, and select novels by authors Max Brooks, Octavia Butler, Philip K. Dick, and George Orwell. Students will learn advanced methods and theories in multimodal critical discourse analysis, ethnography of communication, and digital humanities. Prerequisite: One course addressing foundational concepts of language in society, including LING 025, SOCI040B (Intro to Sociolinguistics); LING 021, ANTH020N (Anthropological Linguistics/ Linguistic Anthropology); LING 009 (Languages of Fear, Racism, and Zombies); LING 030 (Language and Identity in the African Experience: From Kenya to Mexico); or permission of instructor.

Social sciences. 1 credit. Spring 2018. Thomas.

### LING 085. Phonology II

This course is a sequel to LING 045--Phonetics and Phonology. It is designed to provide further training in formal phonology, in terms of both data analysis and the fundamentals of phonological theory. Students will look deeply at both classic and later derivational versions of Optimality Theory, as well as some alternatives to OT, such as Articulatory Phonology. Once a common theoretical foundation has been established we will explore these topics through critical reading of major articles form the linguistic literature, as a way of exploring the details of the theories discussed, their strengths and weaknesses, and the rich cross-linguistic data that underlie them. Prerequisite: LING 045

Social sciences. 1 credit.

Spring 2018. Washington.

#### LING 090. Advanced Research Methods in Linguistics

This course covers the history, methodology, and notable debates in linguistics. Course readings include important primary works on topics throughout the history of linguistics, from early philology, to generative linguistics, to experimental and cognitive approaches. This course is intended for juniors and other advanced linguistics majors in preparation for conducting significant linguistics research, such as a senior thesis.

Prerequisite: any two of LING 001, LING 025, LING 040, LING 045, and LING 050, or permission of the instructor. Social sciences. 1 credit. Spring 2018. Gasser.

#### LING 095. Community-Service Credit: Literacy and Hard-of-Hearing or Deaf People

This course offers credit for community service work. Students have two options. First, they may work with children on literacy skills in a mainstream environment or a bilingual-bicultural program, locally or in the greater Philadelphia area. Second, they may work on bilingual-bimodal ebooks for deaf children.

0.5 - 1 credit. Eligible for CBL

#### LING 096. Community-Service Credit: Literacy

This course offers credit for community service work. The prerequisites are LING 054 /EDUC 054, 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 be determined by the student and the linguistics faculty mentor). Social sciences.

1 credit.

#### LING 100. Research Seminar

All course majors in linguistics and linguistics/language must write their senior thesis in this seminar. Only seniors are admitted. 1 credit.

#### 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.

#### 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.

## **Mathematics and Statistics**

AIMEE S. A. JOHNSON, Professor and Chair VICTOR BARRANCA, Assistant Professor DEB BERGSTRAND, Professor (part time) LINDA CHEN. Associate Professor<sup>3</sup> PHIL EVERSON, Professor<sup>3</sup> NOAH GIANSIRACUSA, Assistant Professor JOSHUA GOLDWYN, Assistant Professor RALPH R. GOMEZ, Associate Professor CHERYL P. GROOD, Professor<sup>2</sup> THOMAS J. HUNTER. Professor STEPHEN B. MAURER, Professor (part time)<sup>2</sup> NSOKI MAMIE MAVINGA, Assistant Professor KELLY MCCONVILLE, Assistant Professor DON H. SHIMAMOTO, Professor LYNNE STEUERLE SCHOFIELD, Associate Professor JANET C. TALVACCHIA, Professor<sup>3</sup> STEVE C. WANG, Professor<sup>3</sup> DAVID BURSTEIN, Visiting Assistant Professor LU CHEN, Visiting Assistant Professor DIANA DAVIS, Visiting Assistant Professor ELIZABETH DRELLICH, Visiting Assistant Professor QUINN A. MORRIS, Visiting Assistant Professor DANIELLE A. LEDFORD, Academic Support Coordinator STEPHANIE J. SPECHT, Administrative Assistant

<sup>2</sup> Absent on leave, spring 2018.

<sup>3</sup> Absent on leave, 2017-2018.

### **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 a variety of disciplines, including statistics, physical science, biological science, computer science, social science, operations research, education, and finance.

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 career paths. These paths lead to graduate school in mathematics, statistics, and other fields; to professional schools; and 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, fall or spring semester), 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. In particular, students intending to take MATH 15 must take Swarthmore's Calculus Readiness Exam and those intending to take MATH 28 must take Swarthmore's Calculus Placement Exam. 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, 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. The student must meet with the Math/Stat First Year Advisor, normally before the 9th week of the semester, to get approval for this arrangement. The registrar will record the final grade exactly as if the student had attended classes normally. 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. Students should consult the department webpage during the College's Sophomore Plan process for more details on how to apply for the major. After the Sophomore Plan 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 B- in courses taken in the department to date, including courses in the fall term of the first year, for which we have shadow grades. 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 028S; 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. MATH 097 is given in the fall only, and meets Tuesdays, 2:40-3:55.

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.

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 coding.

#### Special Emphases

A student may major in mathematics with an emphasis in statistics by taking at least 10 credits in math or statistics, including the core analysis course (Math 63), Probability (Stat 51), Mathematical Statistics I&II (Stat 61 and 111), Statistical Methods II (Stat 21), and Senior Conference (Math 97), along with placement or credit for Introduction to Computer Science (CS 21). Stat 21 counts as a course numbered over 40 for majors with an emphasis in statistics. Students are advised to take CS 21 as early as possible, as it can be difficult to add the course in junior and senior years. At least one of Stat 51 or Stat 61 must be taken at Swarthmore.

Students interested in Applied Math should consider taking Differential Equations (Math 44), Probability (Stat 51), Partial Differential Equations (Math 54), Mathematical Modeling (Math 56), Real Analysis (Math 63), Fundamentals of Applied Math (Math 66) and Complex Analysis (Math 103), along with Introduction to Computer Science (CS 21).

## 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

By graduation, a mathematics course minor must have 6 credits in mathematics or statistics, at least 3 of which must be for courses numbered 044 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 (for Class of '17 and later)

By graduation, a statistics course minor must have at least 6 credits in mathematics and statistics courses. Those courses offered by the Department that do not count towards the major also do not count towards the statistics course minor. Along with the lower level courses listed above for the math course minor, every Statistics course minor must receive credit for, or place out of, CS 21, Stat 21, Stat 51 and Stat 61. At least one of Stat 51 or Stat 61 must be taken at Swarthmore. Students are advised to take CS 21 as early as possible, as it can be difficult to add the course in junior and senior years.

## **Honors Major**

All current sophomores who wish to apply for Honors should indicate this in their Sophomore Plan, should work out a tentative Honors Program with their departmental advisor, and should submit the College's Honors Program Application along with their Sophomore Plan. (All Sophomore Plan 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 advisors, 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) Geometry (either 055 or 075, and 106) Statistics (061 and 111) Topology (104, a 2-credit seminar)

No course is allowed to count in two honors preparations, so it is not possible for a student to do honors preparations in both Real Analysis and Complex Analysis.

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 Plan process, not after the fact. Also, the usual College rules for transfer credit apply: students 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, students are responsible for the syllabus we use. If a course taken elsewhere turns out not to cover it all, the student will not get full credit (even though the transfer course was authorized beforehand) and the student will not complete the major until he or she has demonstrated knowledge of the missing topics. Similarly, for honors preparations students 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 upper-level 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.

#### Mathematics and Statistics 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 non-continuous 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 60s are core upper-level courses; from 70 to 89 are courses that have one or more core courses as prerequisites, and in the 90s 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.

# 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. Natural sciences and engineering. Writing course.

1 credit.

Spring 2018. Staff.

#### 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.

Prerequisite: Four years of traditional high school mathematics (pre-calculus) and placement into this course through Swarthmore's Math/Stat Readiness Examination. Students with prior calculus

experience must also take Swarthmore's Calculus Placement Examination (see "Placement Procedure" section earlier).

Natural sciences and engineering. 1 credit.

Fall 2017. Davis. Gomez.

#### MATH 015SP. Calculus STEM Scholars Program

MATH 015SP will provide an enriched experience designed to support MATH 015 students who plan to take at least four other STEM courses during their time at Swarthmore. During class, students work in small groups on challenging problems designed to promote deep understanding and mastery of the material.

Graded CR/NC.

Prerequisite: Students must apply for admission to this attachment. Admission will be determined by a commitment to both hard work and excellence, rather than by high school GPA, math SAT scores, or past performance in math classes. Students must be concurrently enrolled in an appropriate section of Math 15.

0.5 credit. Fall 2017. Gomez.

#### MATH 024. Numerical Methods-Engineering Applications

(Cross-listed as ENGR 019) Natural sciences and engineering. 1 credit.

#### MATH 025. Further Topics in Single-Variable 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. Prerequisite: MATH 015 or placement by examination (see "Advanced Placement and Credit Policy" section). Natural sciences and engineering. 1 credit. Fall 2017. Morris. Spring 2018. Staff.

#### MATH 026. Advanced Topics in Single-Variable 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). Natural sciences and engineering.

1 credit. Fall 2017. 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. This course is a step up from calculus: It includes more abstract reasoning and structures. Formal proofs are discussed in class and are part of the homework. 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).

Natural sciences and engineering. 1 credit.

T credit

Fall 2017. Drellich. Barranca. Spring 2018. 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). Natural sciences and engineering. 1 credit. Fall 2017. Bergstrand.

#### MATH 028S. First-Year Seminar: Linear Algebra Honors Seminar

MĀTH 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).

Natural sciences and engineering. 1 credit. Fall 2017. Maurer.

#### 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 mathematical induction and other methods of proof, recurrence relations, counting, and graph theory. Additional topics may include algorithms, and probability. There is a strong emphasis on good mathematical writing, especially proofs. While it does not use any calculus, MATH 029 is a more sophisticated course than MATH 015 or MATH 025; thus success in a calculus course demonstrates the mathematical maturity needed for MATH 29.

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.

Natural sciences and engineering. Writing course. 1 credit. Eligible for COGS Fall 2017. Drellich. Spring 2018. Staff.

#### 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 MATH 028) as a prerequisite. Students may take only one of MATH 033, MATH 034, and MATH 035 for credit.

Prerequisite: MATH 025, or MATH 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.

Natural sciences and engineering. 1 credit.

Fall 2017. Morris.

#### 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 MATH 026; and MATH 027, MATH 028, or MATH 028S. Natural sciences and engineering. 1 credit. Eligible for COGS Fall 2017. Goldwyn. Spring 2018. 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 MATH 028S 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 MATH 028S, 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. Natural sciences and engineering. 1 credit.

Spring 2018. Staff.

#### 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 MATH 044 for credit. The department prefers majors to take MATH 044. Prerequisite: Several-variable calculus or permission of the instructor. Natural sciences and engineering. 1 credit. Spring 2018. 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. Prerequisite: Linear algebra and several-variable calculus or permission of the instructor. Natural sciences and engineering. 1 credit. Eligible for COGS Spring 2018. Staff.

#### MATH 046. Theory of Computation

(Cross-listed as CPSC 046) Natural sciences and engineering. 1 credit. Eligible for COGS Spring 2018. Staff.

#### 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. Alternate years. Prerequisite: Linear algebra and several-variable calculus. Natural sciences and engineering. 1 credit. Eligible for COGS 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.

#### Alternate years.

Prerequisite: Linear algebra, several-variable calculus, and either MATH 043, MATH 044, PHYS 050, or permission of the instructor. Natural sciences and engineering. 1 credit. Eligible for COGS Spring 2018. 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. Alternate years. Prerequisite: Linear algebra and several-variable calculus or permission of the instructor. Natural sciences and engineering. 1 credit. Eligible for COGS

#### MATH 056. Modeling

An introduction to the formulation and analysis of mathematical models. This course will present a general framework for the development of discrete, continuous, and graphical models of diverse phenomena. Principles of modeling will be drawn from kinetics, population dynamics, traffic flow, diffusion, continuum mechanics, cellular automata, and network science. Mathematical techniques for understanding models will be emphasized, including dimensional analysis, phase plane diagrams, stability analysis, bifurcation theory, conservation laws, steady-state solutions, and computer simulation. Specific applications from chemistry, biology, physics, engineering, and neuroscience will be discussed. A primary goal of this course is to give insights into the connections between mathematics and real-world problems, allowing students to apply the course concepts to applications that excite them. Prerequisite: Linear algebra and basic differential equations, or permission of the instructor. Natural sciences and engineering. 1 credit. Eligible for ENVS

Fall 2017. Barranca.

#### 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. Prerequisite: Linear algebra. Natural sciences and engineering. 1 credit. Eligible for COGS Spring 2018. Staff.

#### MATH 058. Number Theory

The theory of primes, divisibility concepts, and multiplicative number theory will be developed. Alternate years.

Prerequisite: Linear algebra and several-variable calculus or permission of the instructor. Natural sciences and engineering. 1 credit.

#### 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. Prerequisite: Linear algebra and several-variable calculus or permission of the instructor. Natural sciences and engineering. Writing course. 1 credit. Eligible for COGS Fall 2017. Mavinga. Spring 2018. Staff.

#### MATH 066. Fundamentals of Applied Mathematics

Mathematical problems that arise from real-world applications often do not possess exact solutions due to complicating characteristics, such as uncertainty and nonlinearities. This course will introduce theory and techniques useful for deriving and interpreting approximate, numeric, or probabilistic solutions to mathematical problems. Standard topics include stochastic processes, perturbation methods, and numerical analysis. Applications will be developed and illustrated on examples drawn from areas such as physics, biology, chemistry, and industry. Prerequisite: Linear Algebra, Several Variable Calculus, and basic differential equations (MATH

Calculus, and basic differential equations (MATH 043, MATH 044, or MATH 056, or PHYS 50) Natural sciences and engineering. 1 credit.

Eligible for COGS

#### MATH 067. Introduction to Modern Algebra

This 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.

Natural sciences and engineering. Writing course.

1 credit.

Fall 2017. Grood. Shimamoto.

#### MATH 069. Combinatorics

This course continues the study of material begun in MATH 029. The primary topics are enumeration and graph theory. The first area includes, among other things, a study of generating functions and Polya counting. The second area is concerned with relations between certain graphical invariants. Additional topics may include one or more of the following topics: design theory, extremal graph theory, Ramsey theory, matroids, matchings, codes, and Latin squares. Prerequisite: Grades of C or better in MATH 029 and at least one other course in mathematics numbered 27 or higher, or permission of the instructor.

Natural sciences and engineering.

1 credit. Eligible for COGS

#### MATH 073. Advanced Topics in Analysis

An advanced version of MATH 053, sometimes offered instead, and requiring the core course in analysis.

Prerequisite: Linear algebra and MATH 063. Natural sciences and engineering. 1 credit. Eligible for COGS

#### MATH 075. Advanced Topics in Geometry

Course content varies from year to year depending on student and faculty interest. Topics in recent years have included differential topology and computational geometry and topology. The topic for 2017-2018 is computational geometry and topology, including polygons, the topology of graphs and surfaces, configuration spaces, linkages, dissections, convex geometry, and geometric structures associated to finite sets of points, such as triangulations, simplicial complexes, and Voronoi diagrams. Many of these items will be introduced through their connections to recent research on geometric folding problems, for instance, in topological robotics and computational origami.

The 2017-2018 version of the course may not be used as part of the Honors preparation in Geometry.

Prerequisite: At least one of MATH 055, MATH 063, MATH 067, or MATH 069. Natural sciences and engineering. 1 credit. Eligible for COGS Fall 2017. Shimamoto.

#### MATH 077. Advanced Topics in Algebra

An advanced version of MATH 057, sometimes given instead, and requiring the core course in algebra. (In 2013-2014 MATH 057 will be offered instead.) Peraceuticite: Linear algebra and MATH 067.

Prerequisite: Linear algebra and MATH 067. Natural sciences and engineering. 1 credit. Spring 2018. Staff.

#### MATH 093. Directed Reading

Graded CR/NC. Natural sciences and engineering. Writing course. 1 credit. Fall 2017. Morris.

#### 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 2017. Giansiracusa.

#### 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). Natural science and engineering. 1 credit.

Fall 2017. Schofield.

#### STAT 011. Statistical Methods I

STAT 011 prepares students to carry out basic statistical analyses using computer software. Topics include summary statistics and graphics, design of surveys and experiments, one and twosample t-tests and tests of proportions, and an introduction to simple linear regression. The course is intended for students who want a practical introduction to statistical methods. Students who receive credit for AP Statistics should not take this course; they will receive credit for Stat 11 and 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).

Natural science and engineering. 1 credit. Eligible for COGS Fall 2017. Lu Chen.

Spring 2018. Staff.

#### STAT 021. Statistical Methods II

STAT 021 is a second course in applied statistics that extends methods taught in Stat 011. Topics include multiple linear regression, analysis of variance, and logistic regression. Prerequisite: Credit for AP Statistics, STAT 011 or Econ 031, or STAT 001 with permission of the instructor. Natural science and engineering. 1 credit. Eligible for COGS Fall 2017. McConville. Spring 2018. Staff.

#### STAT 041. Topics in Statistics: Data Analysis Policy Projects

In this course, students work in teams on a semester-long data analysis problem. A key objective of the course is to expose students to the variety of challenges faced by the data analyst. Students research the scientific background of their problem, consult with area organizations, and communicate their methods and results both in writing and in class presentations. At the end of the semester, each team will present their findings in class to their area organization and write a final report for use by the organization. There will be presentations during the second week of classes describing the projects further. Prerequisite: STAT 011 or STAT 021 or permission of instructor Natural science and engineering. Writing course. 1 credit. Eligible for COGS Fall 2017. Schofield.

#### STAT 051. Probability

Introduction to the mathematical theory of probability. Topics include sample spaces and events, conditional probability and Bayes' theorem, univariate probability and density functions, expectation and variance, moment generating functions, Binomial, Negative Binomial, Poisson, Normal, t, Gamma and Beta distributions, joint, marginal and conditional distributions, independence, transformations, the multivariate Normal distribution, the law of large numbers and the central limit theorem. Prerequisite: MATH 033, MATH 034, MATH 035 or permission of the instructor. Natural Science and Engineering 1 credit. Fall 2017. Burstein.

#### STAT 061. Mathematical Statistics I

Introduction to the mathematical theory of frequentist and Bayesian statistical inference. Topics include likelihood functions, parameter estimation, confidence and Bayesian interval estimation, hypothesis testing, linear regression methods and categorical data analysis. Students needing to learn applied statistics and data analysis should consider STAT 031 in addition to or instead of this course.

Prerequisite: MATH 027 or MATH 028, STAT 051 or permission of the instructor. STAT 011 or the equivalent and some experience with computing are strongly recommended. Natural Science and Engineering 1 credit.

Spring 2018. Staff.

## STAT 093. Directed Reading Graded CR/NC.

Fall 2017. Lu Chen. McConville.

#### 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. Natural sciences and engineering. 1 credit. Eligible for COGS Spring 2018. 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. Natural sciences and engineering.

1 credit. Eligible for COGS Fall 2017. Bergstrand. Spring 2018. 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 Weierstrass-may be discussed. Prerequisite: MATH 063. Natural sciences and engineering. 1 credit. Eligible for COGS Fall 2017. Johnson.

#### 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). Alternate years. Prerequisite: MATH 063 and MATH 067. Natural sciences and engineering. 2 credits. Eligible for COGS Spring 2018. Staff.

#### MATH 106. Advanced Topics in Geometry

The course content varies from year to year among differential geometry, differential topology, and algebraic geometry. In 2013, the topic is expected to be advanced differential geometry.

Alternate years. Prerequisite: MATH 055 and MATH 063 or permission of the instructor. Natural sciences and engineering. 1 credit. Eligible for COGS

#### STAT 111. Mathematical Statistics II

This seminar is a continuation of STAT 051 and STAT 061. It deals mainly with statistical models for the relationships among variables. The theory of linear regression models is examined in detail. Other topics may include theory for generalized linear models (including logistic regression), Bayesian inference, and nonparametric statistics. Prerequisite: MATH 027 or MATH 028 and a grade of B- or better in STAT 061; credit or placement out of CPSC 021. Natural science and engineering. 1 credit. Eligible for COGS Spring 2018. Staff.

## **Medieval Studies**

CRAIG WILLIAMSON (English Literature), Coordinator TBD Administrative Assistant

Committee: Tariq al-Jamil (Religion) Stephen P. Bensch (History) James Blasina (Music) Michael W. Cothren (Art History)<sup>2</sup> Steven Hopkins (Religion) Rosaria V. Munson (Classics) Ellen M. Ross (Religion) William Turpin (Classics)

<sup>2</sup> Absent on leave, spring 2018.

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 three 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 three 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.

## **Medieval Studies**

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 two 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.

## **Medieval Studies Courses**

MDST 096 Thesis Eligible for MDST 1 credit MDST 180 Senior Honors Thesis

Eligible for MDST 1 - 2 credit

The following courses may be counted for credit in the Medieval Studies Program. Descriptions of the courses can be found in each department's course listing in this catalog. Other courses may be considered on petition to the Medieval Studies committee. Majors and minors are also allowed to include medieval courses from Bryn Mawr, Haverford, and the University of Pennsylvania in their curriculum.

ARTH 002. The Western Tradition\* CHIN 016. Substance, Shadow, and Spirit in Chinese Literature and Culture CHIN 027. The Story in Dynastic China\* CHIN 033. Introduction to Classical Chinese CHIN 069. The Art of Living: Taste and Aesthetics in Chinese Cultural Traditions ENGL 010. Survey: "Beowulf" to Milton\* ENGL 014. Old English/History of the Language ENGL 016. Chaucer ENGL 046. Tolkien and Pullman and Their Literary Roots HIST 001A. First-Year Seminar: The Barbarian North HIST 001T. First-Year Seminar: 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. From Classical Rome to Renaissance Florence: The Making of Urban Europe LATN 014. Medieval Latin MUSI 020. Medieval and Renaissance Music MUSI 047. Performance (Chamber Music) MUSI 106. Winds of Pleasure: The Music and Writing of Hildegard of Bingen in Context and Revival RELG 008B. The Qur'an and Its Interpreters RELG 011B. The Religion of Islam: The Islamic Humanities RELG 020. Christian Mysticism RELG 030. The Power of Images: Icons and Iconoclasts RELG 053. Gender, Sexuality, and the Body in Islamic Discourses RUSS 047. Russian Fairy Tales\* Seminars CHIN 104. Chinese Poetry HIST 111. Muslims, Christians, and Jews in the Medieval Mediterranean RELG 100. Holy War, Martyrdom, and Suicide in Christianity, Judaism, and Islam RELG 101. Jesus in History, Literature, and Theology 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. Secrecy and Heresy

\* Courses marked with an asterisk may count as a Medieval Studies course if the student chooses to focus on medieval materials; see the instructor for details.

## Modern Languages and Literatures (MLL)

MARÍA LUISA GUARDIOLA, Professor of Spanish, Chair SUZANNE MCCARTHY, Administrative Assistant BETHANNE SEUFERT, Administrative Assistant MICHAEL JONES. Director of Language and Media Centers JOHN WORD, Language Center Technologist/Multimedia Editor Arabic KHALED AL-MASRI, Assistant Professor, Section Head<sup>6</sup> BENJAMIN SMITH, Visiting Assistant Professor, Section Head<sup>5</sup> DIMA HANNA, Lecturer Chinese HAILI KONG, Professor and Section Head<sup>1</sup> PENG XU, Assistant Professor JIAJIA WANG, Visiting Assistant Professor CASEY LEE, Visiting Instructor WOL A KANG, Lecturer KIRSTEN E. SPEIDEL. Senior Lecturer MIN WANG, Lecturer French and Francophone Studies JEAN-VINCENT BLANCHARD, Professor MICHELINE RICE-MAXIMIN, Associate Professor CARINA YERVASI, Associate Professor and Section Head<sup>3</sup> ALEXANDRA GUEYDAN-TUREK. Associate Professor and Section Head BENJAMIN CHEREL, Lecturer ARNAUD COURGEY, Visiting Lecturer German Studies HANSJAKOB WERLEN, Professor and Section Head SUNKA SIMON, Professor MADALINA MEIROSU, Visiting Assistant Professor CHRISTOPHER SCHNADER, Lecturer Japanese WILLIAM O. GARDNER, Associate Professor and Section Head AKIKO IMAMURA, Visiting Assistant Professor YOSHIKO JO, Lecturer ATSUKO SUDA, Lecturer Russian SIBELAN FORRESTER, Professor and Section Head<sup>1</sup> EMILY FREY, Visiting Assistant Professor (part time) JESSE STAVIS, Visiting Assistant Professor (part time) JOSÉ VERGARA, Visiting Assistant Professor TSVETELINA YORDANOVA, Lecturer Spanish MARÍA LUISA GUARDIOLA, Professor and Chair of Modern Languages and Literatures LUCIANO MARTÍNEZ, Associate Professor and Section Head<sup>2</sup> NANCI BUIZA, Assistant Professor DÉSIRÉE DÍAZ, Assistant Professor ELI COHEN, Visiting Assistant Professor JULIA CHINDEMI VILA. Lecturer PATRICIA VARGAS, Lecturer LARISA COLÓN RODRÍGUEZ, Visiting Instructor (part-time) JOSEP NAVAS MASIP, Visiting Instructor (part-time)<sup>2</sup>

Absent on leave, fall 2017.
 Absent on leave, spring 2018.
 Absent on leave, 2017-2018.
 Fall 2017.
 Spring 2018.

## 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

## Modern Languages and Literatures (MLL)

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:

1. 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);

2. Achieving a score of 600 or better on a standard achievement test of a foreign language;

3. Passing either the final term of a collegelevel, yearlong, introductory foreign language course or a semester-long intermediate foreign language course; or

4. 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. Upperclass 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.

#### Advancement 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 one-credit 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 one-credit course in that language at the College.

Students who took an AP or IB exam should consult the department 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 Students who start in the 001-002 sequence must 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.

## **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 Jordan, Morocco, and Oman.

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 are required to complete a preapproved, semester-long study abroad program in a French-speaking country. Minors are strongly encouraged to attend such semester-long programs and should at least attend a preapproved six-week summer program in a francophone country.

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, 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 ACTR, CIEE, 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 Spanish speaking country. Swarthmore College offers students interested in studying abroad several programs listed on the Spanish website www.swarthmore.edu/academics/spanish/studyabroad.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.

Waiver of the study abroad requirement for students of Spanish: majors and minors of Spanish who cannot go abroad for one semester due to academic or other constrains should speak to the section head to discuss their circumstances. In special cases, depending on the student's language proficiency, the study abroad requirement may be waived or fulfilled with a summer-long 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 or major. Please consult with the section head if you have any questions.

## 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 some 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 eight credit requirement of a foreign literature/studies major as each section specifies.

## Literatures in Translation Courses

#### LITR 013R. The Russian Novel: The Classic Tradition

(Cross-listed as RUSS 013)

This course surveys the rise of the Russian novel during the nineteenth century. We will read works by Lemontov, Gogol, Turgenev, Dostoevsky and Tolstoy. Our examination of the literary and rhetorical strategies of these authors will be grounded in an understanding of their cultural context. We will probe issues of Russia's national identity, class system, and tendency toward authoritarianism during this paradoxical century of inertia and upheaval. As a writing course, polished academic writing and the process of revision is given particular emphasis.

Humanities. Writing course. 1 credit. Eligible for RUSS Fall 2017. Vergara.

#### LITR 015. Transgender Worlds

(Cross-listed as GSST 015) Humanities 1 credit. Eligible for GSST, LITR

#### LITR 015S. First Year Seminar: Introduction to Latinx Literature and Culture

(Cross-listed as SPAN 015)

This course is an introduction to the writings of Latino/as in the U.S. with emphasis on the distinctions and similarities that have shaped the experiences and the cultural imagination among different Latino/a communities. We will focus particularly in works produced by the three major groups of U.S. Latino/as (Mexican Americans or Chicanos, Puerto Ricans or Nuyoricans, and Cuban Americans). By analyzing works from a range of genres including poetry, fiction, film, and performance, along with literary and cultural theory, the course will explore some of the major themes in the cultural production of these groups. Topics to be discussed include identity formation in terms of language, race, gender, sexuality, and class; diaspora and emigration; the marketing of the Latino/a identity; and activism through art. Taught in English.

Humanities. Writing course. 1 credit. Eligible for LALS Fall 2017. Díaz

#### LITR 017FA. First Year Seminar: Literature and Medicine

(Cross-listed as FREN 017A) Portrayals of doctors provide a great opportunity to discover some classic works of French Literature, including Molière's *The Imaginary*  Invalid, Flaubert's Madame Bovary, Proust's Swann's Way, and Albert Camus' The Plague. Other authors studied are Montaigne and Diderot. Students focus their discussions on the relationship with patients when these are seen as both human beings and objects of science. Another topic of interest is how literature can be viewed as therapeutic. Throughout the seminar, we try to understand what had made these works original in their times and a source of admiration up to our days.

Texts and discussions in English. Humanities. 1 credit. Fall 2017. Blanchard.

#### LITR 017FB. First-Year Seminar: Forms of Exile in Literature of French Expression (Cross-listed as FREN 017B)

Exile can be a multi-faceted transnational, cultural, political, social journey, which often affect the vision of the here and there of individuals and populations seeking a better life, some type of asylum, a change of landscape, etc. Through readings of (poems, prose, plays, songs, etc.) French writers and artists from the Hexagon and beyond, we will examine issues such as freedom, resistance, social identity, dreams, hopes, differences, transfer of roles, displacement, abandonment, borders, memory, creation, etc., as expressed by Apollinaire, Baudelaire, DuBellay, Césaire, Hugo, Kacimi, Lahens, Levi-Strauss, Ollivier, Saint-John-Perse, Schwarz-Bart, Tadjo, Verlaine, among others. Humanities. 1 credit. Spring 2018. Yervasi.

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 21st century to discuss their construction of these most "natural" impulses-and how they imagine the relationship of human attraction to art, politics and philosophy.

Humanities. Writing course. 1 credit. Eligible for GSST Fall 2017. Frey.

#### LITR 018FJ. Manga, Bande Dessinée, and the Graphic Novel: A Transnational Study of Graphic Fictions

(Cross-listed as JPNS 018, FREN 018) This course provides an introduction to the study of three of the most important contemporary graphic literary forms - manga, bandes dessinées, and the graphic novel - and the

national and transnational traditions with which they have become associated. Through a careful study of major artists and key works from Japan and the Francophone world, we explore the particular histories, aesthetic evolutions, and social impact of these sequential art forms, both in their specific places of origin and across the globe. We consider how these graphic fictions have managed to mirror and refract major issues of historical trauma, technology and violence, as well as how they question representations of gender, class, race and ethnicity, even as they wield a form of "soft power." The transnational impact that some works have played will also be explored through a comparative analysis of local and global dissemination, transnational fan communities, non-Japanese-language manga, and trans industrial exchanges. Texts and discussions in English. Students with knowledge of French and/or Japanese may read the works in the original. Humanities.

1 credit.

#### LITR 021R. Dostoevsky (in Translation) (Cross-listed as RUSS 021)

(Cross-listed as RUSS 021) Writer, gambler, publicist, and visionary Fedor Dostoevsky is one of the great writers of the

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.

Humanities.

1 credit.

### 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. Humanities.

1 credit. Eligible for ASIA Fall 2017. Staff.

#### LITR 023J. Japanese Language and Multilingual Society in the 21st Century (Cross-listed as JPNS 023)

This course introduces social and cultural factors that influence the usage of the Japanese language and language users within everyday conversation, mass media, and popular culture. The course topics include dialects, honorifics, gender, intercultural communication, various identities of Japanese language users, media discourse, and role languages. The course provides students with an opportunity to critically examine their beliefs and assumptions about Japanese language, and cultivates social and cultural awareness for their own language and language use in local and global contexts. Course instruction, discussion, and required readings will be in English. Previous coursework in Japanese language is recommended but not required. Humanities.

1 credit. Eligible for ASIA

Spring 2018. Imamura.

## LITR 023R. The Muslim in Russia

(Cross-listed as RUSS 023)

The long and strong relationship of Russia and Islam has been neglected in scholarship until recently. This course will examine texts (and films) spanning more than a thousand years, to introduce actual interactions of Russians and Muslims, images of Muslims in Russian literature (and a few Muslim images of Russia), the place of Muslim writers in Soviet literature, and the current position of Muslims in Russia and in Russian discourse.

Humanities. 1 credit. Eligible for ISLM

# LITR 025A. War in Arab Literature and Cinema

(Cross-listed as ARAB 025)

This course will explore literary and cinematic representations of war in the Arab world, focusing on the Arab-Israeli Conflict, the Lebanese Civil War, and the Iraq wars. We will look at poetry, fiction, memoir, prison narratives, film, and experimental texts. Through the examination of a variety of experiences, genres, and perspectives, we will ask questions like: How do narratives of war contribute to the formation of national, local, and Arab identities? How has the experience of war impacted understandings of religion, masculinity, gender, and domestic violence? We will identify common themes and images, and also investigate how these patterns change and develop in different spatial and temporal contexts. Humanities.

1 credit

Eligible for ISLM, PEAC

# 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.

Humanities.

1 credit.

## LITR 027CH. The Story in Dynastic China

(Cross-listed as CHIN 027) In this class we will read in translation and discuss a fair sampling of imperial China's most renowned stories. In exploring the most celebrated and influential examples of narrative literature from early times into the Qing dynasty, we will look at these stories, some short, others quite elaborate, 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 character, allegory, and lyricism; individual and society; aesthetics and emotion; imagination and realism; heroism and valor. All readings will be in English, mostly translations of original texts, with some supplementary writings about traditional Chinese fiction.

Humanities. 1 credit. Eligible for ASIA

#### LITR 029A. Arabs Write the West

(Cross-listed as ARAB 029) Drawing on historical, fictional, and autobiographical narratives, this course investigates Arab representations of the Occident. These texts explore cultural encounters, both at home and abroad, border crossings, hybridity, experiences of colonialism and neocolonialism, the psychology of Orientalism and Occidentalism, processes of assimilation and resistance, and the question of contact zones. Differences in geography, period, context, and positionality will provide a variety of perspectives on the theme. Works by Abd Al-Rahman Al-Jabarti, Rifa'a Al-Tahtawi, Yahya Haqqi, Sulaiman Fayyad, Tayyib Salih, Leila Ahmed, and Fadia Fagir will be discussed. This course is taught in English. Humanities.

1 credit. Eligible for ISLM

## LITR 033J. Tokyo Central: The Metropolis in Modern Japanese Literature and Film

(Cross-listed as JPNS 033)

This course aims to equip students to recognize and contextualize changing concepts of self and individual identity, family, community, and labor as represented in literature and film narratives depicting the urban center of modern Japan: Tokyo. Brief lectures on literary historical and historical contexts will precede guided discussions of literary texts and films. Students will be asked to consider, compare, and contrast representations of Tokyo and its inhabitants over time, using close reading, historicization, and visual critical strategies from film studies. In discussions we will also treat Tokyo's relationship to the nation of Japan, other Japanese regions, East Asia, and the world. We will further assess how the course texts represent shifting views and experiences of the urban populace regarding family roles, romance, marriage, gender roles, socio-economic class and social status, social responsibility, consumerism, and leisure over the course of Japan's modern history, from the late 19th century through to the present.

Humanities 1 credit Eligible for ASIA

#### LITR 035J. Narratives of Disaster and Rebuilding in Japan

(Cross-listed as JPNS 035)

This course will explore documentary and fictional representations of the modern Japanese landscape and cityscape in crisis, with special attention to the role of the March 2011 earthquake, tsunami, and nuclear disaster as a catalyst for change in contemporary Japan. Documentaries and fictionalizations of the 2011 "triple disaster" reignited debates over cultural trauma and the ethics of representing disaster. Through the study of literature, film, and critical discourse, we will examine the historical and cultural implications of such famous 20th-century disaster narratives as Godzilla and Japan Sinks, as well as the latest writing and films from Japan, in the context of public debates about safety, sustainability, and social change after the March 2011 tsunami and nuclear disaster. Readings and discussion will be in English.

Humanities. 1 credit. Eligible for ASIA, ENVS

#### LITR 036CH. Women's Literature in Premodern China

(Cross-listed as CHIN 036)

Contrary to our stereotypes about the silent, invisible woman of premodern China, women actually wrote and published their work in unprecedented numbers from the late 16th century to the early 20th century. This course will explore the literary and historical significance of this output, which mainly took the form of poetry and prefaces to poetry collections, letters, some drama, and novels in verse, and which was produced primarily by gentry women (e.g. women from elite families), courtesans, and nuns. A central theme will be the place and problem of women's poetry

in a male-dominated literary tradition and society. Topics to be addressed include the social function of poetry and women's literary networks, women's relationship to the publishing market as writers, editors, and readers, the forces driving male interest in women's writing at certain historical moments, and the changing ideas about what kinds of styles of past poets should be offered to boudoir poets as a repertoire of available choices to read and imitate.

Humanities. 1 credit. Eligible for ASIA Spring 2018. Xu.

# LITR 040S. Colonial Latin America and its New World

(Cross listed as SPAN 040)

An entirely new understanding of the world stemmed from the discovery and colonization of Latin America by the Europeans, particularly the Spanish. As Rolena Adorno wrote: "The emergence of the Americas on the world stage is a story first announced in Spanish, and that story defines colonial Latin American literature." We will analyze and discuss texts written by Europeans but also texts where the so-called defeated tell their side of the story. By reading the works of Spanish, creole, and Amerindian authors -including Bartolomé de las Casas, Felipe Guaman Poma and Sor Juana Inés de la Cruz-, we will trace the emergence of a distinctive Latin American voice.

As a writing course, we will emphasize skills in literary and cultural analysis, and academic writing. Taught in English. Humanities. Writing course. 1 credit.

Eligible for LALS

Eligible for JPNS

#### 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 cyber-fiction by authors such as Tanizaki Junichirô, Abe Kôbô, Kurahasi Yumiko, and Murakami Haruki. Humanities. Writing course. 1 credit.

# 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 that have been 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. Discussions related to "turath" (heritage), the different strategies of its reading and interpretation, and the possibilities of using these readings to confront the contemporary challenges of a globalized world will be the center of attention of 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.

Humanities. 1 credit.

Eligible for ISLM

#### 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. Humanities. 1 credit

Eligible for INTP

#### LITR 049S. Cervantes' Don Quixote : The Narrative Quest

(Cross-listed as SPAN 049)

What is it about Don Quixote's tilting at windmills and acting as if life followed the rules of fiction that has captivated the imagination of so many writers and thinkers ever since it was written in Spain four hundred years ago? This course explores Cervantes's Don Quixote (1605-1615) through theoretical texts, from Bakhtin to Foucault, from Lukacs to Borges, in order to think about Cervantes's innovations in narrative technique, the possibility of interpretation, and the nature of fiction and reality. Students will acquire tools of literary analysis and theory. In English. Humanities.

#### LITR 051G. European Cinema

(Cross-listed as FMST 051)

Setting out from the cornerstones of aesthetics, history and memory, this course introduces you to post-war directors from Italian Neo-Realism, British and French New Waves, Eastern European Cinema, Post-New Wave Italian auteurs, Spanish cinema after Franco, New German Cinema, Swedish and Danish cinema. 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.

Humanities. 1 credit.

Eligible for GMST

### 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 through 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. Humanities.

1 credit.

# LITR 054S. Contemporary Cuba: Utopia, Revolution and Reform

(Cross-listed as SPAN 054)

This course will focus on Cuban literature and culture produced during the historical period of the Cuban Revolution. By reading varied-and often opposed-literary accounts and artistic representations of those years, the course seeks to analyze the complex socio-economic, political, and ideological processes that have informed Cuban society and culture since 1959 until the present day. Although it will use a panoramic and chronological approach, emphasis will be given to works produced in the last three decades. Issues to be discussed include the relation between national identity, ideology and political discourse, the politics of representation in terms of race, gender and sexuality, exile and diaspora, the role of the intellectual, the balance between ethics and aesthetics, and the current period of political and

economic transition. Humanities. 1 credit. Fall 2017. Díaz.

#### 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.

Humanities. 1 credit. Fall 2017. Lee.

#### LITR 059FG. Re-Envisioning Diasporas

(Cross-listed as FMST 059)

collaboration with international, digitally facilitated segments. It addresses the historical, cultural, representational, and theoretical specificities of diasporas through examining how 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? 0.5 credit attachment for students reading in French (FREN 059A).

Students are encouraged to do work in their first and secondary languages. Commitment to crosscultural dialogue and collaboration a must. Film Studies background helpful but not required. Seminar-style class taught in English. Humanities.

1 credit.

Eligible for BLST, FMST, FREN, GSST

#### LITR 070R. Translation Workshop

(Cross-listed as LING 070R, 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. Humanities. 1 credit. Eligible for INTP, RUSS

#### LITR 071F. Beyond Tintin: Contemporary French Graphic novels

This course examines how contemporary graphic novels in French and their aesthetic innovations have helped translate and magnify serious and pressing questions that continue to shape political and social life in France and the world at large. Our readings will address themes ranging from the haunting colonial legacy and the wars in the Middle East to the quest for visibility by immigrants and LGBTQ individuals. Finally, we will analyze how visual adaptations-whether cinematic adaptations of graphic novels or graphic adaptations of movies and novels-reshape their original sources and adapt them to a new purpose. Taught in English. 0.5 credit attachment for students reading in French. Humanities.

1 credit. Eligible for FREN

#### 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.

Humanities. 1 credit. Eligible for FREN Spring 2018. Blanchard.

# LITR 073F. Postwar France: French New Wave

(Cross-listed as FMST 052)

This course is an in-depth exploration of the development and evolution of the French New Wave in postwar France. We will concentrate on the history of the new wave in France from the 1950s through the late 1960s by the close study of the styles of individual filmmakers, the "film movement" as perceived by critics, and the new wave's contribution to modernizing France. The primary emphasis will be on the stylistic, sociopolitical, and cultural dimensions of the new wave. and the filmmakers and critics most closely associated with the movement. Directors who were once all film critics for the magazine **Cahiers du** Cinéma will be studied alongside other important filmmakers of the era. Taught in English. 0.5 credit attachment for students reading in French. Humanities.

1 credit.

Eligible for FMST

# LITR 073FA. Attachment: The French New Wave

Attachment course for students enrolled in LITR 073F. Translation for students reading in French. 0.5 credit.

# LITR 074J. Japanese Popular Culture and Contemporary Media

(Cross-listed as JPNS 074) 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.

Humanities.

Eligible for ASIA, FMST, JPNS

#### LITR 074S. Queer Issues in Latin American Literature & Cinema

(Cross-listed as SPAN 074)

This course will map new forms of representation and interpretation at play in a set of queer issues emerging on recent Latin American literature and cinema. Emphasis will be on gay, lesbian, bisexual, and transgender subjectivities. The aim is not merely assembling a corpus of readings around the notion of minority sexualities but to analyze how sexuality is culturally constructed in specific spatial and temporal geographies. We will also investigate the ways in which literary genres are disturbed and redeployed by queer interventions, and how cinema becomes a privileged medium for empowerment and visibility. Taught in English. Humanities.

1 credit.

Eligible for GSST, LALS

#### LITR 075S. Borges: Aesthetics & Theory (Cross-listed as SPAN 075)

Jorge Luis Borges is one of the most influential writers of the twentieth century. He devoted his entire life to literature, as a writer but also as an

irreverent reader. Hated or held dear, Borges is incessantly quoted. In his texts Borges not only anticipated but also discussed the major topics of contemporary literary theory: the theory of intertextuality, the limits of the referential illusion, the relationship between knowledge and language, and the dilemmas of representation and of narration. We will explore how Borges fictionalized these theoretical problems without ever allowing the development of the tale to lose its aesthetic brilliance. We will also read Borges as a universal writer working inside all the cultural traditions, and also as a writer who seeks to reinvent the history and the traditions of his own country.

Taught in English. Humanities. 1 credit. Eligible for INTP, LALS

### LITR 077F. Caribbean and African Literatures and Cultures in Translation

(Cross-listed as FREN 077)

Through close reading and discussion of African and Caribbean texts, originally written in French, we will examine the "re/wri/gh/t/ing" of the local and national pre/ post/colonial H/h/istories. The emphasis will be on some cultural, social and racial issues and on their rendering in distinct literary forms: language, rhythm, influences, ruptures, etc. The theoretical readings of CLR James, F. Fanon, A. and S. Césaire, E. Glissant, among others, will guide our analysis. Taught in English; and there will be a 0.5 credit French Attachment for students reading in French. Humanities. l credit.

Eligible for BLST

#### LITR 079F. Cinematic Cities or French Detective Fiction and Film

Detective fiction has a long history in the urban literary and cinematic imagination of France and other French-speaking countries. This course focuses on several points of convergence: the history of urban detectives in various Francophone contexts; theories of genre; and stylized representations of the city, its architecture and populations.

#### 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 historics 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. Humanities. 1 credit.

# LITR 086R. Nature and Industry in Russian Literature and Culture

(Cross-listed as RUSS 086)

From pre-Christian religion and folklore based in forest, steppe and tundra and the enduring role of peasant culture to today's Neo-Pagans, Russian culture has been closely bound to nature, developing sustainable agricultural practices, honoring "Moist Mother Earth" and (even sophisticated city dwellers) heading out to gather berries and mushrooms. But the Soviet era pursued science-fictional plans to redesign whole landscapes, make rivers flow backwards and even revolutionize plant genetics (Trofim Lysenko). In practice, such projects led to a shrinking Aral Sea, massive pollution of industrial and agricultural sites, and the worst nuclear disaster in human history (Chernobyl)-at great human cost. Writers have both supported industrial transformation and resisted industrialization. This course will trace the evolution of these elements of Russian culture. focusing on expressions of ideology in literature. No knowledge of Russian is necessary, but students with the language may do some reading in the original.

Humanities. 1 credit.

Eligible for RUSS, ENVS

#### LITR 091CH. Special Topics in Chinese Literature and Culture in Translation (Cross-listed as CHIN 091)

Challenging the stereotype of martial arts as a timeless tradition and unified code by examining it across a wide range of genres in the premodern period (from classical periods to the late Qing dynasty). Objects of study will include biographies from the early histories, classical tales, novels and theater. The course follows a chronological order, beginning with the philosophical roots of and aristocratic involvement in the tradition in earlier centuries and ending with the resurgence of interest in chivalric tales and martial scenes onstage in late Qing China. Within this chronological structure, we take a dual perspective, we will examine the martial arts tradition as, one, represented in literary sources, and two, performed in and trained for traditional Chinese theater. Issues to be considered will include the representation of violence, the politics of representation, the gendering of power, Chinese masculinity, and the relationship of martial arts to dance, visual arts, music and theater.

Humanities. 1 credit. Eligible for ASIA Fall 2017. Xu.

LITR 096. Thesis Fall 2017. Staff. Spring 2018. Staff.

**LITR 180. Honors Thesis** Fall 2017. Staff. Spring 2018. Staff.

## Arabic

Knowledge of Arabic contributes not only to our geopolitical connectivity with Arabic speaking countries; it also contributes to students' work in the interdisciplinary program of Islamic studies and 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. Two content courses conducted entirely in Arabic (the equivalent of fourth-year Arabic) are offered every year as well. Native or heritage speakers of Arabic should consult with the Arabic faculty for placement. Courses in literature in translation, culture, and film 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, peace and conflict studies, and religion to gain perspective on classical and contemporary Arab 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 nonuniversity programs in Jordan, Morocco, Tunisia and Oman.

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 Linguistics and Languages, through the Linguistics Department.

#### Minor in Arabic Language, Literature and Culture

Students must complete a minimum of five credits in courses numbered 004 or above. Of these minimum credits, four should be achieved in courses taught in Arabic rather than in translation. Students may take one Arabic literature course (1 credit) in translation, or a relevant course from another department, with the approval of the section. Only one course may overlap with a major or a second minor. A minimum of three credits should be taken at Swarthmore. Students are strongly encouraged to study abroad in a section approved program; two credits of pre-approved study abroad transfer credit may be counted toward the minor.

## 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.

# Application Process for the Special Major

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.

# Special Major in Linguistics and Languages

 Complete three credits numbered above 003
 Courses in translation will not count towards fulfillment of the three-credit requirement

## 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. Students should consult with the faculty in Arabic to estimate credit before studying abroad.

## **Off-Campus Study**

Study abroad is crucial to gaining proficiency in Arabic because it allows immersion and significant cultural exposure. Studying Arabic in an environment where it is widely spoken exposes the student to natural language use outside the classroom. Modern Standard Arabic is the official or co-official language of Algeria, Bahrain, Chad, Djibouti, Egypt, Iraq, Jordan, Kuwait, Lebanon, Libya, Morocco, Oman, the West Bank and Gaza, Qatar, Somalia, Sudan, Syria, Tunisia, Mauritania, the United Arab Emirates, and Yemen. Large numbers of Arabic speakers also live in Iran and France (about 600,000 speakers each), and Turkey (about one million). 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

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 that utilize foreign language skills parallel the opportunities of liberal arts graduates in general, with a strong focus on international or multicultural aspects. Obvious career paths for Arabic Special Majors are the professions in which foreign language is a primary skill-language teaching, academia, translation and interpretation, or working with non-governmental organizations (NGOs). But as communication, travel, and business endeavors have expanded in the global marketplace, now even relatively small organizations may need to communicate with partners, clients, or customers in other languages, in the U.S. as well as in other countries.

## Arabic Courses

#### ARAB 001, 002. Intensive Elementary Modern Standard Arabic

Students who start in the ARAB 001-002 sequence must complete 002 to receive credit for 001. The purpose of these courses 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. These courses, as well as subsequent Arabic-language courses, help students to advance rapidly in the language and prepare them for more advanced work in literary Arabic, as well for employment, travel, or study abroad. By the end of this sequence, the majority of students are expected to reach a level of intermediate low, according to the ACTFL proficiency rating. Humanities. 1.5 credits each. Fall 2017. Smith, Hanna.

Spring 2018. Smith, Hanna.

#### ARAB 003. Intermediate Modern Standard Arabic I

This course builds on skills in comprehension, listening, reading, writing, and speaking developed at earlier levels. 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 the Arabic script and sound system, and widen their cultural and historic knowledge of the Arab World and the modern Middle East. Humanities.

1.5 credits.

Fall 2017. Smith, Hanna.

#### ARAB 004. Intermediate Modern Standard Arabic II

This course is a continuation of ARAB 003. Because the material covered in this course relies heavily on the previous course, students are expected to review and be familiar with the previous work in ARAB 001, 002, ARAB 002 and ARAB 003.

Prerequisite: ARAB 003 or equivalent or permission of the department. Humanities. 1.5 credits. Eligible for ISLM Spring 2018. Staff, Hanna.

#### ARAB 011. Advanced Arabic I

This course will: (1) conduct a quick review of the basic structures, grammar, and vocabulary learned in earlier courses, (2) introduce new vocabulary in a variety of contexts with strong cultural content, (3) drill students in the more advanced grammatical structures of MSA, and (4) train students to comprehend a variety of MSA

authentic reading passages of various genres from Intermediate to Intermediate High on the ACTFL scale.

Prerequisite: Successful completion of ARAB 004 and permission of the instructor. Humanities.

1 credit. Eligible for ISLM Fall 2017. Al-Masri.

#### ARAB 011A. Arabic Conversation

A conversation course concentrating on the development of intermediate skills in speaking and listening through the use of texts and multimedia materials in Modern Standard Arabic. The aim of this course is for the student to acquire wellrounded communication skills and socio-cultural competence. The selected materials seek to stimulate students' curiosity with the 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 discussion in class. Moreover, students will write out skits or reports for oral presentation in Arabic before they present them in class. This class is conducted entirely in Arabic. Prerequisite: For students who have taken or are presently taking ARAB 011 or the equivalent. 0.5 credit. Eligible for ISLM

Fall 2017. Hanna.

#### ARAB 012. Advanced Arabic II

This course is a continuation of ARAB 011 and all previous course in the sequence. This course will begin with a quick review of advanced grammatical structures and vocabulary. Students will continue to encounter a wide range of authentic texts and audiovisual materials to enhance their competency in reading, writing, listening, and speaking, with a special emphasis on vocabulary building. Prerequisite: Successful completion of ARAB 011 and permission of the instructor. Humanities. 1 credit. Eligible for ISLM Spring 2018. Al-Masri.

#### ARAB 012A. Advanced Arabic Conversation

A conversation course concentrating on the development of intermediate skills in speaking and listening through the use of texts and multimedia materials in Modern Standard Arabic. The aim of this course is for the student to acquire wellrounded communication skills and socio-cultural competence. The selected materials seek to stimulate students' curiosity with the 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 discussion in class. This class is conducted entirely in Arabic. Prerequisite: For students who have taken or are presently taking ARAB 012 or the equivalent. 0.5 credit. Eligible for ISLM Spring 2018. Hanna.

#### ARAB 021. Introduction to Modern Arab Literature

This course surveys the major writers, trends, themes, and experiences in Arabic literature from the 19th century to the present. Beginning with the nahda (the Arab renaissance), we will explore the impact of intellectual debates and developments on the emergence of modern Arabic literature. Through the study of a variety of different texts and authors, from a range of geographies and periods, we will investigate diverse literary and cultural narratives. Common themes, such as the negotiation of modernity and tradition, social and political transformation, and the changing role of women, will provide a structure for comparison. This course is taught in Arabic. Humanities. 1 credit.

Eligible for ISLM Fall 2017. Al-Masri.

#### ARAB 022. Discourses of Oppression in Contemporary Arabic Fiction

Designed to meet the needs of students who have completed ARAB 021: Introduction to Modern Arabic Literature, this course provides an in-depth look at major fictional representations of the institutionalized and non-institutionalized sites and structures of oppression explored by Arab writers. Subtle and overt forms of political oppression are investigated, as well as experiences of hegemony related to gender, sexuality, class, religion, and ethnicity. This course also examines the ways in which oppression is rethought, restructured, and challenged in Arabic fiction, leading to new understandings and possibilities in reality. This course is conducted entirely in Arabic. Humanities 1 credit.

Eligible for ISLM Spring 2018. Al-Masri.

## ARAB 025. War in Arab Literature and Cinema

(Cross-listed as LITR 025A)

This course will explore literary and cinematic representations of war in the Arab world, focusing on the Arab-Israeli Conflict, the Lebanese Civil War, and the Iraq wars. We will look at poetry, fiction, memoir, prison narratives, film, and experimental texts. Through the examination of a variety of experiences, genres, and perspectives, we will ask questions like: How do narratives of war contribute to the formation of national, local, and Arab identities? How has the experience of war impacted understandings of religion, masculinity, gender, and domestic violence? We will identify common themes and images and

## **MLL: Chinese**

investigate how these patterns change and develop in different spatial and temporal contexts. Humanities. 1 credit. Eligible for ISLM, PEAC

#### ARAB 029. Arabs Write the West

(Cross-listed as LITR 029A) Drawing on historical, fictional, and autobiographical narratives, this course investigates Arab representations of the Occident. These texts explore cultural encounters, both at home and abroad, border crossings, hybridity, experiences of colonialism and neocolonialism, the psychology of Orientalism and Occidentalism, processes of assimilation and resistance, and the question of contact zones. Differences in geography, period, context, and positionality will provide a variety of perspectives on the theme. Works by Abd Al-Rahman Al-Jabarti, Rifa'a Al-Tahtawi, Yahya Haqqi, Sulaiman Fayyad, Tayyib Salih, Leila Ahmed, and Fadia Faqir will be discussed. This course is taught in English. Humanities. 1 credit.

Eligible for ISLM

#### ARAB 045. Contemporary Thought in the Arab World

(Cross-listed as LITR 045A)

This survey course will trace some of the main themes, problems and issues that have been 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. Discussions related to "turath" (heritage), the different strategies of its reading and interpretation, and the possibilities of using these readings to confront contemporary challenges will be the center of attention of the course. Readings will comprise three types of texts: those providing historical and social background, translations by the different thinkers under discussion, and articles and essays that interpret and critique these thinkers.

Humanities. 1 credit. Eligible for ISLM

#### ARAB 093. Directed Reading

1 credit. Fall 2017. Al-Masri.

### 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.

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 1credit 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 30minute 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 1-credit 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 30-minute 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 of these 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.

# Special Major in Linguistics and Languages

 Complete three credits numbered above 004B
 One of the three credits must be Chinese 033 (classical Chinese)

## **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 Inter-University Program (IUP) Program at Tsing-hua University, the Princeton in Beijing Program (PIB), 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.

## **Chinese Courses**

# CHIN 001, 002. Introduction to Mandarin Chinese

Students who start in the CHIN 001-002 sequence must complete 002 to receive credit for 001. An intensive introduction to spoken and written Mandarin Chinese, with emphasis on oral Chinese 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.

Humanities. 1.5 credits each. Fall 2017. Kang, Speidel. Spring 2018. Kang, Speidel.

#### CHIN 003. 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,

## **MLL: Chinese**

and thorough understanding of grammatical patterns. Prepares students for advanced study at the College and in China.

Humanities. 1.5 credits. Eligible for ASIA Fall 2017. Wang. Staff.

### CHIN 004. 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. Humanities.

1.5 credits. Eligible for ASIA Spring 2018. Wang. Staff.

#### 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. Humanities. 1 credit.

Eligible for ASIA Fall 2017. 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, or equivalent language skills. Humanities. 1 credit. Spring 2018. Staff.

#### CHIN 007. Chinese/Japanese Calligraphy

(Cross-listed as JPNS 007)

Calligraphy is the art of beautiful handwriting. This course will introduce students to the importance of calligraphy in East Asian Culture. In addition to being a valuable cultural skill, calligraphy is also a process of self-cultivation and self-expression, which reflects the mind-set of the writer. Thus, students will have the opportunity to learn Chinese/Japanese characters not only as linguistic symbols but also as cultural emblems and as an art form. Course objectives include learning to appreciate the beauty of Chinese/Japanese calligraphy, experiencing calligraphy by writing with a brush and ink, and studying various philosophies of calligraphy. In addition to learning several different calligraphic scripts, students will be introduced to the origin, evolution, and aesthetic principles of the Chinese and Japanese writing systems, as well as calligraphy's close connections with painting and poetry. Persistent hands-on practice will be required of all students; course work will include in-class practice, individual/group instruction, reading assignments, and take-home assignments. This class is open to all students and has no language requirement. Due to the course's practicum component, enrollment will be limited by lottery to 10 students. The course can be repeated for credit.

0.5 credit. Fall 2017. Jo.

#### 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 004 or equivalent language skills.

Humanities. 1 credit. Eligible for ASIA

Fall 2017. Wang.

#### 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 004 or equivalent language skills. 0.5 credit.

Eligible for ASIA Fall 2017. Staff.

#### 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.

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Humanities. 1 credit. Eligible for ASIA Spring 2018. Wang.

#### CHIN 012A. Advanced Chinese Conversation

This 0.5-credit course meets once a week for 75 min Staff.s 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 CHIN 011A or equivalent language skills. 0.5 credit. Eligible for ASIA Spring 2018. Staff.

#### 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. Humanities. 1 credit.

Eligible for ASIA Fall 2017. 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. Humanities.

Writing course. 1 credit. Eligible for ASIA Spring 2018. 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. Humanities.

1 credit.

Eligible for ASIA Fall 2017. Staff.

#### CHIN 027. The Story in Dynastic China

(Cross-listed as LITR 027CH)

In this class we will read in translation and discuss a fair sampling of imperial China's most renowned stories. In exploring the most celebrated and influential examples of narrative literature from early times into the Qing dynasty, we will look at these stories, some short, others quite elaborate, 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 character, allegory, and lyricism; individual and society; aesthetics and emotion; imagination and realism; heroism and valor. All readings will be in English, mostly translations of original texts, with some supplementary writings about traditional Chinese fiction.

Humanities.

1 credit.

Eligible for MDST, ASIA

# CHIN 033. Introduction to Classical Chinese

(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. Humanities.

1 credit. Eligible for ASIA, MDST Spring 2018. Staff.

#### 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.

Humanities.

1 credit.

#### CHIN 036. Women's Literature in Premodern China

(Cross-listed as LITR 036CH) Contrary to our stereotypes about the silent, invisible woman of premodern China, women actually wrote and published their work in unprecedented numbers from the late 16th century to the early 20th century. This course will explore the literary and historical significance of this output, which mainly took the form of poetry and prefaces to poetry collections, letters, some drama, and novels in verse, and which was produced primarily by gentry women (e.g. women from elite families), courtesans, and nuns. A central theme will be the place and problem of women's poetry in a male-dominated literary tradition and society. Topics to be addressed include the social function of poetry and women's literary networks, women's relationship to the publishing market as writers, editors, and readers, the forces driving male interest in women's writing at certain historical moments, and the changing ideas about what kinds of styles of past poets should be offered to boudoir poets as a repertoire of available choices to read and imitate.

Humanities. 1 credit. Eligible for ASIA Spring 2018. Xu.

#### CHIN 055. Contemporary Chinese Cinema: The New Waves (1984-2005)

(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.

Humanities. 1 credit. Eligible for ASIA Fall 2017. Lee.

# CHIN 087. Water Policies, Water Issues: China/Taiwan and the U.S.

(Cross-listed as POLS 087)

Access to fresh water is an acute issue for the 21<sup>st</sup> century, and yet civilizations have designed a wide range of inventive projects for accessing and controlling water supplies over the centuries. Fresh water resource allocation generates issues between upstream and downstream users, between a country and its neighbors, between urban and rural residents, and between states and regions. This course examines a range of fresh water issues, comparing China and the U.S. Topics include dams and large-scale water projects (e.g., rerouting rivers); water pollution; groundwater depletion; industrial water use (e.g., for hydrofracking);

impact of agricultural practices; urban storm water management; wetlands conservation; desertification; desalination. What role do governments, transnational organizations, corporations, NGOs and grassroots citizens' movements play in these water decisions? Guest lectures will emphasize science and engineering perspectives on water management. Chinese language ability desirable but not required. Humanities.

1 credit.

#### CHIN 087A. Attachment: Policies and Issues of Fresh Water Resources in China/Taiwan

This is an attachment to CHIN 087. Students who complete the course have the option of adding a 0.5 credit field work component. Field work will be conducted in China under the supervision of Professor Nackenoff and another faculty member, and will include specific Chinese language training in vocabulary used in the field of environmental studies. 0.5 credit.

# CHIN 088. Governance and Environmental Issues in China

(Cross-listed as POLS 088A)

This course examines China's environmental challenges and the range of governmental policies and institutions that have an impact on those challenges. Topics include air pollution, food supply, energy consumption, urbanization, and environmental activism. Special attention will be given to the transformation of Beijing and other major cities, to China's policy-making process, and the role of environmental NGOs and global institutions in shaping domestic policy outcomes. Literary works (Chinese novels and short stories) and feature films/documentary films reflecting environmental issues will be combined with readings from social science and environmental science to provide an interdisciplinary perspective. All required readings/screenings are in English or English translation/subtitled. Chinese language ability is preferred, but not required. Humanities.

1 credit.

Eligible for ENVS

#### CHIN 088A. Attachment: Governance and Environmental Issues in China

(Cross-listed as POLS 088A) This is an attachment to CHIN 088. Students who

Source of the field of environmental studies. O.5 credit field work component. Field work will be conducted in China under the supervision of Professors Kong and White, and will include specific Chinese language training in vocabulary used in the field of environmental studies. O.5 credit.

#### CHIN 089. Tea in China: Cultural and Environmental Perspectives.

Tea is a longstanding and vital constituent of Chinese culture, and also has had a marked and pervasive presence in other parts of the world. This course will focus on "Tea in China" through three major aspects: the cultural, social, and historical; tea cultivation and the natural environment; and the economies of tea. Literary writings and films will be combined with other relevant readings and audio-visual materials for the class. Tea experts and professionals will offer guest lectures to enhance our understanding of tea from bio-ecological and botanical perspectives. As a component of this interdisciplinary cultural course, students will have the chance to participate in"sipping culture," and will taste major kinds of tea from Mainland China and Taiwan during the semester

All required readings/screenings are in English or English translation/subtitled. Chinese language ability will be an asset, but it is not required. Humanities. 1 credit.

Eligible for ENVS

#### CHIN 089A. Attachment: Tea in China: Cultural and Environmental Perspectives

This is an attachment to CHIN 089. Students who complete the course have the option of adding a 0.5 credit field work component. Field work will be conducted in China under the supervision of Professors Kong and Berkowitz, and will include specific Chinese language training in vocabulary used in the field of environmental studies. 0.5 credit.

#### 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.

Humanities. 1 credit. Eligible for ASIA Fall 2017. Staff.

#### CHIN 091. Special Topics: Martial Arts Tradition in Chinese Literature and Theater (Cross-listed as LITR 091CH)

This course challenges the stereotype of martial arts as a timeless tradition and unified code by

examining it across a wide range of genres in the "pre-modern" period (from classical periods to the late Oing dynasty). Our objects of study will include biographies from the early histories, classical tales, novels and theater. The course follows a chronological order, beginning with the philosophical roots of and aristocratic involvement in the tradition in earlier centuries and ending with the resurgence of interest in chivalric tales and martial scenes onstage in late Qing China. Within this chronological structure, we take a dual perspective, meaning we will examine the martial arts tradition as, one, represented in literary sources, and two, performed in and trained for traditional Chinese theater. Issues to be considered will include the representation of violence, the politics of representation, the gendering of power, Chinese masculinity, and the relationship of martial arts to dance, visual arts, music and theater.

Humanities. 1 credit. Eligible for ASIA Fall 2017. Xu.

# CHIN 092. Special Topics in Chinese Literature and Culture in Chinese

This 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. Humanities. 1 credit.

## CHIN 093. Directed Reading 0.5 credit.

#### CHIN 096. Thesis

#### CHIN 099. Senior Colloquium

0.5 - 1 credit. Spring 2018. Staff.

#### 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 20th-century 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. Humanities. 2 credits.

Eligible for ASIA

#### 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, pre-modern 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. Humanities. 2 credits

#### 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. Humanities.

2 credits.

#### CHIN 199. Senior Honors Study

## French and Francophone Studies

In French and Francophone Studies, you will learn French and acquire global competence in the Francophone world. Students are introduced to France and a variety of countries such as Algeria and Senegal. They can expand their knowledge of the diversity of French-speaking cultures by developing an appreciation of literary value and filmic expression. Our courses also pay careful attention to the major social and political developments that have shaped France, and its former colonies, thus providing an opportunity to understand the forces underlying these various cultures, literatures, and films. Students in our program explore interests as diverse as critical theory, film studies, gender studies, postcolonial studies, or the Islamic world, and work directly with primary sources in their original language.

## 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 014 or FREN 015, 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 French-speaking country.

Majors and minors in the Course and Honors Programs are expected to be proficient in spoken and written French, and 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.

# Application Process Notes for the Major or the Minor

To apply for a major or minor in French and Francophone Studies, speak with the chair or one of your professors in French and Francophone Studies to discuss your options and then follow the process described by the Dean's and Registrar's Offices for your Sophomore Plan.

If after applying you are deferred, you may apply again in the spring by addressing the reasons for your deferral.

## Course Major

#### Requirements

1. Complete eight advanced courses or seminars numbered 014 or above for a minimum of 8 credits. Note that AP and IB credits will not count toward the major. FREN 016 can only count once to fulfill the major credit requirement.

2. Off-campus study is required for all majors. Students who participate in preapproved programs may only count 3 credits toward their major. See the "Off-Campus Study" section for rules on transfer of credit.

3. Take Senior Colloquium (FREN 091) in the 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 spring 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 (FREN 091), described above.

#### Acceptance Criteria

To be accepted as a course major, students must have taken French 014 or the equivalent, earning grades no less than a C.

## **Course Minor**

#### Requirements

1. Complete five credits in courses or seminars numbered 014 or above. Three of these credits must be completed on the Swarthmore campus. Note that AP and IB credits will not count toward the minor. FREN 016 can only count once to fulfill the minor credit requirement.

2. Minors are strongly encouraged to complete at least a six-week summer program of study in a French-speaking country. Students who participate in preapproved programs may only count two credits toward their minor. See the "off-campus study" section for rules on transfer of credit.

3. Complete Senior Colloquium (FREN 091) in 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 014 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 senior year.

1. Complete eight advanced courses or seminars numbered 014 or above for a minimum of 8 credits. Note that AP and IB credits will not count toward the honors major. FREN 016 can only count once to fulfill the honors major credit requirement.

2. Off-campus study in a francophone country, for one semester is required for all honors majors. See the "off-campus study" section for rules on transfer of credit.

3. Complete one advanced course with a Francophone component.

4. Complete Senior Colloquium (FREN 091) in the 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 spring semester.

5. Complete at least one advanced course (above FREN 015) 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.

#### Mode of Examination:

A three-hour written examination, and a one-half 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 014 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 senior year.

1. Complete five- credits in courses or seminars numbered 014 or above. Three of these credits must be completed on the Swarthmore campus. Note that AP and IB credits will not count toward the minor. FREN 016 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 honors minors spend at least one semester abroad. See the "off-campus study" section for rules on transfer of credit.

## **MLL: French and Francophone Studies**

3. Complete Senior Colloquium (FREN 091) in 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 one advanced course (above FREN 015) 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.

#### Mode of Examination

A three-hour written examination, and a one-half 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 014 or the equivalent, and have demonstrated interest in and aptitude for the study of literature or culture in the original language.

# Special Major in Linguistics and Languages

1. Complete three credits numbered 014 or above 2. Two of the three credits must be completed on the Swarthmore Campus. Note that AP and IB credits will not count toward the credit requirement and FREN 016 can only be counted once.

## **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.

## **Off-Campus Study**

Study abroad programs are vital to the French and Francophone program. Majors may count up to 3 credits toward their French major. Minors may count 2 of these credits toward their French minor. Any student who wishes to receive more than one credit from study abroad must take a 1- or 2- credit advanced course in French and Francophone Studies numbered 40 or higher in the semester in which they return to campus. Students should contact a French faculty member to obtain the current list of preapproved programs. 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.

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.

## **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.

#### 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.

## 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 015, or the equivalent, and study abroad for at least one semester in a Frenchspeaking 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, 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

## **MLL: French and Francophone Studies**

Africa and the Middle East; those who have gone to graduate school are studying French, library science, comparative literature, ethnomusicology, French history, public policy, educational policy, and public health. Many alumni are in education, law, business, journalism, medicine, the arts, and international affairs, among other fields.

# French and Francophone Studies Courses

The following courses are taught in French. For courses on French and Francophone content taught in English, see the section on Modern Languages and Literatures: Literatures in Translation.

# FREN 001, 002. Intensive First Year French Language

Students who start in the FREN 001-002 sequence must complete 002 to receive credit for 001. This course sequence is intended for students who begin French in college. Designed to impart an active command of the language, this course is taught in French and combines the study of grammar with intensive oral practice, listening, writing, and reading. Introduction to literary and expository prose, films, and other authentic cultural media are used to enhance students' language acquisition skills as well as to develop an understanding of the French-speaking world. FREN 001 is offered in the fall semester only. FREN 002 is offered in the spring semester only. Humanities.

1.5 credits each.

Fall 2017. Rice-Maximin. Courgey. Spring 2018. Rice-Maximin. Courgey.

#### FREN 003. Intensive Intermediate French

An intensive third semester course designed to build on the structures learned in elementary French. It is taught in French. It combines grammar with intensive oral practice, listening, writing, and reading toward the goal of proficiency. Literature, articles, film, music, and other authentic cultural media produced in French are used to hone language skills and improve communication as well as to provide contexts for understanding the French-speaking world. FREN 003 is offered in the fall semester only. Humanities.

1.5 credits.

Fall 2017. Blanchard. Courgey.

#### FREN 013. L'Atelier: French Oral Production Workshop

"L'Atelier" is a mandatory recorded speaking practice workshop attachment to all elementary French-language courses (French 13.001, 13.002, 13.003) that takes place once every two weeks. Several 60-minute sessions - all held in Kohlberg's Language & Media Center - will be offered to maximize student participation. It is designed with a dual purpose of reinforcing grammatical structures and thematic vocabulary being studied in the main course and with a view to long-term benefits in terms of enhanced fluency, pronunciation and intonation practice, phonetic accuracy, and general speaking skills. These include increased confidence and autonomy in spoken communication, both in the form of oneway speaking and two-way interaction since many activities simulate real-life dialogues. After being provided with a different online worksheet each time, students will record themselves when ready and submit their recordings electronically. Each student's audio file will then be graded, and feedback will be provided for content, grammar, and phonetic review. 0.0 credit.

Fall 2017. Courgey. Spring 2018. Courgey.

# FREN 014. Advanced French: La France et le monde francophone contemporains 1

Offered each semester, this course gives students the opportunity to develop French language skills through explorations of culture and society in France and the Francophone World.

*Controverses* (textbook) will be used for learning the art of writing in French. Particular attention will be paid to oral communication, grammar review, and writing skills. FREN 003 or placement required.

Humanities. 1 credit. Fall 2017. Blanchard. Spring 2018. Rice-Maximin.

#### FREN 015. Advanced French: La France et le monde francophone contemporains 2 (W)

Offered each semester, this course gives students the opportunity to further develop French language skills through the study of articles, essays, and images. Engage in reading, discussing, and writing about cultural and visual texts selected from ads, newspapers, literature, television shows, comic strips, videos, and film from France and the Francophone World. Writing skills will be addressed using the second half of Controverses (textbook). Particular attention will be paid to oral and written communication and cultural analysis. FREN 004, FREN 014, or placement required. Humanities.

Writing Course. 1 credit. Fall 2017. Gueydan-Turek. Spring 2018. Gueydan-Turek.

#### FREN 016. 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 with a different instructor, but can only count once to fulfill major/minor credit requirement.

Prerequisite: For students previously in FREN 015, or the equivalent Placement Test score.

0.5 credit. Fall 2017. Cherel. Spring 2018. Cherel.

#### FREN 017A. First Year Seminar: Literature and Medicine

(Cross-listed as LITR 017FA)

Portrayals of doctors provide a great opportunity to discover some classic works of French Literature, including Molière's *The Imaginary Invalid*, Flaubert's *Madame Bovary*, Proust's *Swann's Way*, and Albert Camus' *The Plague*. Other authors studied are Montaigne and Diderot. Students focus their discussions on the relationship with patients when these are seen as both human beings and objects of science. Another topic of interest is how literature can be viewed as therapeutic. Throughout the seminar, we try to understand what had made these works original in their times and a source of admiration up to our days.

Texts and discussions in English. Humanities. 1 credit.

Fall 2017. Blanchard.

## FREN 017B. First Year Seminar: Forms of Exile in Francophone Literature

(Cross-listed as LITR 017FB)

Exile can be a multi-faceted transnational, cultural, political, social journey, which often affect the vision of the here and there of individuals and populations seeking a better life, some type of asylum, a change of landscape, etc. Through readings of (poems, prose, plays, songs, etc.) French writers and artists from the Hexagon and beyond, we will examine issues such as freedom, resistance, social identity, dreams, hopes, differences, transfer of roles, displacement, abandonment, borders, memory, creation, etc., as expressed by Apollinaire, Baudelaire, DuBellay, Césaire, Hugo, Kacimi, Lahens, Levi-Strauss, Ollivier, Saint-John-Perse, Schwarz-Bart, Tadjo, Verlaine, among others. Humanities.

Humanities. 1 credit.

Spring 2018. Yervasi.

#### FREN 018. Manga, Bande Dessinée, and the Graphic Novel: A Transnational Study of Graphic Fictions

(Cross-listed as LITR 018FJ, JPNS 018) This course provides an introduction to the study of three of the most important contemporary graphic literary forms - manga, bandes dessinées, and the graphic novel - and the national and transnational traditions with which they have become associated. Through a careful study of major artists and key works from Japan and the Francophone world, we explore the particular histories, aesthetic evolutions, and social impact of these sequential art forms, both in their specific places of origin and across the globe. We consider how these graphic fictions have managed to mirror and refract major issues of historical trauma, technology and violence, as well as how they question representations of gender, class, race and ethnicity, even as they wield a form of "soft power." The transnational impact that some works have played will also be explored through a comparative analysis of local and global dissemination, transnational fan communities, non-Japanese-language manga, and transindustrial exchanges. Texts and discussions in English. Students with knowledge of French and/or Japanese may read the works in the original. Humanities l credit.

FREN 041. Guerre et paix dans la littérature française

Through a study of the representations of war and peace in French literature from the 19th and 20th centuries, this course examines the evolving attitudes that intellectuals have held towards pacifist ideologies and violent conflicts, as well as the ethical and aesthetic influences that mass violence has had on their writings. The class will approach this topic from a variety of critical perspectives, including (1) studies of the emotional consequences of trauma, mourning, and shame, (2) a study of the interconnection of societal constructions of gender with representations of conflict and peace, and (3) a discussion of the rise of intellectuals in the face of injustice. Works covered will include testimonies, memoirs, fictional literature and popular culture, bringing together authors such as Balzac, Zola, Genet, Camus, Duras, and Tardi. Humanities.

1 credit.

Eligible for PEAC Fall 2017. Gueydan-Turek.

#### FREN 045A. Le Monde francophone: Postcolonial Cities in the Francophone World

As a physical and imaginary space, the city is a privileged stage for political and social upheaval. Within cities, cultural and racial divisions are constantly questioned and remade; the local is unavoidably confronted with the global. Francophone cities, in particular, mediate past and on-going conflicts between France and its excolonies, and manifest the tensions between local/global cultures and the French colonial legacy. This interdisciplinary course examines the complexity of the Francophone experience in Francophone metropolises as portrayed in literature, films, artwork and journalistic articles. Themes examined will include: the aesthetics of the city, the city vs. the nation, racial relations in the urban space, the global village, pop culture and slang in the city.

This course has a Francophone component. Humanities.

Spring 2018. Gueydan-Turek.

#### FREN 045B. Le Monde francophone: France and the Maghreb: Postcolonial Writing in a Transnational Context

This course examines the relationship between France and the Maghreb, two cultural spaces that are simultaneously united and divided by their common violent colonial history. Through the study of novels, films, art work and theoretical texts, we will trace the evolution of this conflicted relationship from the 1950's to present times. We will focus, in particular, on the following topics: (post) colonialism and nationalism, diglossia and Francophonie, gendered representation, immigration and exile, transculturation and globalization. Humanities.

1 credit. Eligible for ISLM

#### FREN 045C. Le Monde francophone: Haitian Literature and Culture and the French D.O.M.

Studying the literary traditions of 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 French Départements d'Outre-Mer such as Martinique and Guadeloupe. Students will read works from various authors.

This course has a Francophone component. Humanities. 1 credit.

Eligible for BLST, FMST

#### FREN 055. Le Roman français

One often forgets that the period following the great revolution of 1789 was marked by many other uprisings. The goal of this course is to understand literary movements in the contexts of historical upheaval from 1789 to the Commune of Paris in 1871. Works from Balzac, Flaubert, Zola, Proust.

Humanities. 1 credit.

#### FREN 057. Bande dessinée, nouvelle Manga et romans graphiques

The bande dessinée, the Francophone analog to comics, has evolved alongside contemporary youth culture to become a locus for expressions of sociocultural and aesthetic changes, as well as antiestablishment discourses. In the context of issues such as social class, cultural diversity, and feminity/masculinity, this course will connect canonical comics (such as Asterix and Tintin) with more current cutting-edge forms including la nouvelle Manga and graphic novels from Rwanda, Algeria, Lebanon and Iran. Humanities.

Humanition 1 credit.

Eligible for FMST, GSST

#### FREN 071A. Attachment:Beyond Tintin; Contemporary French Graphic novels

Attachment course for students reading in French enrolled in LITR 071F 0.5 credit.

#### FREN 073A. Attachment: Postwar France: French New Wave

Attachment course for students reading in French enrolled in LITR 073F. 0.5 credit.

#### 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. Humanities. Writing course. 1 credit. Spring 2018. Blanchard.

### FREN 093. Directed Reading

#### FREN 096. Thesis

#### Seminars

#### FREN 109. Queering North African Subjectivities

This seminar will explore the ways in which literary, visual and cultural representations of sexual difference and gender roles disrupt the cultural imagination of everyday life in North Africa and its Diasporas in France. Special attention will be given to representations of Arab women and queer subjectivities as sites of resistance against dominant masculinity. We will analyze the ways in which representations of gender have allowed for a redeployment of power, a reconfiguration of politics of resistance, and the redrawing of longstanding images of Islam in France. Finally, we will question how creations in French that straddle competing cultural traditions, memories, and material conditions can queer citizenship.

Humanities. 2 credits.

Eligible for ISLM, GSST

#### 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.

This course has a Francophone component. Humanities.

2 credits.

Eligible for BLST, ISLM, GSST

#### FREN 112. Le Monde comique de Molière

This seminar is designed to acquaint students with the major works of Molière and 17th-century culture. We will investigate: Molière's political relationship with Louis XIV at Versailles, the discourse of early modern feminism of the précieuses and the femmes savantes; the critique of religious hypocrisy, and the influence of early modern notions of anthropology, notably medicine, on Molière's notions of selfhood. These aspects will be brought forward through close attention to the poetics of comedy and the art of the comedian. Humanities

2 credits.

#### FREN 113. Re-Contons l'histoire: Postcolonialité et fiction d'écritures françaises

In this seminar, we will examine Caribbean, French and African narratives whose authors rewrite/right the histories and History of their societies. By telling and re-telling the many revolts, the resistance (too often obscured by the colonial power) and the importance of some cultural practices, they shed light on the presentday postcolonial situation. Included are fictional texts by A. and I. Césaire, E. Glissant, O. de Gouges, M. Condé, S. Schwartz-Bart, E. Trouillot, D. Maximin, M Kacimi, V. Tadjo, as well as theoretical texts by C.L.R. James, Fanon, Memmi, Glissant, Césaire, and others. Humanities.

1 credit. Fall 2017. Rice-Maximin.

#### FREN 116. La Pensée géographique

Cartography, psychogeography, rhizomes, and so much more! How and why do philosophical and critical thinkers rely on spatial and geographical metaphors to work through some of their more complex ideas? How might some of these metaphors become models for understanding and analyzing texts? In this course, we will explore some of the central ideas behind this spatial turn in theory and criticism in conjunction with the study of French and Francophone texts: from medieval explorers and maps of early France and French empire to Situationism, poststructuralism, and postcolonialism.

May be taken for 1 credit with permission of the instructor. Humanities. 2 credits. Eligible for INTP

FREN 180. Honors Thesis

#### FREN 199. Senior Honors Study

### **German Studies**

Affiliated Faculty: Peter Baumann, Professor (Philosophy) Richard Eldridge, Professor (Philosophy) Tamsin Lorraine, Professor (Philosophy) Braulio Muñoz, Professor (Sociology And Anthropology) Robert Weinberg, Professor (History) Thomas Whitman, Associate Professor (Music)

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.

Majors are expected to be sufficiently proficient in German when they graduate. To this end, we strongly advise students to spend an academic semester-preferably spring semester-in a Germanspeaking 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**

1. Completion of a minimum of eight credits in courses numbered 003 and above.

2. 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) 3. Three of the eight credits may be taken in English from among the courses relevant to German studies listed in the catalog under literatures in translation (e.g., LITR 054G or LITR 066G) or from courses listed as eligible for German studies (see list below).

4. Comprehensive requirement: By April 15, 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.

5. 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 five 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 three 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**

1. Students must complete a minimum of five credits in courses and seminars, at least three of which are taught in German and numbered 003 or above. Of these courses, GMST 008, 020 and GMST 091: Special Topics are required.

2. Up to two credits can come from courses eligible for German studies numbered 008 or above.

3. 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 two credits will normally count toward the minor. In

case of double majors, this number can be increased in consultation with the German Studies coordinator.

#### Typical Course of Study:

GMST 003 GMST 008 GMST 020 GMST 091 One to two advanced courses or one seminar taught in German or 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**

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 eight credits, six 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: five 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 30- to 45minute oral examination for minors.

## Special Major in Linguistics and Languages

- 1. Complete three credits numbered 008 or above
- 2. Complete GMST 008, 020, 091
- 3. In place of GMST 091, a seminar may be taken

### **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.

### **German Studies 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. Intensive Elementary German

Students who start in the GMST 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 GMST 008, or GMST 020. GMST 001 offered in fall only, GMST 002 offered in spring only. Humanities.

1.5 credits each. Fall 2017. Werlen. Schnader. Spring 2018. Werlen. Schnader.

#### GMST 003. Intensive Intermediate German

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 GMST 008, or GMST 020. Humanities. 1.5 credits. Fall 2017. Schnader.

#### GMST 005. German Conversation

A 0.5-credit conversation course, concentrating on the development of the students' speaking skills. Prerequisite: GMST 003 in a current or a previous semester or the equivalent placement test score. 0.5 credit.

Fall 2017. Schnader.

#### GMST 006. German Conversation

A 0.5-credit conversation course, concentrating on the development of the students' speaking skills. Prerequisite: GMST 003 in a current or a previous semester or the equivalent placement test score. 0.5 credit.

Spring 2018. Schnader.

# GMST 008. Texts in Context: Topics in German Culture and Society from the Reformation until Today

A 4th semester course integrating the continued work on advancing the students' linguistic skills with the acquisition of cultural, historical, and literary content about German-speaking countries. This course is the gateway to all upper level courses in the German studies curriculum. Topics alternate every year.

Topic for Spring 2018: Sex Gender and Migration in German Speaking Literature

Topic for Spring 2019: Streifzüge durch die deutschsprachige Literatur von der Romantik bis zur Gegenwart.

Prerequisite: GMST 003 or equivalent Placement Score

Humanities.

1 credit. Spring 2018. Staff.

#### 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 18th 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.

Topic for Fall 2017: Einführung in die deutsche Literatur.

Topic for Fall 2018: Liebe, Begehren und Geschlechterbeziehung in Literatur und Film Prerequisite: placement test score or GMST 008. Humanities.

### **MLL: Japanese**

1 credit Fall 2017. Werlen.

#### 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 nation-building practices.

Fulfills national cinema requirement for FMST. Humanities.

Writing course. 1 credit. Eligible for GMST, FMST

#### GMST 091. Contemporary German Literature/Gegenwartsliteratur

In this course, we will read a variety of prose texts representing the latest work of contemporary novelists from Germany, Austria and Switzerland. The selected novels are meant as buoys in the vast sea of recent literary publications, marking current thematic and stylistic preoccupations in German literature. Readings include novels by Reinhard Jirgl, Angelika Klüssendorf, Ursula Krechel, Lutz Seiler, Stephan Thome, Eva Lapido, David Bielmann und Monique Schwitter. Topic for Spring 2018: Migranten und Literatur: Merkels Deutschland

Topic for Spring 2019: Trans-Germany and its Discontents

Prerequisite: GMST 008 or GMST 020. Humanities. 1 credit.

Spring 2018. Staff.

#### GMST 093. Directed Reading 1 credit.

#### 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. Age of Goethe

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) and his philosophical and economic worldview. Humanities. 2 credits.

Fall 2017 Werlen

#### 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. Humanities.

2 credits.

#### GMST 111. Genres

This seminar explores, in depth, a particular genre of literary and media production. Scheduled topics include the following: Medienkultur, Populärliteratur, Der deutsche Film, Das deutsche Drama, Der deutsche Roman. Topic for Fall 2018: German Television (1950-2017) from ARD to ZDF. Humanities. 1 credit.

#### **GMST 199. Senior Honors Study**

The following courses are German Studies eligible. Descriptions of the courses can be found in each department's course listing in this catalog. ARTH 005. Modern Art in Europe and the United States FMST 051. European Cinema FMST 059. Re-Envisioning Diasporas HIST 035. The Modern Jewish Experience HIST 037. History and Memory: Perspectives on the Holocaust LITR 051G. European Cinema LITR 059FG. Re-Envisioning Diasporas MUSI 006B. Music of the Holocaust and World War II Era MUSI 007B. Beethoven and the Romantic Spirit MUSI 022. 19th-Century European Music MUSI 105. Music and War PHIL 039. Existentialism PHIL 049. Marx, Nietzsche, and Freud PHIL 114. Nineteenth-Century Philosophy PHIL 139. Phenomenology, Existentialism, and Poststructuralism

### Japanese

### The Academic Program

Courses in Japanese language, literature, and culture may be combined with courses taken at

## **MLL: Japanese**

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 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, 012A, 013, 013A 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 tri-college 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.

## Special Major in Linguistics and Languages

1. Complete one course numbered 004 or above.

2. Complete two courses numbered 011 or above or a seminar. The language of instruction for courses filling this requirement should be Japanese.

#### Minor in Japanese Language, Literature and Culture

A minimum of five 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.

### Japanese Courses

JPNS 001, 002. Introduction to Japanese Students who start in the JPNS 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. JPNS 001 offered in the fall only, JPNS 002 offered in the spring only.

Humanities.

1.5 credits each.

Fall 2017. Imamura. Suda. Spring 2018. Imamura. Suda.

#### JPNS 003. 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-JPNS 002. Humanities. 1.5 credits. Eligible for ASIA

Fall 2017. Gardner. Jo.

#### JPNS 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-JPNS 002. Humanities. 1.5 credits. Eligible for ASIA Spring 2018. Gardner. Jo.

#### JPNS 007. Chinese/Japanese Calligraphy (Cross-listed as CHIN 007)

Calligraphy is the art of beautiful handwriting. This course will introduce students to the importance of calligraphy in East Asian Culture. In addition to being a valuable cultural skill, calligraphy is also a process of self-cultivation and self-expression, which reflects the mind-set of the writer. Thus, students will have the opportunity to learn Chinese/Japanese characters not only as linguistic symbols but also as cultural emblems and as an art form. Course objectives include learning to appreciate the beauty of Chinese/Japanese calligraphy, experiencing calligraphy by writing with a brush and ink, and studying various philosophies of calligraphy. In addition to learning several different calligraphic scripts, students will be introduced to the origin, evolution, and aesthetic principles of the Chinese and Japanese writing systems, as well as calligraphy's close connections with painting and poetry. Persistent hands-on practice will be required of all students; course work will include in-class practice, individual/group instruction, reading assignments, and take-home assignments. This class is open to all students and has no language requirement. Due to the course's practicum component, enrollment will be limited by lottery to 10 students. Students who are also enrolled in ARTH 034 (Colloquium: East Asian Calligraphy) will receive priority in the lottery. Can be repeated for credit. 0.5 credit. Eligible for ASIA Fall 2017. Jo.

#### JPNS 008. Extensive Reading in Japanese

This course will offer students an opportunity to develop their Japanese readings skills through free readings of Japanese materials (stories, nonfiction, manga, etc.) gathered at McCabe Library. The course will follow the Extensive Reading or Graded Reading methodology, which encourages students to build their reading ability through exposure to a broad variety of texts with minimal use of dictionaries, with the assistance and supervision of the Japanese instructor. The course is open to all students of Second Year Japanese level and above. 0.5 credit. Spring 2018. Jo.

#### JPNS 012. 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. Humanities. 1 credit. Eligible for ASIA Fall 2017. Suda.

#### JPNS 012A. Japanese Conversation

This course aims to improve students' command of spoken Japanese at the intermediate level. Can be repeated for credit. Prerequisite: completion of JPNS 004, or instructor's permission. 0.5 credit. Eligible for ASIA Fall 2017. Suda.

#### JPNS 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. Humanities. 1 credit. Eligible for ASIA Spring 2018. Suda.

#### JPNS 019. Fourth-Year Japanese

This fourth-year level course aims to develop students' advanced 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: JPNS 013 or equivalent. Humanities. 1 credit. Eligible for ASIA Fall 2017. Jo.

#### JPNS 020. Topics in Japanese

This fourth-year level course aims to develop students' advanced 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: JPNS 013 or equivalent. Humanities 1 credit. Spring 2018. Jo.

### JPNS 023. Japanese Language and Multilingual Society in the 21st Century

(Cross-listed as LITR 023J)

This course introduces social and cultural factors that influence the usage of the Japanese language and language users within everyday conversation, mass media, and popular culture. The course topics include dialects, honorifics, gender, intercultural communication, various identities of Japanese language users, media discourse, and role languages. The course provides students with an opportunity to critically examine their beliefs and assumptions about Japanese language, and cultivates social and cultural awareness for their own language and language use in local and global contexts. Course instruction, discussion, and required readings will be in English. Previous coursework in Japanese language is recommended but not required.

Humanities. 1 credit. Eligible for ASIA Spring 2018. Imamura.

#### 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. Humanities. 1 credit. Eligible for ASIA

Spring 2018. Gardner.

#### JPNS 035. Narratives of Disaster and Rebuilding in Japan

(Cross-listed as LITR 035J)

This course will explore documentary and fictional representations of the modern Japanese landscape and cityscape in crisis, with special attention to the role of the March 2011 earthquake, tsunami, and nuclear disaster as a catalyst for change in contemporary Japan. Documentaries and fictionalizations of the 2011 "triple disaster" reignited debates over cultural trauma and the ethics of representing disaster. Through the study of literature, film, and critical discourse, we will examine the historical and cultural implications of such famous 20th-century disaster narratives as Godzilla and Japan Sinks, as well as the latest writing and films from Japan, in the context of public debates about safety, sustainability, and social change after the March 2011 tsunami and nuclear disaster. Readings and discussion will be in English.

Humanities. 1 credit. Eligible for ASIA, ENVS Fall 2017. Gardner.

#### JPNS 094. Independent Study

#### JPNS 096. Japanese Thesis

Humanities Writing course. 1 credit.

### 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

## MLL: Russian

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, and linguistics 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 with 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 advanced coursework 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 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 (unless placed higher)
- 2. RUSS 010 and/or RUSS 011 (or equivalent course in Russia)

3. One survey course: RUSS 013 or RUSS 014 Four content credits: RUSS 013-RUSS 086. At least one full content credit may be earned through: two half-credit attachments to these intranslation courses; the attachments include RUSS 091 (Seminar Attachment), RUSS 093 (Directed Reading), or RUSS 094 (Independent Study). Credit from study abroad may be used toward 3 of these credits.

4. One two-credit seminar: RUSS 100 and above.

For students who choose not to emphasize literature, a Russian history course may be used to fulfill one content credit. Possible courses include HIST 001Q, HIST 038, and HIST 039. Students should consult Russian Section Faculty regarding attachments to these courses.

#### 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 Post-Soviet 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

A minimum of five credits, which must include:

1. RUSS 004 (unless placed higher)

2. RUSS 010 or RUSS 011 (or equivalent course in Russia)

3. One survey course: RUSS 013 or RUSS 014

4. Two content credits: RUSS 013-RUSS 086 or One content credit (RUSS 013-RUSS 086) plus an attachment.

(Credit from study abroad may be used toward all content credits.)

5. One two-credit seminar: RUSS 100 and above.

### Honors Major

#### Prerequisites for Majors:

A minimum of eight credits, which must include:

1. RUSS 004 (unless placed higher)

2. RUSS 010 and/or RUSS 011 (or equivalent course in Russia)

3. One survey course: RUSS 013 or RUSS 014

4. Four content credits: RUSS 013-RUSS 086. At least one full content credit must be earned through: two half-credit attachments to these intranslation courses, RUSS 091 (Seminar Attachment), RUSS 093 (Directed Reading), RUSS 094 (Independent Study), or a second seminar: RUSS 100 and above. Credit from study abroad may be used toward 3 of these credits.

5. At least one two-credit seminar: RUSS 100 and above. For students who choose not to emphasize literature, one Russian history course may be used to fulfill one content credit. Possible courses include HIST 001Q, HIST 038, and HIST 039. Students should consult Russian Section Faculty regarding attachments to these courses.

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 the 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 (2credit) honors preparations and any other relevant material.

2. Honors 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 (2-credit) 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:

A minimum of five credits, which must include:

- 1. RUSS 004 (unless placed higher)
- 2. RUSS 010 or RUSS 011 (or equivalent course in Russia)
- 3. One survey course: RUSS 013 or RUSS 014
- 4. One content credit (RUSS 013-RUSS 086) plus an attachment

(Credit from study abroad may be used toward all content credits.) or

One two-credit seminar: RUSS 100 and above.

The minimum grade for acceptance into the Honors Program is "B" level work in language courses taken at Swarthmore and in RUSS 011 or its equivalent.

At least one semester of study in Russia is strongly encouraged. See item 2 above for Senior Honors Study Paper.

### **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.

## Special Major in Linguistics and Languages

1. Complete three credits numbered above 004 2. One of the three credits must be 010 or 011 (and both may be counted)

3. Students are especially encouraged to include a seminar and/or advanced language course taught at Bryn Mawr College

### **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 academic-year 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.

### 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 of 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 bolster 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 History and 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.

#### **Career Options/Opportunities**

As the paths of study above suggest, Russian can be combined with almost any field. 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 or have become medical doctors. One of our former students left the Swarthmore area to dance with the Boston Ballet. Graduate study may lead to careers as college and university professors or directors of university Title VI centers.

Whatever your career choice, 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.

### **Russian 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 department faculty.

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: 21A, 33A, 41A, etc. Courses numbered under 20 cannot be taken as seminars.

#### RUSS 001, 002. Intensive Russian

Students who start in the RUSS 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.

RUSS 001 offered in the fall only, RUSS 002 offered in the spring only.

Humanities.

1.5 credits each.

Fall 2017. Staff, Yordanova.

Spring 2018. Johnson, Yordanova.

#### **RUSS 003. Intensive Russian**

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.

literatures.

Humanities. 1.5 credits.

Fall 2017. Vergara, Yordanova.

#### 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. Humanities. 1.5 credits.

Spring 2018. Forrester. Yordanova.

#### 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. Can be repeated once for credit. Prerequisite: RUSS 004 in the current or a previous semester or by permission of the instructor. 0.5 credit.

Spring 2018. Yordanova.

#### **RUSS 008A. Russian Phonetics**

(Cross-listed as LING 008A)

This course does not require any previous knowledge of Russian. It was originally conceptualized as an opportunity for students of Russian to develop their pronunciation; however, it will also allow linguists to put theory into practice with the pursuit of the acquisition of Russian phonetics. This is ultimately a practical course; therefore, attention will be focused on resetting the default positions of the tongue, jaw and lips (or, as the Russians have it, the "articulation foundation"). Work on the production of the individual phonemes will be followed by the study of phonetic rules, which govern the production of consecutive sounds in word and phrases, and by the study of intonational constructions. 0.5 credit

Fall 2017. Yordanova.

#### **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. Humanities. Writing course. 1 credit.

#### RUSS 013. The Russian Novel: The Classic Tradition

(Cross-listed as LITR 013R)

This course surveys the rise of the Russian novel during the nineteenth century. We will read works by Lemontov, Gogol, Turgenev, Dostoevsky and Tolstoy. Our examination of the literary and rhetorical strategies of these authors will be grounded in an understanding of their cultural context. We will probe issues of Russia's national identity, class system, and tendency toward authoritarianism during this paradoxical century of inertia and upheaval. As a writing course, polished academic writing and the process of revision is given particular emphasis. Humanities.

Writing course. 1 credit. Fall 2017. Vergara.

## RUSS 013A. Attachment: The Russian Novel

Attachment course for students reading in Russian enrolled in RUSS 013. 0.5 credit. Fall 2017. Staff.

RUSS 014. The Russian Novel: Revolution, Terror and Resistance

(Cross-listed as LITR 014R)

This course surveys the Russian novel during the twentieth century, from the years leading up to the Bolshevik Revolution, through the Soviet era, and into the post-Cold War period. Works include Andrei Bely's modernist novel *Petersburg*, Yuri Zamiatin's sci-fi dystopia *We*, and Mikhail Bulgakov's Faustian masterpiece *Master and Margarita*. In addition to exploring ideas of genre and artistic strategy, particular focus will be paid to the ways in which these and other authors resist the terror and repression of their respective eras. Humanities.

Writing course. 1 credit. Fall 2017. Staff.

## RUSS 014A. Attachment: The Russian Novel

Attachment to RUSS 014. 0.5 credit.

#### 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. Humanities.

Writing course. 1 credit. Eligible for GSST Fall 2017. Frey.

### RUSS 018. Reading the Russian Media 0.5 credit.

Fall 2017. Yordanova.

#### 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.

Humanities. 1 credit.

Spring 2018. Johnson.

#### RUSS 023. The Muslim in Russia

(Cross-listed as LITR 023R)

The long and strong relationship of Russia and Islam has been neglected in scholarship until recently. This course will examine texts (and films) spanning more than a thousand years, to introduce actual interactions of Russians and Muslims, images of Muslims in Russian literature (and a few Muslim images of Russia), the place of Muslim writers in Soviet literature, and the current position of Muslims in Russia and in Russian discourse.

Humanities. 1 credit. Eligible for ISLM Fall 2017. Frey.

## 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.

Humanities.

1 credit.

#### 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. Humanities

Humanities. 1 credit. Eligible for INTP Spring 2018. Forrester.

#### **RUSS 070. Translation Workshop**

(Cross-listed as LING 070, 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. Humanities. 1 credit.

Eligible for INTP

## RUSS 086. Nature and Industry in Russian Literature and Culture

(Cross-listed as LITR 086R)

From pre-Christian religion and folklore based in forest, steppe and tundra and the enduring role of peasant culture to today's Neo-Pagans, Russian culture has been closely bound to nature, developing sustainable agricultural practices, honoring "Moist Mother Earth" and (even sophisticated city dwellers) heading out to gather

berries and mushrooms. But the Soviet era pursued science-fictional plans to redesign whole landscapes, make rivers flow backwards and even revolutionize plant genetics (Trofim Lysenko). In practice, such projects led to a shrinking Aral Sea, massive pollution of industrial and agricultural sites, and the worst nuclear disaster in human history (Chernobyl) - at great human cost. Writers have both supported industrial transformation and resisted industrialization. This course will trace the evolution of these elements of Russian culture. focusing on expressions of ideology in literature. No knowledge of Russian is necessary, but students with the language may do some reading in the original. Humanities.

1 credit. Eligible for ENVS

## RUSS 086A. Attachment: Nature and Industry in Russian Literature and Culture

Attachment to RUSS 086, taught only in Russian 0.5 credit.

#### RUSS 091. Special Topics

For senior course majors. Study of individual authors, selected themes, or critical problems. Offered on demand. Humanities. 1 credit.

RUSS 093. Directed Reading 0.5 - 1 credit.

#### RUSS 094. Independent Study

Humanities. 1 credit.

#### 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.

### Spanish

Built on a solid competence in Spanish language, the major and minor develop students' skills in critical analysis and provide an understanding of the literatures and cultures of Spain, Latin America and the Caribbean, and Latinos in the United States.

### The Academic Program

The curriculum is organized in three tiers: **Spanish language sequence:** Our intensive language courses give students ample opportunity for practice, encouraging the development of communicative proficiency and cultural competency. With two instructors per language class, we are able to expose students to different accents and teaching styles while fostering an active and rewarding learning experience. **Introductory courses:** Our writing courses enable students to move toward writing proficiency in Spanish and provide a panoramic view of the literary and cultural histories of the Hispanic world.

Advanced courses and seminars explore specific trends and topics pertaining to the literatures and cultures of Spain, Mexico and Central America, South America, and the Hispanic Caribbean as well as those of Latino/a communities in the United States.

With the goal of enabling students to communicate fluently in Spanish, we base our curriculum upon a linguistic and pedagogical continuum beginning at the elementary language level and culminating in the most advanced courses and Honors seminars.

#### Application Process 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.

### **Course Major**

The Spanish major seeks to provide training in literary and cultural analysis while enabling students to acquire linguistic proficiency.

#### Requirements

1. Students must complete a minimum of 8.5 credits of work in courses numbered 008 and above. One of these courses must be SPAN 022 or SPAN 023, except in special cases when the section waives this requirement.

2. Majors must maintain a curricular balance in their overall program. Students are encouraged to choose courses representing each one of the following areas: Caribbean, Mexico/Central America, South America, and Spain.

3. Students may count only one of these courses toward the major: SPAN 008, SPAN 010 or SPAN 011. Note that neither AP nor IB credits will count towards the major.

4. One of the 8.5 credits of advanced work may be taken in English from the courses listed in the catalog under "Literatures in Translation: Spanish" (LITR.S) offered by the section.

5. All majors are encouraged to take at least one seminar in the section. Students can take a seminar after they have completed one advanced course (numbered 040 to 089). Only one seminar in the major will count for two credits. (A seminar can also be taken for 1 credit depending on student's needs.) 6. In the spring semester of their senior year, Spanish majors will register in SPAN 095 to prepare their Spanish final paper.

7. A minimum of four of the eight courses must be taken at Swarthmore.

8. 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. Only advanced language courses taken abroad may receive Spanish credit.

Exceptions to the study abroad requirement: In special cases, depending on the student's language proficiency, this requirement may be waived or fulfilled with a summer-long study abroad program identified and approved by the Spanish section. (For summer programs, only one relevant course taken abroad may count towards fulfillment of the major.) The requirement will be waived for students who have recently arrived in the US and/or have had extensive schooling in Spanish in Spanish-speaking countries. Spanish/English bilingual students who have grown up in Spanishspeaking environments in the United States may petition to have the requirement waived or fulfilled with a summer-long study abroad program. The Spanish faculty will evaluate each case individually.

9. Upon returning from abroad, students must enroll in a one-credit advanced course in the section.

10. To graduate with a major in Spanish, a student must maintain a minimum grade of B in the discipline, and a C average in course work outside the department.

### 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 SPAN 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 8.5 credits required for the major.

#### Culminating Exercise/Final Examination

Along with development of analytical literary and cultural abilities, majors are expected to reach an advanced level of linguistic proficiency. The Spanish Final Exam has oral and written components, both entirely in Spanish. In the spring semester of their senior year, Spanish majors will register in SPAN 095 to develop their Spanish final paper and prepare for their oral examination. Spanish 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 20 pages, plus bibliography.

Once the student has selected the paper to be revised, he/she needs to meet with the specific Spanish faculty member to agree on a timeline to turn in drafts, and discuss changes and revisions.

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, as exhibited in this paper and the oral examination, will be part of the final evaluation.

### **Course Minor**

#### Requirements

All minors must take a total of five courses and/or seminar offerings numbered 008 and above. Only one of these may overlap with the student's major or other minor. Note that AP and IB credits will not count towards the minor.

All minors must take either SPAN 022 or 023, except in special cases when the section waives this requirement.

Minors must maintain a curricular balance in their overall program. Students are encouraged to choose courses representing the following areas: Caribbean, Mexico/Central America, South America, and Spain.

Students may count only one of the following towards their minor: 008, 010 and 011. Courses in English translation will not count toward fulfillment of the minor.

All minors are strongly encouraged to take seminars offered by the section. Students can take a seminar after they have completed one advanced course (numbered 040 to 089). Seminars count as one credit toward the minor.

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. Only advanced language courses taken abroad may receive Spanish credit. **Exceptions to the study abroad requirement:** In special cases, depending on the student's language proficiency, this requirement may be waived or fulfilled with a summer-long study abroad program identified and approved by

the Spanish section. (For summer programs, only one relevant course taken abroad may count towards fulfillment of the minor.) The requirement will be waived for students who have recently arrived in the US and/or have had extensive schooling in Spanish in Spanish-speaking countries. Spanish/English bilingual students who have grown up in Spanish-speaking environments in the United States may petition to have the requirement waived or fulfilled with a summerlong study abroad program. The Spanish faculty will evaluate each case individually.

Upon returning from study abroad, students are expected to register in a one-credit advanced course in the section.

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.

### Acceptance Criteria

For admission to the course minor, 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 (SPAN 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 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:

A "B" average in Spanish coursework at the College.

Completion at Swarthmore of either SPAN 022 or SPAN 023 (except in cases when the section waives this requirement) and one course numbered 040 to 089.

Completion of one semester of study in a Spanishspeaking country in a program approved by the Spanish section. Depending on their linguistic proficiency, as evaluated by the Spanish faculty, honors majors and minors may petition to have the requirement waived or fulfilled with a summerlong study abroad program.

Demonstrated linguistic ability in the language.

Present fields for external examination based on either two-credit seminars offered by the section, or the combination of two advanced courses numbered 050-089 that form a logical pairing.

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 Major in Linguistics and Languages

Spanish requirements for the special major: Complete three credits numbered above SPAN 022.

One of the three credits must be SPAN 022 or SPAN 023 but not both.

Courses in translation will not count towards the fulfillment of the three-credit requirement.

In special circumstances, by permission of the Spanish section, one of the introductory writing courses (SPAN 008, SPAN 010, SPAN 011) could count toward the three-credit requirement.

If the student is pursuing study abroad in a Spanish speaking country, only one literature course taken abroad that pertains to the curriculum of the Spanish section may count toward fulfillment of the three-credit requirement. For full immersion, all courses taken abroad must be taken in Spanish. (Advanced language courses taken abroad may receive Spanish credit but will not count toward the special major's three-credit requirement.)

See Linguistics for department specific requirements.

## Special Major in Spanish and Educational Studies

The Spanish Program and the Department of Educational Studies prepare 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

Students must complete 6 credits of work in courses numbered 008 and above. None of these courses may be taught in English.

Only one of the following courses may count toward the 6-credits requirement: SPAN 008,

SPAN 010 or SPAN 011. One of the 6 credits must be SPAN 022 or SPAN 023.

One credit special major thesis in Educational Studies and Spanish

One semester/summer abroad in a Spanish speaking country in a program approved by the Spanish section. Only two courses taken abroad may count toward the 6 credit requirement. (For summer programs, only one relevant course taken abroad may count towards fulfillment of the major.)

Students must complete 5 credits in Educational Studies.

**Note:** The special major itself does not constitute preparation toward certification. The required Educational Studies courses are described elsewhere.

See Educational Studies for department specific requirements.

# Requirements for the Special Major in Spanish and Educational Studies with Teacher Certification

In addition to the requirements of the Department of Educational Studies, students must meet the following requirements:

Students must complete 8 credits of work in courses numbered SPAN 008 and above.

Only one of the following courses may count toward the 8-credits requirement: SPAN 008, SPAN 010 or SPAN 011. One of the 8 credits must be SPAN 022 or SPAN 023.

One of the eight credits may be taken in English from the courses listed in the catalog under "Literatures in Translation: Spanish" (LITR.S) offered by the section.

One credit special major thesis in Educational Studies and Spanish

One semester/summer abroad in a Spanish speaking country in a program approved by the Spanish section. Only two courses taken abroad may count toward the 8 credit requirement.

See Educational Studies for department specific requirements.

### **Off-Campus Study**

Study abroad is an enriching intellectual experience when it is fully integrated into the student's overall academic experience at Swarthmore. Since the principal educational advantages of study abroad are in-depth crosscultural exposure and language learning, the best study abroad programs are those that maximize these benefits by fully immersing students in the host country's culture and society. This goal can only be effectively achieved by choosing full immersion study abroad programs. Pursuing academic coursework in English in a Spanishspeaking country does not comply with the academic goals and mission of the Spanish section.

The Spanish section encourages students to choose programs that build on previous language study. In order to be better prepared for academic work in Spanish, we recommend students take a writing course in Spanish (SPAN 010, SPAN 011, SPAN 022, SPAN 023) at Swarthmore prior to going abroad.

Upon returning from abroad, majors or minors must enroll in an advanced literature course in the section.

### **Spanish Courses**

Students wishing to major or minor 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 SPAN 023 before they can take an advanced literature, culture or film course in Spanish unless they receive special permission from the instructor. Courses numbered 040 to 089 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 Spanish

Students who start in the SPAN 001-002 sequence must complete 002 to receive credit for 001. 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 skills-listening 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.

SPAN 001 offered only in the fall, SPAN 002 offered only in the spring.

Humanities. 1.5 credits each.

Fall 2017. Buiza, Staff, Chindemi Vila. Spring 2018. Díaz, Staff, 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, 002 / 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 short subject 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. Humanities. 1.5 credits.

Fall 2017. Díaz, Vargas.

#### SPAN 003. Intensive Intermediate Spanish

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 skillslistening, speaking, reading, and writing-as building blocks toward proficiency and communication.

Prerequisite: SPAN 002 or SPAN 002B or the equivalent

Humanities. 1.5 credits. Fall 2017. Cohen, Chindemi Vila. Spring 2018. Cohen, Chindemi Vila.

#### SPAN 004. Intensive Advanced Spanish

This course is designed for students who have already learned the basic aspects of Spanish grammar. Through 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 with communication-oriented activities, therefore allowing for the expression of advanced concepts and ideas in speech and writing that will enable students to take introductory writing courses in literature and culture.

Note: Students who receive a final grade of "B-" or below in SPAN 004 need to take SPAN 008 as their next course. Students who receive a final grad of "B" or higher in SPAN 004 may continue to any of the introductory literature/culture courses (010, 011, 022, 023). Students should consult with their instructor, which one of these courses might be more beneficial to them.

Prerequisite: SPAN 003 or the equivalent Humanities.

1.5 credits. Fall 2017. Staff, Vargas. Spring 2018. Staff, Vargas.

#### SPAN 008. Spanish Conversation and Composition

Recommended for students who have finished SPAN 004, have received a 5 in the AP/IB exam or want to improve Spanish oral and written expression. This is a practical course for writing and rewriting in a variety of contexts, and it will prepare the student to write at an academic level of Spanish. 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. Films and literary texts will serve as a stimulus for advanced conversation with the goal of improving fluency and comprehension in Spanish. Prerequisite: SPAN 004 or the equivalent or permission of the instructor. Humanities. Writing course. 1 credit.

Fall 2017. Martínez. Spring 2018. Staff.

#### 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. Prerequisite: SPAN 004 or the equivalent or permission of the instructor. Humanities. Writing course. 1 credit.

Eligible for LALS Spring 2018. Buiza.

#### 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. Students will develop advanced skills in speaking, writing, and reading in Spanish.

Prerequisite: SPAN 004 or the equivalent or permission of the instructor. Humanities. Writing course. 1 credit.

### Fall 2017. Cohen.

#### SPAN 015. First Year Seminar: Introduction to Latinx Literature and Culture

(Cross-listed as LITR 015S)

This course is an introduction to the writings of Latino/as in the U.S. with emphasis on the distinctions and similarities that have shaped the experiences and the cultural imagination among different Latino/a communities. We will focus particularly in works produced by the three major groups of U.S. Latino/as (Mexican Americans or Chicanos, Puerto Ricans or Nuyoricans, and Cuban Americans). By analyzing works from a range of genres including poetry, fiction, film, and performance, along with literary and cultural theory, the course will explore some of the major themes in the cultural production of these groups. Topics to be discussed include identity formation in terms of language, race, gender, sexuality, and class; diaspora and emigration; the marketing of the Latino/a identity; and activism through art. Offered each fall. Taught in English. Humanities. Writing course.

1 credit. Eligible for LALS Fall 2017. Díaz.

#### 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. Humanities. Writing course. 1 credit. Fall 2017, Cohen.

#### SPAN 023. Introducción a la literatura latinoamericana

This introduction to the study of Latin American literature and related visual documentation will place special emphasis on the changing relationships between aesthetics and politics. We will analyze different genres and artistic styles that emerge within the sociocultural sphere in moments of political crisis, such as the independence from Spain, the Mexican and Cuban revolutions, the dictatorships of the Southern Cone, migration, and other contemporary social processes. Within this framework, we will discuss the work of major writers (Borges, García Márquez, Vargas Llosa, Fuentes, Neruda) as well as emerging writers. Since we will also be mapping the representation of race, class, and gender, close attention will be given to selected works in literary theory, gender and queer theory, and cultural studies. Prerequisite: SPAN 004 or the equivalent or permission of the instructor. Humanities. Writing course. 1 credit. Eligible for LALS

Spring 2018. Staff.

## SPAN 048. El triunfo del antihéroe: la novela picaresca española

Picaresque literature, with its delinquent protagonists and its depiction of the more disreputable aspects of society, has played an important role in shaping artistic production since its rise in early modern Spain. Examining the proliferation of the picaresque in the sixteenth and seventeenth centuries, students will become familiar with the aesthetic features and social significance of picaresque fiction while also exploring both relevant precursors and the continuing influence of the picaresque in modern literature and film in order to reflect on topics including the idea of the hero, realism in verbal and visual art, and the rhetoric of selfrepresentation. Humanities. 1 credit.

#### SPAN 053. Memorias a la deriva. El Caribe y sus diásporas

This course will focus on the study of the central role that notions of diaspora and insularity have played in the formation of Caribbean cultures with emphasis in the symbolic representation of these issues during the 20<sup>th</sup> and 21<sup>st</sup> centuries. Particularly, we will pay attention to icons, images, and metaphors that have become an essential part of Caribbean aesthetics and subjectivity like the island, the sea, the boat, the hurricane, the bird, the cannibal, and the runaway. By tracing the representation of those emblems in a wide variety of texts and visual culture works we will reflect on the intersections between history, politics, diaspora, ecology, and affects.

Prerequisite: SPAN 022 or 023, the equivalent or permission of the instructor. Humanities. 1 credit. Eligible for LALS, BLST

#### SPAN 054. Contemporary Cuba: Utopia, Revolution and Reform

(Cross-listed as LITR 054S) This course will focus on Cuban literature and culture produced during the historical period of the Cuban Revolution. By reading varied-and often opposed-literary accounts and artistic representations of those years, the course seeks to analyze the complex socio-economic, political, and ideological processes that have informed Cuban society and culture since 1959 until the present day. Issues to be discussed include the relation between national identity, ideology and political discourse, the political conflict between US-Cuba; exile and diaspora; the politics of representation in terms of race, gender and sexuality; the role of the intellectual in times of political and ideological conflicts; the ethic of aesthetic discourses; and the current period of political and economic transition. Authors included are Fidel Castro, Ernesto Guevara, Reinaldo Arenas, Leonardo Padura, and Pedro Juan Gutiérrez, among others.

Humanities. 1 credit. Eligible for LALS, PEAC Fall 2017. Díaz.

#### SPAN 056. Don Quijote

This course will focus on Cervantes's **Don Quijote**, a masterpiece of Spanish literature and the first great modern novel with widespread influence on world literature. **Don Quijote**'s originality stems from the way in which it makes us think about fiction, history, reality, madness, and perspectivism. While paying close attention to the socio-historical context of early modern Spain, we will analyze the novel's connections with the literary genres of the time, and explore issues related to literary theory. Taught in Spanish.

Prerequisite: SPAN 022 or 023, the equivalent or permission of the instructor.

Humanities.

Writing course. 1 credit.

Spring 2018. Cohen.

#### SPAN 060. Memoria e identidad

This course will focus on memory making as an identity building agent. We will study literary texts, films and other cultural artifacts to commemorate the silenced voices of the past. The work of several Spanish authors, film directors and intellectuals of the last decades, who try to recover the silenced voices of the past in an effort to contest the "rhetoric of amnesia", so persistent in the early transition to democracy in Spain, will be studied through close readings and a theoretical component. Special emphasis will be placed on the role of memory in literary, film and cultural narratives to build national identity. Prerequisite: SPAN 022 or 023, the equivalent or permission of the instructor. Humanities. 1 credit. Eligible for PEAC Spring 2018. Guardiola.

#### SPAN 069. Cartografías urbanas

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 human being's place in its own society and historical moment. We will explore cultural representations of the city as an icon of industrialization in the nineteenth century and the declining of the modern city and its narratives in post-industrial and post-colonial times. Cultural cartographies of the city will help us to better understand new urban configurations and subjectivities. The discussion will focus on Madrid, Barcelona and other Spanish cities of the 19th, 20th and 21st centuries. We will see urban representations in novels by Galdós, Pardo Bazán, Baroja, Laforet, Cela, Rodoreda, Roig, Mendoza and representative films.

Prerequisite: SPAN 022 or 023, the equivalent or permission of the instructor. Humanities

1 credit.

Fall 2017. Guardiola.

#### SPAN 077. Cine y literatura: la adaptación fílmica

The aim of this course is to study a particular set of Latin American texts and their film adaptations. Incorporating relevant critical terminology, the immediate focus will be on the medium-specific language of the visual text and on the close reading of literary texts. We will identify and analyze the strategies used to adapt novels and short stories to the film medium. The approach of this class will set aside the issue of fidelity to understand how the film presents its own interpretation of literary texts. The works chosen pose special challenges for adaptation. Novels/stories and film adaptations may include, but are not limited to, Plata quemada, "Patrón", Oriana, Tan de repente, Pantaleón y las visitadoras, Ilona llega con la lluvia, among others Prerequisite: SPAN 022 or 023, the equivalent or

Prerequisite: SPAN 022 or 023, the equivalent or permission of the instructor. Humanities.

Humanines 1 credit

Fall 2017. Martínez.

#### SPAN 079. García Márquez y su huella

This course examines the work of Nobel Prize winner Gabriel García Márquez (1927-2014), and his literary influence on a younger generation of Colombian writers.

García Márquez has been involved in many of the crucial literary, political and cultural issues of this era, in Colombia, Latin America and globally. His work exemplifies these conflicts and ranges from so-called realismo mágico (**Cien años de** 

soledad) to historical fiction (El general en su laberinto) and documentary writing (Relato de un náufrago).

We will read his major novels, and works by Laura Restrepo, William Ospina, Fernando Vallejo and Juan Gabriel Vázquez. The goal is not to trace the inheritance of the Macondian imaginary world, but rather to reflect on a particular understanding of literary genres, and the power of fiction to represent social, economic and political challenges.

Prerequisite: SPAN 022 or SPAN 023, the equivalent or permission of the instructor. Humanities 1 credit.

Eligible for LALS

#### SPAN 080. Los hijos de la Malinche: Representaciones culturales de la Revolución Mexicana

This course will examine the representations of the Mexican Revolution in novels, short stories, essays, theatre, films, and **Corridos** by Mexican authors and artists. We will pay attention to the complexity of perspectives generated by this sociopolitical upheaval, whose legacy has been riddled with ambivalence. The objective is to gain a critical understanding of how and why the Revolution became such a fundamental part of Mexican identity and culture. Topics include: political disenchantment, solitude, class division, gender roles, national myths, and identity construction.

Prerequisite: SPAN 022 or 023, the equivalent or permission of the instructor.

Humanities. 1 credit. Eligible for LALS Fall 2017. Buiza.

#### SPAN 084. México, 1968: La violencia de ayer y hoy

This course will examine the cultural representations of violence in contemporary Mexico, from the 1968 student massacre in Tlatelolco to the female homicides in Ciudad Juárez to the social unrest brought about by the war on drugs. The objective will be to understand not only the dynamics of political and social violence in Mexico, but also the bearing that it has had on literature and film. We will analyze the ways in which literary works, poetry, chronicles, and films contend with the issues of state terror, institutionalized oblivion, trauma, violence, and cultural identity formation. In addition to film and literature, the course will incorporate the scholarly and theoretical interventions that will help make sense of this crisis of violence plaguing Mexico. Prerequisite: SPAN 022 or 023, the equivalent or permission of the instructor. Humanities. 1 credit.

Eligible for LALS, PEAC

#### SPAN 087. Cruzando fronteras: migración y transnacionalismo en el cine mexicano

This course studies Mexican films and documentaries that engage issues of migration and transnationalism. The aim is to understand how these cinematic genres portray the complexities of cultural identity and the social and interpersonal struggles caused by displacement and globalization. We will also look at how some Mexican communities have been transformed by the consequences of migration to the U.S. In addition, the course will incorporate border literature and Mexican music that add different dimensions to the themes explored in the course. Buiza.

Prerequisite: SPAN 022 or 023, the equivalent or permission of the instructor.

Humanities.

Eligible for FMST, LALS

#### SPAN 088. Pasados desgarradores: trauma y afecto en la literatura centroamericana de posguerra

This course focuses on contemporary Central American literature. It begins with the revolutionary poetry, narrative of resistance, and testimonio that emerged out of the sociopolitical turmoil of the isthmus during the decades of war, revolutions, and genocide. We will then study the atmosphere of disenchantment during the postwar period and the aesthetic shift in representations of trauma, violence, and disaffection. We will study novels, short stories, poems, films, music, and read scholarly articles to understand the sociohistorical and literary context of the war and the postwar periods in Central America.

Prerequisite: SPAN 022 or 023, the equivalent or permission of the instructor.

Humanities. 1 credit. Eligible for LALS, PEAC Spring 2018. Buiza.

#### SPAN 095. Spanish Culminating Exercise

Spanish majors will register in this course in the spring semester of their senior year to prepare their Spanish final paper. Students are urged to have their paper proposals approved as early as possible during the fall semester of their senior year. Permission of the Spanish section head and a supervising Spanish professor is needed. Offered every spring. 0.5 credit.

Spring 2018. Staff.

#### Seminars

Students wishing to take seminars must have completed at least one course in Spanish numbered 040 and above. Students are admitted to seminars on a case-by-case basis by the instructor according to their overall preparation.

#### SPAN 101. Alejo Carpentier

In this seminar, we will study the work of Cuban master writer Alejo Carpentier, who famously coined and developed the concept of "lo real maravilloso." Carpentier wrote in a myriad of genres using journalism, creative essays, short stories and novels to explore and expose what he considered to be a wondrous and unique sense of history, space, and time in Latin American and the Caribbean. While reading some of his most relevant works such as El reino de este mundo, La música en Cuba, Los pasos perdidos, El siglo de las luces, and El arpa y la sombra, we will explore his exquisite craft of the novelistic discourse and his studies on Afro-Caribbean history and culture, the baroque and neo-baroque styles seen as a historical and post-colonial ethos, and his meditations and experimentations in literary representations of space and time. Humanities. 2 credits. Eligible for LALS Spring 2018. Díaz.

#### SPAN 108. Jorge Luis Borges

This seminar focuses on Jorge Luis Borges, one of the most influential writers of the 20th century. He devoted his entire life to literature, as a writer but also as an irreverent and subversive reader. None of his lines, none of his declarations happened inadvertently. Hated or held dear, Borges is incessantly quoted. The objective of this course is to read Borges from the double perspective required by his worldwide fame: as a universal writer who transcends national borders, but also as a writer that seeks to reinvent the history and the traditions of his own country, Argentina. Humanities. 2 credits. Eligible for LALS, INTP

#### Music

GERALD LEVINSON, Professor of Music<sup>2</sup> THOMAS WHITMAN, Professor of Music and Chair BARBARA MILEWSKI, Associate Professor of Music LEI OUYANG BRYANT, Associate Professor Music JONATHAN KOCHAVI, Associate Professor of Music JAMES BLASINA, Visiting Assistant Professor of Music ANDREW HAUZE, Lecturer in Music MARCANTONIO BARONE, Associate in Performance (part time) JOSEPH GREGORIO, Associate in Performance (part time) ANDREW NEU, Associate in Performance (part time) I NYOMAN SUADIN, Associate in Music and Dance Performance BERNADETTE DUNNING, Administrative Coordinator SUSAN GROSSI, Administrative Assistant JEANNETTE HONIG, Concert and Production Manager

#### Dance

KIM D. ARROW, Associate Professor of Dance PALLABI CHAKRAVORTY, Associate Professor of Dance, Director of the Dance Program OLIVIA SABEE, Assistant Professor of Dance (part time) IJMATATU POE, Assistant Professor of Dance (part time) LADEVA DAVIS, Associate in Dance Performance (part time) NI LUH KADEK KUSUMA DEWI, Associate in Dance Performance (part time) CHANDRA MOSS-THORNE, Associate in Dance Performance (part time) SALEANA PETTAWAY, Associate in Dance Performance (part time) HANS BOMAN, Dance Accompanist BERNADETTE DUNNING, Administrative Coordinator SUSAN GROSSI, Administrative Assistant

<sup>2</sup> Absent on leave, spring 2018.

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

Revised, fall 2015. These requirements apply to members of the class of 2018 and subsequent years. Majors and minors who plan to graduate in 2016 and 2017 will fulfill the requirements of the previous academic program.

## 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 self-motivation.

### **Course Major**

The music major curriculum normally includes the following components. Every student's program is subject to approval by music faculty, taking into consideration the student's background and goals. We welcome individualized proposals, which are evaluated and approved on the basis of consultations with the music faculty. We 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.** 4 courses in Music Theory 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

One additional upper level Music Theory course (MUSI 014, MUSI 115, or other advanced course in theory) and MUSI 040D

## Majors are strongly advised to take 5 Music Theory courses if possible.

**B. Required.** 2 courses in Music History and Literature from among the following

MUSI 020 (Medieval and Renaissance)

MUSI 021 (Baroque and Classical)

MUSI 022-W (19th-Century Europe)

MUSI 023-W (20th Century)

C. Required. Ethnomusicology. 1 course

MUSI/DANC 010 (The Fieldwork of Music and Dance)

D. Required. 1 elective.

This may be an additional course --- at any level, introductory or advanced ---- in Music History and Literature; in Ethnomusicology or World Traditions; or in Music Theory; Conducting and Orchestration; or Composition. Alternatively, with permission of the music faculty, it could be an academic course in Theater or Dance if relevant to the student's interests.

**E. Required.** 1 course to fulfill the Senior Comprehensive requirement.

MUSI 094: Senior Research Topics

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 or cultural style (selected in advance by the student, subject to the approval of the department) which demonstrates skills in the three areas of analysis, historical or socio-cultural 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 prepare for their senior comprehensive examination.

#### F. Required. Additional Requirements for Course Majors:

Keyboard Skills Exam

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 free private lessons to all majors and minors who need support in this area. 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.

Department ensemble for at least four semesters.

**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 service-learning experiences that incorporate music.

### **Course Minor**

**A. Required.** At least two courses in Music Theory 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

**B. Required.** At least two courses in Music History and Literature, and/or in Ethnomusicology, from among the following: MUSI/DANC 010 (The Fieldwork of Music and Dance)

MUSI 020 (Medieval and Renaissance)

MUSI 021 (Baroque and Classical)

MUSI 022-W (19th-Century Europe)

MUSI 023-W (20th Century)

Any other Music History course numbered above 023

C. Required. 1 elective.

This may be an additional course at any level, introductory or advanced in Music History and Literature; in Ethnomusicology or World Traditions; or in Music Theory. Alternatively, with permission of the music faculty, it could be an academic course in Theater or Dance if relevant to the student's interests.

#### **D. 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 Exam

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, and Department Ensemble

membership. In addition, honors majors do three honors preparations in music.

**Three Honors Preparations:** 

**1. Required Honors Preparation: Senior Research Project.** This consists of MUSI 094 (Senior Research Topics) in combination with one course in Music History and Literature, in Music Theory, or in Ethnomusicology.

**2. 3. Elective Honors Preparations,** normally one of the following:

**Music Theory.** A 2-credit honors preparation in Music Theory is normally based on MUSI 115 in combination with one lower-level Music Theory 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.

**Composition.** At least two semesters of MUSI 019 (Composition)

Senior Honors Recital. A Senior Honors Recital preparation is available only to students who have distinguished themselves as performers. It is normally 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 advisor 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 research -including analytical as well as historical work -and will be overseen by one or more members of the music faculty.

#### Senior Thesis.

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.

Oral examinations are given for all honors preparations in music. Written examinations, in addition to oral examinations, are given for those preparations based on courses or seminars, not for theses, performances, and composition portfolios.

### **Honors Minor**

**A. Required.** Two courses in Music Theory plus Musicianship sections (MUSI 040). MUSI 040 may be taken for  $0.0 \mbox{ or } 0.5$  credit at the student's option.

MUSI 011 and 040A

MUSI 012 and 040B

**B. Required.** At least two courses in Music History and Literature, and/or in

Ethnomusicology, from among the following:

MUSI/DANC 010 (The Fieldwork of Music and Dance)

MUSI 020 (Medieval and Renaissance)

MUSI 021 (Baroque and Classical)

MUSI 022-W (19th-Century Europe)

MUSI 023-W (20th Century)

Any other Music History course numbered above 023

#### C. Required. 1 elective.

This may be an additional course --- at any level, introductory or advanced --- in Music History and Literature; in Ethnomusicology or World Traditions; or in Music Theory. Alternatively, with permission of the music faculty, it could be an academic course in Theater or Dance if relevant to the student's interests.

#### D. One honors preparation.

See Honors Major for descriptions of possible Honors Preparations.

#### E. Additional Requirements.

Keyboard Skills Exam

Department ensemble for at least two semesters

### **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 Ethnomusicology

Other special majors are possible. For more information, contact the department chair.

## 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 advisor.

Students are advised that many graduate programs in music require a reading knowledge of at least two languages, with one most commonly being either German or French.

### Additional Resources

Special scholarships and awards in music include the following (see 17 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 half-course 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. For further details, consult the MUSI 048 guidelines on the Music Program website.

#### Orchestra, Chorus, Wind Ensemble, Gamelan, Chamber Music, Jazz Ensemble

Students may take Performance Chorus (MUSI 043), Performance Garnet Singers (MUSI 050, corequisite MUSI 043 required), 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.

### **Music Courses and Seminars**

#### Introductory Courses without Prerequisite

#### MUSI 001A. 1000 Years of Musical Firsts

An overview of Western musical history, this course examines 12 famous pieces of music as works of art and as moments of cultural history through a detailed study of their premiere performances. Case studies range from the Middle Ages to contemporary composition and special attention is given to techniques in musical listening. Pieces include Handel's Messiah, Beethoven's 5th Symphony, the Symphonie Fantastique (Berlioz), Rite of Spring (Stravinsky), and West Side Story (Bernstein). Humanities. L credit.

#### MUSI 002. First-year Seminar: Carnival Culture: Dance, Music and Drama in Early Modern Europe

(Cross listed as DANC 002, THEA 011A) As Enlightenment ideals gave way to Revolutionary impulses, dancers doubled as singers, circus performers shared their stages, and entertainments took place on the fairgrounds and in aristocratic palaces. Performances in these distinctive multi-genre traditions raise a number of questions that are equally relevant for us today: What is the artwork? How can we restate a history that was intended to be fleeting? What is the relationship between "text" and performance? This course explores the hybrid genres of dance, mime, music and drama from the past to analyze their present relevance as "art."

This course fulfills a requirement for dance majors and minors. Open to all students.

- Humanities.
- 1 credit.

Fall 2017. Sabee.

#### MUSI 002B. Reading and Making Music: The Basics of Notation

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. Humanities. 1 credit.

Fall 2017. Blasina.

#### MUSI 003. Jazz History

In-depth insights into Jazz history from its African roots and early forms to its recent developments. Focusing on exemplary recordings and musicians and including visiting Jazz musicians in class, the student will be able to get an overview as well as to make personal experiences and to develop listening and analyzing abilities.

Humanities.

1 credit.

## MUSI 004A. Zombie Art:Why Opera Will Never Die

Do you sometimes enjoy insatiable lust, crazed debauchery, a bit of madness? How about the thrill of revenge, exquisite music, demented theater, and hunchbacks? Please read on....

This class explores the exhilarating musical, dramatic and cultural tightrope walk that is opera. Before there was Justin Timberlake there was Farinelli, and way before today's trans movement there was normalized gender bending. We will examine key works from opera's 400-year history and take a closer look at the unfolding of this deeply human, monumental art form and the forces that have tried, unsuccessfully, to kill it over the last century. This class is intended to demystify what is often seen as an elitist music, and requires no pretentiousness or previous operatic experience. Humanities. L credit

Fall 2017. Milewski.

#### 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. Humanities.

1 credit.

#### MUSI 005. U.S. Pop Music History

A survey of American popular music from the late 19th century to the present day based on discussions of individual case studies of music, musicians, and genres in the context of American history. Emphasis is on understanding musical developments with respect to American race and gender relations, structures of musical production, youth cultures, urban and rural musical cultures, immigration and emigration, war and violence, audiences and reception, and fan communities. Topics include blackface minstrelsy, Tin Pan Alley, early blues, crooners, rock 'n' roll, girl groups, the "British Invasion", heavy metal, glam rock, divas, hip hop, file sharing and iTunes, social media, and live performances vs. studio recording. Humanities.

1 credit.

#### MUSI 005A. Music Cultures of the World

(Cross-listed as SOAN 020D)

This course examines the relationships between music and culture through a study of music cultures from around the world. We will explore the fundamentals of music including pitch, scale, rhythm, meter, texture, form, timbre & musical instruments. We will also consider music in its social, political, and historical context and develop critical listening skills to discuss music and sound. Through an exploration of case studies selected from diverse music cultures we will focus upon topics such as identity, race, ethnicity, gender, class, religion, memory, migration, globalization, tourism, and social and political movements. Humanities.

1 credit.

Fall 2017. Bryant

#### MUSI 005B. Popular Music and Masculinities from Rock 'n' Roll to Boy Bands

This course examine the ways in which varying masculinities have been articulated, performed, and marketed in American popular music from the 1950s to the present day. It examines how popular music has facilitated a challenge to gender and sexual norms, or alternatively, how it has served to reinforce norms. Particular focus will be given to the intersections of gender, sexuality, race, ethnicity. class, and ability. It is therefore both a history of popular music and a history of gender and sexuality. This course includes musical analysis, music video analysis, scholarly articles in musicology, and theoretical readings in gender studies.

Humanities 1 credit. Eligible for GSST

#### MUSI 005C. Traditional Musics of World Cultures

Introduction to world music and ethnomusicology via a set of case studies on traditional music and music-making practices. This course stresses music as an integral to--constitutive of, rather than separate from--the culture in which it is rooted. Within this framework we will discuss how the concept of "tradition" does not necessarily imply historical fact, but can be more influenced by understandings of and nostalgic feelings about "the past" as commentary and critique of the present. The course's final project will consist of individual ethnographic projects, in which students engage with a local community group or musicians involved in some form of traditional music practice. Humanities. 1 credit.

#### MUSI 005D. The Art of the American Musical

(Cross-listed as ENGL 095A, THEA 005B) The triumph of Hamilton: An American Musical, by Lin-Manuel Miranda, over Shuffle Along, or, the Making of the Musical Sensation of 1921 and All That Followed, by George C. Wolfe, at the 2016 Tony Awards is a metaphor for the racial amnesia concerning art by and about blacks who are not useful to neoliberal public policy. This course applies #blacklivesmatter to the American musical--between the all-black-cast revival, Beyoncé, biological versus social origins of race, black culture in a "post-soul" era, blackface versus black-on-black minstrelsy, the chitlin circuit, color-blind versus conceptual casting, genre, gospel, and reviews of **Porgy and** Bess, by George Gershwin, Ira Gershwin, and DuBose Heyward, in black daily newspapers and black monthly and weekly magazines--taking seriously Wolfe's claim about intellectual history that "given the dynamics of this country, you may find yourself at a point where your story is no longer valuable, acute or attractive, and if it hasn't been recorded, if you haven't recorded it or if you haven't put into motion people to record it, then it won't be there." These topics require students to conduct research into the African-American experience in the musical as well as listen to sound recordings of Broadway, Off-Broadway, regional/tour, and West End stage works and watch film, television, video, and video clips on YouTube.

Humanities. 1 credit. Eligible for BLST Fall 2017. Glover.

#### 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. Humanities. 1 credit. Eligible for PEAC, CBL

## 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.

Humanities.

1 credit.

## 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).

Prerequisite: Open to all students without prerequisite. No prior knowledge of music is assumed.

Humanities. Writing course.

1 credit.

## MUSI 008. Music, Politics, and Society in the Modern Middle East: 1922-2016

Home to many of the world's oldest civilizations and major religions, the Middle East remains a region of remarkable cultural diversity. From the fall of the Ottoman Empire in 1922 to the Arab Spring and the current refugee crisis, this vast territory has experienced extraordinary political and social change over the past nearly one hundred years. While often riven by conflict, the Middle East is also a site of ever-renewing intellectual, artistic, and political movements. The musical soundtrack to this constellation of dynamic forces is rich and complex, animated by shifting social environments and ongoing intercultural encounters. Arabs, Turks, Persians, Jews, Kurds, Greeks, Berbers, Armenians, Assyrians, and many other ethno-linguistic and religious identities all claim unique forms of musical expression, mirroring in many cases their environments-rural, urban, desert, coastal, seafaring, nomadic, antiquated, hypermodern, pious, and defiantly secular. In this course we will examine nearly a century of music making in the Middle East focusing on Turkey, Iran, and the countries of the Eastern Mediterranean and North Africa. Readings, audio examples, films, and in-class music making will address the ways that music of the Middle East intersects with religious practices, nationalism, gender, sexuality, language, ethnicity, migration, and protest movements. Through an

exploration of elite, popular, folk, and sacred music among others, we will attempt to make sense of the rich and varied soundscapes of the modern Middle East.

Humanities. 1 credit. Eligible for PEAC

#### MUSI 008A. Music & Mao: Music and Politics in Communist China

(Cross-listed as SOAN 020E)

In this course we will examine music in post-1949 China with particular emphasis on cultural and political trends of the 20th and 21st century. We will consider cultural policies of the Communist Party of China and influential interactions with other countries inside and outside of Asia. Though focusing primarily upon music, discussion will also include visual arts, dance, and theater. Humanities.

1 credit. Eligible for ASIA Fall 2017. Bryant

#### 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. Humanities. 1 credit.

MUSI 010. The Fieldwork of Music and Dance

(Cross-listed as DANC 010)

How does one conduct fieldwork in Music and Dance? How do our disciplines intersect and where do they diverge? In this course we will explore ethnographic field methods and oral histories, including open-ended and semistructured interviews as well as life-histories. We will also address political, and ethical debates associated with fieldwork in the related disciplines of Anthropology, Ethnomusicology, Performance Studies, Dance Studies, and Gender and Sexuality Studies. This will entail reading across various fields that incorporate fieldwork in research. The course objectives will include: a) examining underlying assumptions and biases in qualitative research methods; b) learning immersive techniques such as participant-observation and sensitivity to multiple viewpoints; c) engaging in debates about the politics of representation, selfreflexivity, and insider/outsider perspectives; d) learning to conceptualize a study, integrate theory

and method, and describe, analyze and craft a narrative. This course will be jointly taught by Music and Dance faculty members. Humanities. 1 credit.

#### 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. 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.

Prerequisite: Knowledge of traditional notation and major and minor scales; ability to play or sing at sight simple lines in treble and bass clef. Humanities.

1 credit.

Fall 2017. Kochavi.

## MUSI 011.02. Harmony, Counterpoint, and Form 1\*

This 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.

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.

Prerequisite: Knowledge of traditional notation and major and minor scales; ability to play or sing at sight simple lines in both treble and bass clef. Humanities.

\*or MUSI 115, if students want it 1 credit.

Fall 2017. Blasina.

## 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.

Humanities. 1 credit. Spring 2018. Kochavi

## MUSI 013. Harmony, Counterpoint, and Form 3

Continues 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 040C for 0 or 0.5 credit. Keyboard skills lessons may also be required for some students. Humanities. 1 credit. Fall 2017. Levinson.

## MUSI 014. Harmony, Counterpoint, and Form 4

This 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. Humanities

1 credit.

Spring 2018. Whitman

#### MUSI 017. Jazz Theory

Experiencing and learning the Art of Improvisation focusing on Jazz, exploring its styles from tradition to today in a combination of theory, analysis and musical practice. Prerequisite: MUSI 011, instrumental/vocal skills or permission of the instructor. Humanities.

1 credit.

#### 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.

Humanities.

1 credit.

#### MUSI 040. Elements of Musicianship

Sight singing and rhythmic and melodic dictation. Required for all MUSI 011 to MUSI 014 students, with or without 0.5 credit. The instructor will place students at appropriate levels. 0.0 or 0.5 credit.

#### MUSI 040A. Elements of Musicianship I

The Elements of Musicianship courses explore music making from a variety of perspectives and across many styles and genres of (mostly) Western music. Among the skills developed are: sightsinging melodies and arpeggiated harmonic progressions; singing and playing the piano simultaneously; part singing in choral works; taking musical dictation; transcription of recorded music; basic conducting; beginning keyboard harmony; and transposition.

The first semester, Music 40A, provides an introduction to scale degree solmization; singing major and minor scales (all forms); fluency in all keys and time signatures; rhythmic subdivision; conducting patterns; intervals within the major/minor scales and primary triads; passing and neighboring tones; decontextualized perfect intervals; and diatonic keyboard skills. Required for all MUSI 011 students, with or without 0.5 credit. The instructor will place students at appropriate levels. 0.0 or 0.5 credit. Flal 2017. Hauze

#### MUSI 040B. Elements of Musicianship II

The Elements of Musicianship courses explore music making from a variety of perspectives and across many styles and genres of (mostly) Western music. Among the skills developed are: sightsinging melodies and arpeggiated harmonic progressions; singing and playing the piano simultaneously; part singing in choral works; taking musical dictation; transcription of recorded music; basic conducting; beginning keyboard harmony; and transposition.

The second semester, Music 40B, explores the use of triads in inversion; tonicizations of closely related key areas; chromatic non-harmonic tones; the dominant seventh chord; syncopation and cross-rhythm; and complex subdivision.

Required for all MUSI 012 students, with or without 0.5 credit. The instructor will place students at appropriate levels. 0.0 or 0.5 credit. Spring 2018. Hauze

#### MUSI 040C. Elements of Musicianship III

The Elements of Musicianship courses explore music making from a variety of perspectives and across many styles and genres of (mostly) Western music. Among the skills developed are: sightsinging melodies and arpeggiated harmonic progressions; singing and playing the piano simultaneously; part singing in choral works; taking musical dictation; transcription of recorded music; basic conducting; beginning keyboard harmony; and transposition.

The third semester, Music 40C, introduces atonal melodies using seconds, thirds, fourths, and fifths and continues to explore closely related modulation and chromatic tonicization; sequences; advanced triplets and irregular meters; advanced transposition; the "church" modes; the whole tone scale; and the octatonic scale.

Required for all MUSI 013 students, with or without 0.5 credit. The instructor will place students at appropriate levels. 0.0 or 0.5 credit.

Fall 2017. Hauze

#### MUSI 040D. Elements of Musicianship IV

The Elements of Musicianship courses explore music making from a variety of perspectives and across many styles and genres of (mostly) Western music. Among the skills developed are: sightsinging melodies and arpeggiated harmonic progressions; singing and playing the piano simultaneously; part singing in choral works; taking musical dictation; transcription of recorded music; basic conducting; beginning keyboard harmony; and transposition.

The fourth and final semester, Music 40D, explores advanced atonal melodies; distant chromatic modulation; diminished seventh chords; Neapolitan and augmented sixth chords; and mixed meters.

Required for all MUSI 014 students, with or without 0.5 credit. The instructor will place students at appropriate levels. 0.0 or 0.5 credit. Spring 2018. Hauze

#### 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.

Humanities.

1 credit.

#### **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. Humanities. L credit

#### 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.

Humanities. 1 credit.

Spring 2018. Staff.

#### 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. Humanities. Writing course. 1 credit.

#### 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. Humanities.

Writing course. 1 credit.

Spring 2018. Milewski.

#### MUSI 025. American Musical Theater

Musical theater has often been considered a quintessentially American genre. But how has it helped Americans to understand America. This survey will trace the genre's musical and dramatic development and explore representations of race, ethnicity, gender, and sexuality. Musicals considered will include: Show Boat, Porgy and Bess, Cradle Will Rock, Oklahoma!, West Side Story, Sweeney Todd and Wicked. Students will have the opportunity to work with the department's Fall 2014 production of Guys and Dolls.

Prerequisite: MUSI 011 or permission of the instructor. Humanities.

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1 credit.

#### MUSI 026. Dance in Europe and North America: 19th and 20th Centuries

(Cross listed as DANC 022)

This survey covers theatrical dance in Europe and North America from the French Revolution through the late twentieth century, examining ballet and modern dance within the greater performance contexts. We will also consider ways in which race, gender, sexuality, and politics affect dance creation, performance, and dissemination. Humanities.

Writing course.

1 credit.

#### MUSI 027. Divas

This course examines the musical performances and personae of 20th and 21st century musical "divas" through the lenses of race, class, gender, sexuality, and fandom. Special attention is on how popular divas have disrupted dominant discourses of gender, sex, race, religion, and embodiment, as well as articulated resistance to hegemonic cultural requirements. Discussions will address questions such as: Who is a diva, and what constitutes divaness? How have divas defined, expanded, and transgressed boundaries of acceptable female musicianship? How can subversion and resistance be read in mass-produced cultural forms? What has the effect of technology and mediation been on diva performance and reception? What is the role of camp and outrageousness in diva performance and imitation?

Prerequisite: MUSI 011.01 or permission of instructor.

Humanities.

1 credit.

#### 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. Humanities. 1 credit.

Eligible for ASIA

#### MUSI 033A. Caribbean/Latin America

This course will focus on the collective genius of the folk, traditional, and popular musics of Cuba and Brazil, such as Afro-Cuban and Afro-Brazilian 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. This course fulfills the world traditions component requirement for the music major. Prerequisite: Knowledge of traditional music notation and major and minor scales. Recommended, but not required: Knowledge of Spanish or Portuguese. Humanities. 1 credit.

#### MUSI 035. Foundations of Ethnomusicology

This course provides an introduction to the history, methodologies, and theories of ethnomusicology. Through review and analysis of past case studies, we will discuss the development of the discipline, engaging with fundamental questions about the relationships among music, culture, scholarship, and advocacy. This course material and assessments will be designed in an interdisciplinary fashion, drawing primarily from music analysis and the social sciences. In addition to individual and collaborative assignments, students will produce ethnographic portfolios of a nearby group or community to be presented at the end of the semester. Humanities.

1 credit.

#### 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. Humanities.

1 credit.

#### MUSI 075. Special Topics in Music Theater

Available to students participating in the study abroad programs coordinated through Swarthmore in France, Ghana, India, or Japan. Prerequisite: Consent of the dance program director and the faculty advisor for off-campus study. Humanities.

1 credit.

## MUSI 091. Introduction to Performing Arts Education: Music & Dance

(Cross-listed as DANC 091, 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 and dance, we will also consider theater. We will look at primary education in the United States, and we will also touch upon some of the ways the performing arts are 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.

#### Graded CR/NC

Prerequisite: This course is open to any student who has taken at least one course in education, music, dance, or theater.

Humanities.

Writing course. 1 credit.

## MUSI 091C. Special Topics (Music Education)

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. Graded CR/NC.

0.5 credit.

### MUSI 092. Independent Study 1 credit.

#### MUSI 093. Directed Reading

1 credit.

#### MUSI 094. Senior Research Topics in Music

Required of all senior majors as preparation for the senior comprehensive in music. 0.5 credit. Spring 2018. Milewski

#### MUSI 095. Tutorial

Special work in composition, theory, or history. Humanities.

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 102. Color and Spirit: Music of Debussy, Stravinsky, and Messiaen See MUSI 038

Prerequisite: MUSI 013 (concurrent enrollment possible by permission of the instructor). Humanities. 1 credit.

#### 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? Prerequisite: MUSI 011.

Humanities. 1 credit.

Fall 2017. Milewski.

#### MUSI 105. Music and War

For centuries, and across different cultures, music has both served war and illustrated its victories and terror. Music has also provided powerful commentary on war, articulating human pain and protest in equal measure. In this seminar we consider these functions in a range of musical works of the 20th century from popular songs, film shorts, and folk songs from around the world, to music composed in prisons and concentration camps and some of the greatest art music of the 20th century. We will begin our discussion with a brief excursion into previous periods and conclude with an examination of music's role during the war in Iraq.

Prerequisite: MUSI 011 or permission of the instructor.

Humanities.

#### MUSI 106. Winds of Pleasure: The Music and Writing of Hildegard of Bingen in Context and Revival

Celebrated for her prophetic powers, Hildegard of Bingen was a 12th century composer, abbess, writer of three natural science and medicinal texts, and a sought-after resource for contemporary political and religious leaders. This course examines the music, drama, sermons, letters, and medicinal works written by the visionary and polymath, contextualizing Hildegard's compositional style within medieval genres. Special attention will be given to liturgical drama, the recording and compilation of Hildegard's work during the Middle Ages, compositional aspects of

Hildegard's music, representations of gender, the body, and sexuality in her music and writing. The Hildegard revival of the 19th and 20th centuries will provide case studies (ranging from Anonymous 4 to Swedish folk rock) to analyze contemporary performance practices. Prerequisite: MUSI 011.01 or permission of the instructor. Humanities.

1 credit.

## MUSI 115. 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. Humanities. \* or other upper level theory course 1 credit. Fall 2017. Kochavi.

#### MUSI 119 Introduction to Compos

MUSI 118. Introduction to Composition Prerequisite: MUSI 011 and MUSI 012. Humanities. 1 credit.

#### MUSI 119. Composition

Repeatable course. Prerequisite: permission of the instructor. Humanities. 1 credit. Fall 2017. Levinson

#### Performance

**Note:** The following performance courses are for 0.5-course credit per semester.

#### MUSI 041. Performance (Jazz Ensemble)

0.0 or 0.5 credit. Fall 2017. Neu. Spring 2018. Neu.

#### MUSI 043. Performance (Chorus)

0.0 or 0.5 credit. Fall 2017. Gregorio. Spring 2018. Gregorio.

#### MUSI 044. Performance (Orchestra)

0.0 or 0.5 credit. Fall 2017. Hauze. Spring 2018. Hauze.

#### MUSI 046. Performance (Wind Ensemble)

0.0 or 0.5 credit. Fall 2017. Hauze. Spring 2018. Hauze.

#### MUSI 047. Performance (Chamber Music)

(See guidelines for this course earlier.) 0.0 or 0.5 credit.

Fall 2017. Johns. Spring 2018. Johns.

## MUSI 048. Performance (Individual Instruction)

Please consult the MUSI 048 guidelines on the Music Program website. 0.5 credit. Fall 2017. Staff. Spring 2018. Staff.

## 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. 0.5 or 0.0 credit. Eligible for ASIA Fall 2017. Whitman. Spring 2018. 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.

### USI 049C Borforma

## MUSI 049C. Performance: Improvisation: an interdisciplinary approach.

(Cross-listed as DANC 049N) This performance course will examine improvisation as a tool to create and expand performance potentials across art-forms and from multiple global perspectives. As dancers, musicians, artists, designers, writers, thinkers and performers we will practice collective improvisation and experiment with how our skills, ideas, instruments and technologies can mesh together, dancer as sound, musician as body, stagecraft as movement, ideas as images, inspiring new possibilities for unique live performance. Students do not need to have a background in dance or music to participate in the class. We have all been accumulating movement, sound, literary and visual information throughout our lives, and your personal accumulation of this information will be our raw material for investigation in class. This course is ideal for any students with interest in exploring performance, transformation, and the immediate moment. 0.5 credit.

Spring 2018. Langabeer. Poe.

#### MUSI 050. Performance (Garnet Singers)

Formerly Performance (Chamber Choir) Corequisite: Students enrolled in MUSI 050 must also be enrolled in MUSI 043 (Performance Chorus). 0.0 or 0.5 credit.

Fall 2017. Staff. Spring 2018. Staff.

#### MUSI 071. Salsa Dance/Drumming

(Cross-listed as DANC 071) 0.5 credit.

Spring 2018. Arrow.

At Swarthmore, dance is a global discourse. The dance and music programs share an integrated approach to composition, history, performance, and theory in lecture/discussion and studio practice courses. We believe this is central to the understanding of dance as an artistic, intellectual, and social inquiry within a liberal arts context.

### Dance

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### 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 (choreographic laboratories, improvisation, history, repertory, and theory). The role of dance as an agent of social change 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

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 majors and minors. Study abroad dance programs developed by members of the dance faculty are available in France, Ghana, India, Japan, and United Kingdom. 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, and Northern Ireland. Additional information regarding study abroad experiences is listed below and can also be found on both the Dance Program and Off-Campus Study websites. In order to further enhance student engagement with the field at large, every year the program hosts diverse national and international dance artists and scholars.

### **Course Major**

The goal of the course major in Dance is to expose a student to the broad scope of the field. The distribution of required courses for the major provides students with an introduction to Dance Studies, Choreography, and Performance, and allows them to direct their final credit(s) in the major toward a specific focus: **Choreography**, **Dance Studies** or an **Individually Created focus**. Majors will be required to develop an extended paper or a significant dance performance piece as part of their focus. All dance majors and minors are strongly encouraged to participate in technique and repertory classes each term.

## Prerequisites for the Major including all areas of focus:

These prerequisites are strongly recommended for first-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. One Dance Studies course

2. DANC 011. Dance Lab I: Making Dance

3. One Dance Technique class (in any style) for academic credit

### Prerequisite credits for Majors: 2.5 Requirements for each focus are as follows:

#### **Dance Studies**

 Four Dance Studies courses
 Two Dance Technique and/or Repertory/Ensemble courses - one Western and one non-Western course

3. \*DANC 095 or 096. Senior Thesis

Total credits in focus: 6 - 7

#### Choreography

1. DANC 012. Dance Lab II: Making Dance or if not offered, DANC 013. Dance Composition Tutorial (twice)

- 2. DANC 045. Dance Technique: Yoga
- 3. Two Dance Studies courses
- 4. Two Dance Repertory/Ensemble courses- one
- Western and one non-Western course
- 5. Two Technique courses (any style)
- 6. \*DANC 094. Senior Project

#### Total credits in focus: 6.5

Note: Majors with a focus in Choreography are also strongly encouraged to enroll in THEA 003 Fundamentals of Design for Theater Performance and THEA 004B. Lighting Design.

#### Individually created focus

Individually Created focus: see **Special Major** Total prerequisites and credits required for Majors: 8.5 - 9.5

\*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.

## **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 Choreography, Dance Studies, and Performance, and allows them to direct their final credit(s) in the minor toward a specific focus: **Choreography or Dance Studies**. Minors will be encouraged, but not required, to develop an extended paper or a significant dance performance piece as part of their program. All dance majors and minors are strongly encouraged to participate in technique and repertory classes each semester.

# Prerequisites for the Minor including both areas of focus:

These prerequisites are strongly recommended for first-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. One Dance Studies course

2. One Technique or Repertory/ensemble course for academic credit

## Prerequisite credits for Minor: 1.5

#### Course requirements for minor:

1. DANC 011. Dance Lab I: Making Dance

2. One Dance Studies course

3. Additional courses (totaling 2 credits) proposed by the student and approved on an individual basis by the faculty from a combination of chorecorraphy dance studies, repertory, and

choreography, dance studies, repertory, and technique courses.

#### Total credits in Minor: 4

Total prerequisites and credits required for Minor: 5.5

## **Honors Major**

Majors in the Honors Program must have received a grade of B+ or better in all dance courses before admission. The choice of focus for a student's major will be determined in consultation with an advisor from the dance faculty.

# The Dance Major in Honors is identical to the Dance Course Major in its prerequisites and focus requirements.

Additional Requirements for the Dance Honors Major:

## Requirements for the Honors Major:

All dance majors in the Honors Program must do three preparations of two credits each:

1. Dance Studies: two dance studies courses and a literature review

2. Choreography: Dance Lab II (DANC 012) and one dance studies course

3. Either Senior Project or Senior Thesis:

Senior Project (Choreography):

DANC 092. Independent Study (fall)

DANC 094. Senior Project (spring)

Senior Thesis (Dance Studies):

DANC 095. Senior Thesis (fall)

DANC 096. Senior Thesis (spring)

Students' choice of which courses to include in their preparations is subject to faculty approval. Syllabi, papers, and videos of student choreography from these courses will be submitted to external examiners as part of students' Honors Portfolio.

Students should be prepared to submit their final senior project or thesis proposal at the start of their junior year.

## **Honors Minor**

The Dance Minor in Honors is identical to the Dance Course Minor in its prerequisites and focus requirements.

Students in the Honors Program who are presenting a major in another discipline and a minor in dance must do one two-credit preparation in dance, in either Choreography or Dance Studies.

## **Honors Minor Requirements**

Choreography: One dance studies course Dance Lab II (DANC 012) or Senior Project (DANC 094)

Dance Studies:

One dance studies course

Senior Thesis (DANC 095)

Students' choice of which courses to include in their preparations is subject to faculty approval. Syllabi, papers, and videos of student choreography from these courses will be submitted to external examiners as part of students' Honors Portfolio.

Students should be prepared to submit their final senior project or thesis proposal at the start of their junior year.

## **Special Major**

The program for a Special Major comprises a minimum of five credits in dance coursework. The two disciplines in this major may be philosophically linked or may represent separate areas of the student's interest. The faculty encourages students to consider the philosophical links between the two disciplines. Examples of past special majors include: Dance and Anthropology, Dance and Art, Dance and Biology, Dance and Education, and Dance and Psychology. Special Majors are encouraged to take at least one dance class before applying.

All Special Majors will design their programs in consultation with a faculty advisor.

#### **Dance Studies**

1. Four Dance Studies courses 2. DANC 095. Senior Thesis

## Choreography

1. One Dance Studies course

2. DANC 011. Dance Lab: Making Dance I

3. DANC 012. Dance Lab: Making Dance II

- 4. DANC 013. Dance Composition: Tutorial
- 5. DANC 045. Dance Technique: Yoga

6. DANC 094. Senior Project

# 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 053, 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 (16 0.5-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.

## 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.

## Dance Courses

## Introductory Courses

#### DANC 002. First-year Seminar: Carnival Culture: Dance, Music and Drama in Early Modern Europe

(Cross listed as MUSI 002, THEA 011A) As Enlightenment ideals gave way to Revolutionary impulses, dancers doubled as singers, circus performers shared their stages, and entertainments took place on the fairgrounds and in aristocratic palaces. Performances in these distinctive multi-genre traditions raise a number of questions that are equally relevant for us today: What is the artwork? How can we restate a history that was intended to be fleeting? What is the relationship between "text" and performance? This course explores the hybrid genres of dance, mime, music and drama from the past to analyze their present relevance as "art."

This course fulfills a requirement for Music or Dance majors and minors.

Open to all students.

This course fulfills a requirement for Music or Dance majors and minors. Open to all students. Humanities. Writing course. 1 credit.

Fall 2017. Sabee.

## DANC 004. Arts in Action

(Cross-listed as MUSI 006) What is art and what constitutes social change?

The course will explore these questions in two ways: First, we will look at the interconnections between culture, art, and community through rigorous intellectual inquiry by orienting students to the history of the field through selected readings. Second, we will engage in situated experiential learning with local and international arts communities. This course aims to bring together students with an interest in investigating and investing in social change work through the arts. Class requirements include: Readings, video viewing and discussions, volunteering in community events, keeping a regular journal, and doing a final project based on the readings, interviews, and field experiences.

This course is open to all students. This course fulfills a prerequisite requirement for dance majors and minors.

Humanities. 1 credit. Eligible for PEAC, CBL Fall 2017. Chakravorty.

# DANC 091. Introduction to Performing Arts Education: Music & Dance

(Cross-listed as MUSI 091, 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 and dance, we will also consider theater. We will look at primary education in the United States, and we will also touch upon some of the ways the performing arts are 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.

Prerequisite: This course is open to any student who has taken at least one course in education, music, dance, or theater.

Humanities Writing course. 1 credit.

# Choreography and Design and Dance Studies Courses

#### DANC 010. The Fieldwork of Music and Dance

(Cross-listed as MUSI 010)

How does one conduct fieldwork in Music and Dance? How do our disciplines intersect and where do they diverge? In this course we will explore ethnographic field methods and oral histories, including open-ended and semistructured interviews as well as life-histories. We will also address political, and ethical debates associated with fieldwork in the related disciplines of Anthropology, Ethnomusicology, Performance Studies, Dance Studies, and Gender and Sexuality Studies. This will entail reading across various fields that incorporate fieldwork in research. The course objectives will include: a) examining underlying assumptions and biases in qualitative research methods; b) learning immersive techniques such as participant-observation and sensitivity to multiple viewpoints; c) engaging in debates about the politics of representation, selfreflexivity, and insider/outsider perspectives; d) learning to conceptualize a study, integrate theory and method, and describe, analyze and craft a narrative. This course will be jointly taught by Music and Dance faculty members. Humanities. 1 credit.

#### DANC 011. Dance Lab I: Making Dance

This course will explore how might you use dance to tell a story, express an emotion, respond to music or sound, or make a political statement, just to name a few possibilities. Students will use movement assignments as a way to challenge their ideas about texture and rhythm, experiment with improvisation as a way of generating material, and engage with a research-based approach to choreography. Special guest artists will include choreographer Meredith Rainey, formerly of the Pennsylvania Ballet, and theater artist Carmen C. Wong.

All previous dance technique experience or other movement experience is welcome, but not required.

Corequisite: A course in dance technique must be taken concurrently.

Humanities.

1 credit.

Fall 2017. Sabee.

#### **DANC 011A. Dance Production Practicum**

By individual arrangement with the dance faculty for rehearsal and performance of work in conjuction with dance program courses; DANC 012, DANC 013, DANC 092, or DANC 094. P.E.

Fall 2017. Staff.

#### DANC 012. Dance Lab II: Making Dance

A continued study of principles of choreography and dance creation. We will examine notions of movement invention, employment, and appropriation through experimentations with time, space, energy qualities, design context, audience perspective, and collaboration. Explorations will be geared toward honing each student's particular interests - in this moment - around the "what"s and "how"s of creation. Students will work much more independently than in the first class in this series, and will need to work intensively throughout the semester with a student design collaborator and a student researcher on a final performance project for the end of the semester. Design collaborators can be from the areas of costume, lighting, set/visual design, interactive media design, etc. The class welcomes all genres of movement for

use within this academic context. Reading, video and live concert viewing, short dance studies, journals, a final grant proposal and a final performance for the public are all required. Students with whom the choreographer works and who commit to 3 hours weekly, may receive PE credit under DANC 011A. Dance Production Practicum.

Prerequisite: DANC 011

Corequisite: A course in dance technique must be taken concurrently. Humanities.

1 credit.

Spring 2018. Arrow.

#### 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.

Students with whom the choreographer works and who commit to 3 hours weekly, may receive PE credit under DANC 011A. Dance Production Practicum.

Prerequisite: DANC 011 or its equivalent. Corequisite: A course in dance technique must be taken concurrently.

0.5 credit. Fall 2017. Staff. Spring 2018. Staff.

## DANC 022. Dance in Europe and North America: 19th and 20th Centuries

(Cross-listed as MUSI 026)

This survey covers theatrical dance in Europe and North America from the French Revolution through the late twentieth century, examining ballet and modern dance within the greater performance contexts. We will also consider ways in which race, gender, sexuality, and politics affect dance creation, performance, and dissemination. Prerequisite: No Prerequisite. Humanities. Writing course.

1 credit.

#### DANC 023. Contemporary Performance

This course interrogates issues surrounding twenty-first-century movement-based performance including cultural hybridity and the relationship between movement and text. Using aesthetic theory and methodologies developed by performance studies and dance studies, we will ask what gets performed, where, and why. Humanities.

1 credit.

Eligible for INTP Spring 2018. Sabee.

#### DANC 025A. Dance and Diaspora

(Cross-listed as ANTH 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. Humanities.

Writing course.

1 credit.

Eligible for ASIA, GSST

#### DANC 038. Performing Ecstasy Dancing the Sacred

(Cross-listed as RELG 042)

By locating the sacred in the experiences of ecstatic dance and music, the course will specifically examine the evolution of Bhakti (Hindu) and Sufi religious practices from ritual to performance art. By exploring the sacred in relation to social processes of culture and their transformations, it will connect the sacred not only to history, tradition, ritual, spirituality and subjectivity but also to national identity, commodity and tourism in contemporary culture. It is a reading and writing intensive course. Humanities. 1 credit.

Eligible for ASIA, GSST

#### DANC 077B. Anthropology of Performance (Cross-listed as ANTH 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, poststructural, 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. Humanities.

Writing course. 1 credit.

#### DANC 079. Dancing Desire in Bollywood Films

(Cross-listed as ANTH 079B) 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. Humanities.

1 credit.

Eligible for ASIA, FMST, GSST Spring 2018. Chakravorty.

# Dance Technique and Repertory/Ensemble Courses

**Note:** Technique courses (040-048, 050-053, 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

TENSION CONTINUUMS: This course is designed to introduce skills and performance sensibilities in the area of Modern and Contemporary Dance techniques, specifically as they relate to tension, meta-tension, and sequentiality. Movement will be sourced from an array of US American post-modern and social dance sources (i.e. release techniques, Cunningham, dancehall, etc.), as well as European contemporary dance sources (i.e. Counter technique, Axis Syllabus, Flying Low). Our work will be in the service of defining techniques and values to equip our physical, mental, and emotional bodies with skills to be readily mobile, present, attentive and communicative. We will explore our bodies in dynamic alignment, moving toward an understanding of the infinities that exist inside and outside of our physical bodies. Ideally, the course will be a useful tool to ignite growth in students as learners, dancers, and performers. This class will also incorporate warm-up

choreographies designed by dancer and anatomist Irene Dowd.

Graded CR/NC. 0.5 credit or P.E. Fall 2017. Poe. Spring 2018. Poe.

#### DANC 041. Dance Technique: Ballet I

An introduction to the fundamentals of classical ballet vocabulary with a focus on anatomically correct alignment, movement quality, and musicality. If taken for academic credit, concert attendance, two short papers, and a vocabulary test are required. Graded CR/NC. 0.5 credit or P.E. Fall 2017. Sabee. Spring 2018. Sabee.

#### DANC 043. Dance Technique: African I

African Dance I introduces students to movement concepts and vocabulary from the Umfundalai Dance technique. Drawing from key styles and traditions from the African Diaspora in a codified approach, students will gain a beginning understanding of how to embody African dance and aesthetic principles implicit in African orient movement. Students enrolled in DANC 043 for academic credit are required to write several detailed journals and a short final reflection paper. Graded CR/NC. 0.5 credit or P.E. Elicible for PLST

Eligible for BLST Fall 2017. Pettaway. Spring 2018. Pettaway.

#### DANC 044. Dance Technique: Tap

This course is available to all tappers, from beginning to advanced. Such forms as soft-shoe, waltz-clog, stage tap, and "hoofin" will be explored. There will be research and discussions of renowned tap dancers. Opportunities for discovering historical facts about tap will be made throughout the course. If taken for academic credit, concert performance and two short papers are required. Graded CR/NC.

0.5 credit or P.E. Spring 2018. Davis.

#### DANC 045. Dance Technique: Yoga

Vinyasa Flow/Power Yoga course with a focus on asanas (physical postures) and pranayama (breath control) and relaxation techniques. While this is a vigorous class, the practice is intended to be joyful and energizing with a goal of producing calm in mind and body, a practical knowledge of body alignment, injury prevention, and muscle and skeletal usage. The course will consist of a mix of styles incorporating elements of Ashtanga, Vinyasa Power Yoga, and Byron (AU) Yoga Centre Purna. If taken for academic credit, three short papers are required. Graded CR/NC. 0.5 credit or P.E. Fall 2017. Arrow.

Spring 2018. Arrow.

#### DANC 046. Dance Technique: Kathak

This course will introduce students to Indian Kathak dance, which is the source of the globalpop Bollywood. The class will be accompanied by a world music ensemble in residence specializing in classical Indian music. The class will follow an interactive playful approach called Sawal Jabab (call and response). Kathak dance has its roots in the Indo-Islamic traditions of courtly Indian culture. Internationally renowned artists will accompany the class on tabla (percussion), sarengi

(stringed instrument) and vocals. Open to all students. No prior knowledge of music or dance is required.

Graded CR/NC. 0.5 credit or P.E. Eligible for ISLM Fall 2017. Chakravorty.

# DANC 048. Dance Technique: Special Topics in Technique

Intensive 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. 0.5 credit or P.E.

# DANC 048A. Embodying Improvisation: a global cross-disciplinary discourse

This studio course will examine improvisation as a tool to create and expand performance potentials. We will explore the practice of improvisation from multiple global perspectives. The course is performance-centered, though we will interrogate practices that occur in a variety of settings, from the proscenium stage to the after-hours niteclub, from the "in front of your mirror when no one is looking" persona to the pop star stadium highlystaged persona, from the quotidian to the ecstatic. As a result, we will begin to ponder the presence of performance in all spaces. We will be informed by a number of dance and movement techniques (for example, contemporary improvisation through shifts of energetic mode, social partner dancessalsa, bachata, swing, contact improvisation, viral sensations-such as twerking), though students do not need to have a background in dance to participate in the class. We have all been accumulating movement information throughout our lives, and your personal accumulation of this information will be our raw material for investigation in class. This course is ideal for any students with interest in exploring performance (dance, theater, music, performance art), transformation, and the immediate moment. If taken for academic credit, concert attendance and one or two short papers are required. Graded CR/NC. 0.5 credit or P.E.

## DANC 049. Dance Performance: Repertory

The 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. A course in dance technique should be taken concurrently. 0.5 credit or P.E.

#### DANC 049B. Dance Performance Repertory: 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. Graded CR/NC. 0.5 credit or P.E.

Fall 2017. Davis.

#### DANC 049D. Dance Performance Repertory: 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. Performance required. Graded CR/NC.

0.5 credit or P.E. Fall 2017. Arrow.

#### DANC 049A. Dance Performance Repertory: Modern

This course will utilize current ideas in contemporary dance and J-Sette performance as a groundwork for the creation of a new work. J-Sette is a style of dance and performance emerging from majorette teams at historically Black colleges in the southern US. This style is rigorously percussive and densely sensual in its movement. The course will be performance-centered, and will interrogate practices that occur in a variety of settings - from the proscenium stage to the afterhours niteclub, from the "in front of your mirror when no one is looking" persona to the pop star stadium highly-staged persona, from the quotidian to the ecstatic. J-Sette's call-and-response choreographic structure will allow us to explore unity, interpretation, appropriation, dissent, and disruption. As raw material, we will also call upon the movement information we have each been respectively accumulating throughout our lives. This course is ideal for any students with interest in exploring performance, and especially those interested in Black aesthetics embodiments. A technique class should be taken concurrently, and Modern III is highly recommended.

Graded CR/NC. 0.5 credit or P.E. Fall 2017. Poe.

#### DANC 049C. Dance Performance Repertory: 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.

Graded CR/NC. Prerequisite: DANC 043 or permission of the instructor. 0.5 credit or P.E. Eligible for BLST Spring 2018. Pettaway.

#### DANC 049E. Dance Performance Repertory: Ballet

During spring 2017 Ballet Repertory will follow the Antony Tudor Dance Studies curriculum. Students will learn and perform excerpts from Tudor's seminal ballet Dark Elegies (1937) set to Gustav Mahler's Kindertotenlieder. From tender moments of quiet devastation to careering bursts of rage, Tudor's "ballet requiem," expresses the raw emotion of a tight-knit community faced with the inexplicable loss of their beloved children. Students should be concurrently enrolled in a ballet technique class. Graded CR/NC.

Prerequisite: DANC 061 or instructor permission. 0.5 credit or P.E.

Spring 2018. Moss-Thorne.

#### DANC 049F. Dance Performance Repertory: Kathak

This is a moderate level technique course on Kathak. We will work on teen tala or metrical scale of sixteen beats to learn complex rhythmical structures called bols. The various patterns of bols such as tukra, tehai and paran will also be explored. The two aspects of Kathak technique nrtta (abstract movement) and nritya (expressive gestures) will be used for a final composition. The final composition will be presented in a scheduled student dance concert. Graded CR/NC. Prerequisite: DANC 046 or prior knowledge of any classical Indian dance forms. 0.5 credit or P.E. Eligible for ASIA Spring 2018. Chakravorty.

## DANC 049H. Dance Performance Repertory: Movement Theater Workshop

(Cross-listed as THEA 008) Prerequisite: THEA 001 or 002, any dance course 040 to 044, or consent of the instructor. Humanities. 1 credit.

#### DANC 049N. Dance Performance Repertory: Performance Improvisation: an interdisciplinary approach

(Cross-listed as MUSI 049C) This performance course will examine improvisation as a tool to create and expand performance potentials across art-forms and from multiple global perspectives. As dancers, musicians, artists, designers, writers, thinkers and performers we will practice collective improvisation and experiment with how our skills, ideas, instruments and technologies can mesh together, dancer as sound, musician as body, stagecraft as movement, ideas as images, inspiring new possibilities for unique live performance. Students do not need to have a background in dance or music to participate in the class. We have all been accumulating movement, sound, literary and visual information throughout our lives, and your personal accumulation of this information will be our raw material for investigation in class. This course is ideal for any students with interest in exploring performance, transformation, and the immediate moment. Graded CR/NC.

0.5 Credit or P.E. Spring 2018. Poe. Langabeer.

#### DANC 050. Dance Technique: Modern II

TENSION CONTINUUMS: This course is designed to refine skills and performance sensibilities in the area of Modern and Contemporary Dance techniques, specifically as they relate to tension, meta-tension, and sequentiality. Movement will be sourced from an array of USAmerican post-modern and social dance sources (i.e. release techniques, Cunningham, dancehall, etc.), as well as European contemporary dance sources (i.e. Countertechnique, Axis Syllabus, Flying Low). Our work will be in the service of defining techniques and values to equip our physical, mental, and emotional bodies with skills to be readily mobile, present, attentive and communicative. We will explore our bodies in dynamic alignment, moving toward an understanding of the infinities that exist inside and outside of our physical bodies. Ideally, the course will be a useful tool to ignite growth in students as learners, dancers, and performers. This class will also incorporate warm-up choreographies designed by dancer and anatomist Irene Dowd. Graded CR/NC. Prerequisite: DANC 040 or instructors permission. 0.5 credit or P.E. Fall 2017. Poe.

Spring 2018. Poe.

## DANC 051. Dance Technique: Ballet II

Intermediate-level course building on skills developed in Ballet I. Additional vocabulary and increased center work will be introduced with a focus on building stamina, increasing technical proficiency, and refining performance quality. If taken for academic credit, concert attendance, two short papers, and a vocabulary test are required.

Graded CR/NC.

Prerequisite: DANC 041 or instructor permission. 0.5 credit or P.E.

Fall 2017. Moss-Thorne.

Spring 2018. Moss-Thorne.

# DANC 052. Dance Technique: Pointe and Partnering

Course introducing or developing pointe technique and partnering skills, and improving overall strength and conditioning. Class includes barre work, center work, pointe technique, and basic partnering with a focus on artistry, musicality, strength, and stamina. Possible performance opportunity in the end of semester dance concert. If taken for academic credit, a short paper is required.

Graded CR/NC.

Prerequisite: Previous pointe work or instructor permission required. 0.5 credit or P.E. Fall 2017. Moss-Thorne.

Spring 2018. Moss-Thorne.

#### DANC 053. Dance Technique: African II

African dance II encourages experienced students to expand their understanding and technical execution of African dance forms. The course will use the Umfundalai technique along with other neo-traditional 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. Graded CR/NC.

Prerequisite: DANC 043 or permission of instructor. 0.5 credit or P.E. Eligible for BLST

Fall 2017. Pettaway. Spring 2018. Pettaway.

## DANC 060. Dance Technique: Modern III

Advanced intermediate level practice in technical movement skills in the modern dance idiom. These include but are not limited various modern dance forms, ballet, word dance and improvisation. If taken for academic credit, concert attendance and two short papers are required. Graded CR/NC. 0.5 credit or P.E.

## DANC 061. Dance Technique: Ballet III

Advanced-level course building on skills developed in Ballet II and requiring a strong background in ballet technique. Challenges students to grasp advanced movement sequences with a high level of technical proficiency and performance quality. If taken for academic credit, concert attendance and two short papers are required.

Graded CR/NC.

Prerequisite: DANC 051 or permission of instructor. 0.5 credit or P.E. Fall 2017. Moss-Thorne. Spring 2018. Sabee.

## 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. Graded CR/NC. Prerequisite: None and no experience in dance or music necessary. 0.5 credit or P.E. Eligible for BLST Spring 2018. Arrow.

## DANC 075. Special Topics in Dance

Available to students participating in the study abroad programs coordinated through Swarthmore. By arrangement. Prerequisite: DANC 004, DANC 011, and consent of the Director of Dance. Humanities. 1 credit. Fall 2017. Staff.

#### 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 meet with supervising faculty on a weekly basis and 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. Students with whom the student choreographer works and who commit to 3 hours rehearsal time weekly, may receive PE credit under DANC 011A Dance Production Practicum. The project culminates in a public performance. 1 credit.

Fall 2017. Staff. Spring 2018. 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 meet with a faculty supervisor weekly and present written reports to the faculty supervisor. Permission must be obtained from the program director and from the supervising faculty. 1 credit.

Fall 2017. Staff. Spring 2018. 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 advisor. The major part of the semester is spent conducting independent rehearsals in conjunction with weekly meetings under an advisor'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 advisor, 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.

Students with whom the choreographer works and who commit to 3 hours weekly, may receive PE credit under DANC 011A. Dance Production Practicum.

Prerequisite: Previous or concurrent enrollment in an advanced-level technique course or demonstration of advanced-level technique. 1 credit. Fall 2017. Staff.

Spring 2018. Staff.

#### DANC 095. Senior Thesis

Intended for senior majors or minors, the thesis is designed by the student in consultation with a dance faculty advisor. The major part of the semester is spent conducting independent research in conjunction with weekly tutorial meetings under an advisor'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 credits.

Fall 2017. Staff.

## DANC 096. Senior Thesis

Intended for senior majors or minors, the thesis is designed by the student in consultation with a dance faculty advisor. The major part of the semester is spent conducting independent research in conjunction with weekly tutorial meetings under an advisor'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.

Spring 2018. Staff.

# Peace and Conflict Studies

LEE SMITHEY (Sociology and Anthropology, Peace and Conflict Studies), Coordinator Anna Everetts (Administrative Assistant)

Committee: Sa'ed Atshan (Peace and Conflict Studies) Nanci Buiza (Spanish) Wendy E. Chmielewski (Peace Collection) Denise Crossan (Lang Professor for Social Change, Peace and Conflict Studies) Emily Paddon Rhoads (Political Science) Sangina Patnaik (English Literature) Ellen Ross (Religion) Krista Thomason (Philosophy) Dominic Tierney (Political Science) Andrew Ward (Psychology)

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 interdisciplinary 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 major or minor in Peace and Conflict Studies at Swarthmore will:

Understand factors shaping human conflict (including psychological, social, cultural, political, economic, biological, religious, and historical factors);

Analyze specific cases of conflict, including interpersonal, inter-group, interstate, and international disputes;

Examine theories and models of peacebuilding and reconciliation, and evaluate attempts to conduct, manage, resolve, or transform conflict nonviolently;

Investigate intersectionality; forms of oppression and injustice; and conflict, locally, globally, in the United States, and abroad;

Explore topics relevant to peace and conflict through fieldwork, internships, or other experiences outside the classroom;

Demonstrate the following skills: critical thinking, analysis, research, writing, communication, and teamwork.

## The Academic Program

Peace and Conflict Studies may be a special major or a minor subject in either the Course or the Honors Program. Introduction to Peace and Conflict Studies (PEAC 015) is required for majors and minors.

# Application Process Notes for the Special Major or the Minor

See the Peace and Conflict Studies Program website for guidelines and forms for applying for a

major or minor in Peace and Conflict Studies (http://www.swarthmore.edu/peacestudies).

Students who intend to major or minor in Peace and Conflict Studies should consult with the Program Coordinator, and submit a copy of their Sophomore Plan during the spring of the sophomore year. The Sophomore Plan should present a plan of study that satisfies the requirements, specifies the courses to count toward the special major or minor, shares the student's interest in Peace and Conflict Studies, and identifies how the program complements the student's academic goals. If a student is proposing to write a senior thesis to satisfy the Senior Comprehensive requirement, the student should specify a general thesis topic and a preference regarding thesis advisor. (The program will assign advisors.) All applications must be approved by the Peace and Conflict Studies Committee. The Sophomore Plan for students proposing an Honors special major or Honors minor in Peace and Conflict Studies should describe the proposed Honors preparation/s in terms of its/their suitability for examination and its/their contribution to the student's interests in Peace and Conflict Studies. When possible, students should obtain advance approval from faculty members who teach the courses or seminars that are to be included in an Honors preparation. If a preparation involves a thesis, the student should specify a provisional thesis topic and a thesis advisor. All applications must be approved by the Peace and Conflict Studies Committee.

Juniors or seniors proposing a course or Honors special major or minor in Peace and Conflict Studies should consult with the Program Coordinator and submit a revised Sophomore Plan.

## **Course Special Major**

A course special major in Peace and Conflict Studies consists of ten credits. Introduction to Peace and Conflict Studies (PEAC 015) is required and should be taken before the junior year if at all possible. During the senior year, all programs must include a comprehensive exercise that integrates work in the major (as is required for all department and program majors at Swarthmore). For most course special majors, this will consist of a onecredit thesis. Course students may complete a nonthesis comprehensive exercise with approval of the Peace and Conflict Studies Committee. No more than two courses counting toward the Peace and Conflict Studies major may overlap with courses counting toward the student's other major/minors.

Students who wish to propose a course special major should consult with the Program Coordinator in the early stages of selecting elective courses. Normally, the student who applies for a major in Peace and Conflict Studies will have completed (or be in the process of completing) two courses in Peace and Conflict Studies.

# Honors Special Major

An Honors special major in Peace and Conflict Studies consists of ten credits. Introduction to Peace and Conflict Studies (PEAC 015) is required and should be taken before the junior year if at all possible. During the senior year all programs must include a comprehensive exercise that integrates work in the special major. For most Honors special majors, this will consist of a two-credit Honors thesis. Any thesis must be multidisciplinary. Honors special majors may complete a non-thesis comprehensive exercise with approval of the Peace and Conflict Studies Committee. No more than two courses counting toward the Peace and Conflict Studies Honors major may overlap with courses counting toward the student's other major/minors.

The interdisciplinary Honors program for a special major in Peace and Conflict Studies consists of four related Honors preparations in Peace and Conflict Studies. Preparations will normally consist of a double-credit thesis, or a one-credit thesis and one related course; double-credit seminars; or a combination of two courses approved by the Peace and Conflict Studies Committee. All Honors preparations must be discussed with the Peace and Conflict Studies Coordinator and approved by the Peace and Conflict Studies Committee.

Applications for Honors special majors in Peace and Conflict Studies are considered on a case-bycase basis. Students who wish to propose an Honors special major should consult with the Program Coordinator in the early stages of selecting elective courses and Honors preparations. Normally, the student who applies for an Honors special major in Peace and Conflict Studies will have completed (or be in the process of completing) two courses in Peace and Conflict Studies.

## **Course Minor**

Students with any major, whether in course or in the Honors Program, may add a course minor in Peace and Conflict Studies. 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 at all 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. Students who intend to pursue a course minor in Peace and Conflict studies should consult with the Program Coordinator.

## **Honors Minor**

Students with any major in the Honors Program may choose an Honors minor in Peace and Conflict Studies. Normally, the student who applies for an Honors minor in Peace and Conflict Studies will have completed (or be in the process of completing) two courses in Peace and Conflict Studies.

An Honors 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 at all possible.

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 Honors minor preparation will generally consist of a seminar or a combination of two courses.

## **Off-Campus Study**

The Peace and Conflict Studies Program faculty enthusiastically support study abroad for majors and minors. A number of study abroad programs that are approved by the Off-Campus Study Office offer appropriate coursework. Students who enroll in PEAC 053: Israeli-Palestinian Conflict may have the opportunity to participate in the course attachment that provides a study tour to Israel/Palestine during the winter break.

Normally up to two courses taken outside of Swarthmore may be counted toward the minor, and up to three courses taken outside of Swarthmore College may be counted toward the major, subject to the approval of the Peace and Conflict Studies Program Coordinator.

## **Research and Service-Learning**

#### Internships

Student programs can include an internship or fieldwork component. 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 Program majors and minors are encouraged to apply for funding from the Lippincott Fund, 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 is 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

http://blogs.swarthmore.edu/pcsstudents/.

## Peace and Conflict Studies Courses

The following courses may be applied toward a minor or special major 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 majors and minors. Courses 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 major or minor in Peace and Conflict Studies at Swarthmore. Student programs may, subject to prior approval by the Committee, also include courses offered at the University of Pennsylvania and courses taken abroad.

# PEAC 003. Crisis Resolution in the Middle East

This introductory course is designed for students without a background in Peace and Conflict Studies or Middle East Studies. Central questions include: How do we define crises in the contemporary Middle East/North Africa region? How does the nature of the crisis (political, economic, social, and environmental) impact communities differently? How are grassroots actors, civil society institutions, states, and international organizations responding to these challenges in their nation-states and across borders? What transnational networks of solidarity have linked the Middle East to other regions across the globe? For instance, this course will examine the consequences of environmental degradation and escalating food prices on conflict and instability across the region. We will trace the origins of autocratic regimes in the Middle East and social movements calling for rights and reforms on one hand and the rise of fundamentalism and terrorism (i.e. Al-Oaeda and ISIS). Furthermore, the course will explore crises such as contemporary Syria, and how local and international interventions aimed at reversing the marginalization of-and threats against-minority populations (ethnic, religious, gender, sexuality, ability) have come to constitute a realm of crisis management. By understanding crises through the theoretical prism of human security frameworks, we will ascertain the prospects for democratization, development, pluralism, and peace in the region. Non-distribution. 1 credit Eligible for PEAC, POLS, ISLM

Spring 2018. Atshan.

#### PEAC 015. Introduction to Peace and Conflict Studies

In Introduction to Peace and Conflict Studies, we learn that peace and conflict are not mutually exclusive. To paraphrase Conrad Brunk, the goal of peace and conflict studies is to better understand conflict in order to find nonviolent ways of turning unjust relationships into more just ones. We examine both the prevalence of coercive and non-peaceful means of conducting conflict as well as the development of nonviolent alternatives. locally and globally, through institutions and at the grassroots. The latter include nonviolent collective action, mediation, peacekeeping, and conflict transformation work. Several theoretical and philosophical lenses will be used to explore cultural and psychological dispositions, conflict in human relations, and conceptualizations of peace. The course will take an interdisciplinary approach with significant contributions from the social sciences. U.S.-based social justice movements, such as the struggle for racial equality, and global movements, such as nonviolent activism in Israel/Palestine, and the struggle for climate justice around the world, will serve as case studies. Social Sciences.

1 credit. Eligible for PEAC Fall 2017. Atshan.

#### PEAC 025B. Transforming Intractable Conflict

#### (Cross-listed as SOCI 025B)

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. Social sciences. Eligible for PEAC, SOCI

#### PEAC 039. Social Entrepreneurship for Social Change

Social entrepreneurship is concerned with entrepreneurial responses to demanding and unmet social needs (not adequately served by market or by state). Through in-depth case analysis, we will consider the context of social entrepreneurial activity (such as the peace and reconciliation movement in Northern Ireland), the individuals who become engaged in impacting social need (locally, nationally and globally), along with organizing and undertaking activities and addressing needs effectively. Limited to 15 students.

Non-distribution. 1 credit. Fall 2017. Crossan.

# PEAC 043. Gender, Sexuality, and Social Change

How has gender emerged as an analytical category? How has sexuality emerged as an analytical category? What role did discourses surrounding gender and sexuality play in the context of Western colonialism in the Global South historically as well as in the context of Western imperialism in the Global South today? How are gender and sexuality-based liberation understood differently around the world? What global social movements have surfaced to codify rights for women and LGBTQ populations? How has the global human rights apparatus shaped the experiences of women and queer communities? What is the relationship between gender and masculinity? What are the promises and limits of homonationalism and pinkwashing as theoretical frameworks in our understanding of LGBT rights discourses? When considering the relationship between faith and homosexuality, how are religious actors queering theology? How do we define social change with such attention to gender and sexuality? Social Sciences.

Writing course.

1 credit.

Eligible for PEAC, GSST, INTP Spring 2018. Atshan.

## PEAC 049. Be the Change: Social Entrepreneurship in Principle and Practice

Amidst market implosions, human conflict, environmental crises, and on-going demise of the welfare state, the need for new, durable organizational forms, committed to social change, is clear. Social entrepreneurship offers a unique model for creative conflict transformation and community problem solving. Using business practices, social enterprises seek to redress social and environmental concerns while generating revenue. Students will learn about the manifestation of social entrepreneurship principles and practice in non-profit, for-profit, and hybrid organizations. Then students will draft plans for their own social enterprise, thereby garnering a deeper understanding of social enterprise as organizational forms, while also embarking on a journey to explore their own potential as social entrepreneurs. Class limited to 15 students. Non-distribution.

1 credit.

Spring 2018. Crossan.

#### PEAC 053. Israeli-Palestinian Conflict

This course will examine the historical underpinnings of the Israeli-Palestinian conflict and how they have shaped the contemporary context in Israel/Palestine. We will approach this from a demography and population-studies framework in order to understand the trajectories and heterogeneity of Israeli and Palestinian societies and politics. For instance, how has the relationship between race and period of migration to Israel impacted Ashkenazi and Mizrahi Israeli sub-populations differently? What explains divergent voting patterns between Palestinian Christians and Muslims over time? How can we measure inequality between Israeli settlers and Palestinian natives in the West Bank in the present? The course will also synthesize competing theoretical paradigms that account for the enduring nature of this conflict. This includesbut is not limited to-the scholarly contributions of realist political scientists, U.S. foreign policy experts, social movements theorists, security sector reformers, human rights advocates. international law experts, and negotiations and conflict resolution practitioners. Class capped at 35 students.

Social Sciences. 1 credit. Eligible for PEAC, ISLM, POLS. Fall 2017. Atshan.

# PEAC 055. Climate Disruption, Conflict, and Peacemaking

(Cross-listed as ENVS 066, SOAN 055C) The course will examine several ways in which climate change is a driving force of violent and nonviolent conflict and creates opportunities for peacemaking and social justice. Already, climate change has been identified by the U.S. military as a threat to national security, offering a new rationale for expanding the military industrial complex. Demands on scarce resources generate and exacerbate regional conflicts and drive mass movements of refugees. Behind these dramatic manifestations of climate stress lie extensive corporate and national interests and hegemonic silences that emerging conflicts often reveal. Conflict also brings new opportunities for peacebuilding, cooperation, and conflict resolution. Climate crises have renewed and expanded local and global movements for environmental justice and protection, many of which have historical connections with the peace movement. In support of the college's carbon charge initiative, we will dedicate part of the course to understanding what constitutes the social cost of carbon and how it is represented in carbon pricing, particularly with respect to increasing frequencies of armed conflict and extension of the military industrial complex. Social sciences.

1 credit. Eligible for PEAC, SOCI, ENVS Fall 2017. Smithey.

## PEAC 070. Research Internship/Fieldwork

Credit hours to be arranged with the coordinator. Non-distribution.

#### PEAC 071B. Research Seminar: Strategy and Nonviolent Struggle

(Cross-listed as POLS 081, SOCI 071B) This research seminar involves working with The Global Nonviolent Action Database built at Swarthmore College. This website is accessed by activists and scholars worldwide. The database contains crucial information on campaigns for human rights, democracy, environmental sustainability, economic justice, national/ethnic identity, and peace. Students will investigate a series of research cases and write them up in two ways: within a template of fields (the database proper) and also as a narrative describing the unfolding struggle. Strategic implications will be drawn from theory and from what the group is learning from the documented cases of wins and losses experienced by people's struggles. Non-distribution.

Writing course. 1 credit. Eligible for PEAC

#### PEAC 077. Gun Violence Prevention: Peace Studies and Action

The course aims to bridge gaps between peace research, theory, and implementation by encouraging students to move between each as we examine the problem of gun violence, study effective interventions, consider nonviolent ways of conducting conflict, and assess the challenges of developing and sustaining effective peace work. While developing a nuanced understanding of the problem of gun violence, we also aim to get close to the experience of peacemakers and victims by consulting with and visiting local organizations collaborate with a local gun violence prevention organization to contribute to the work of the organization and develop our own analytical and research skills. Discussion over course readings will also be emphasized. This course will encourage collaboration and active participation in delivering the content of the course. Prerequisite: PEAC 015. Non-distribution

1 credit. Eligible for PEAC Fall 2017. Smithey.

## PEAC 090. Thesis

Credit hours to be arranged with the coordinator. Writing course. Fall 2017. Staff.

## PEAC 093. Directed Reading

1 credit. Fall 2017. Staff.

## PEAC 103. Humanitarianism: Anthropological Approaches

(Cross-listed as ANTH 103) This honors seminar will introduce students to the most salient theoretical debates among anthropologists on humanitarian intervention around the world. We will also examine a range of case studies, from the birth of Western Christian humanitarian missions in colonial contexts to humanitarian interventions (e.g. military, foodbased assistance, natural disaster relief, postconflict reconstruction) today. The geographic scope of this seminar will encompass North America, South America, the Caribbean, Europe, sub-Saharan Africa, the Middle East/North Africa, East Asia, and South Asia. We will consider, for instance, how anthropologists have examined relief efforts in the wake of Hurricane Katrina in New Orleans. What social science scholarship has been produced on mental health interventions after political and natural crises in Haiti? How are victims of torture at the hands of the Indian military supported by international organizations in Kashmir? What is the nature of global Islamic humanitarianism today? How are local national staff employed by international organizations shaping humanitarian approaches to gender-based violence in Colombia? These are among the many questions we will address over the course of the semester

Honors seminar. Non-distribution. 2 credits. Eligible for PEAC

#### PEAC 135 Social Movements and Nonviolent Power

(Cross-listed as SOCI 135)

In this two-credit Honors seminar, we will study the global proliferation of the strategic use of nonviolent tactics and methods and investigate the power in social relations upon which collective nonviolent action capitalizes. We will also address sociological literature on the emergence. maintenance, and impact of social movements. For examples of the kinds of case studies covered in this seminar. visit http://nvdatabase.swarthmore.edu Honors seminar. Non-distribution. 2 credits.

Eligible for PEAC

## PEAC 180. Senior Honors Thesis

2 credits. Fall 2017. Staff.

The following courses may be counted for credit in the Peace and Conflict Program. Descriptions of the courses can be found in each department's course listing in this catalog.

## Anthropology

ANTH 103. Humanitarianism: Anthropological Approaches

## Arabic

ARAB 025. War in Arab Literature and Cinema

## Dance

DANC 004 Arts in Action

## Economics

ECON 012. Game Theory and Strategic Behavior

ECON 051. International Trade and Finance\*

ECON 081. Economic Development\*

ECON 082. Political Economy of Africa

ECON 151. International Economics\*

## **English Literature**

ENGL 009J. First-Year Seminar: Revolution and Revolt

ENGL 083. On Violence

#### **Environmental Studies**

ENVS 035. Environmental Justice: Theory and Action

## French

FREN 041. Guerre et paix dans la littérature française

## History

HIST 027. Living with Total War: Europe, 1914-1919

HIST 037. History and Memory: Perspectives on the Holocaust

HIST 090I. Technologies of the Cold War in Africa

HIST 067. Digging Through the National Security Archive: South American "Dirty Wars" and the United States' Involvement

#### Literatures

LITR 025A. War in Arab Literature and Cinema LITR 083J. War and Postwar in Japanese Culture Music MUSI 008. Music, Politics, and Society in the Modern Middle East: 1922-2016 MUSI 105. Music and War Philosophy PHIL 011. Moral Philosophy\* PHIL 021. Social and Political Philosophy\* PHIL 051. Human Rights and Atrocities Political Science POLS 004. International Politics POLS 013. Political Psychology and Moral Engagement\* POLS 019. Democratic Theory and Practice POLS 043B. Environmental Justice: Theory and Action POLS 061. American Foreign Policy POLS 062. The Politics and Practice of Humanitarianism POLS 067. Great Power Rivalry in the 21st Century POLS 069. Globalization: Politics, Economics, Culture and the Environment POLS 075. International Politics: Special Topics: The Causes of War POLS 081. Strategy and Nonviolent Struggle POLS 112. Democratic Theory and Civic Engagement in America POLS 113. International Politics: War, Peace, and Security Psychology PSYC 035. Social Psychology\* Religion RELG 001C. Religion and Terror in an Age of Hope and Fear RELG 005. World Religions\* RELG 022. Religion and Ecology RELG 023. Quakers Past and Present\* RELG 039. Good and Evil RELG 100. Holy War, Martyrdom, and Suicide in Christianity, Judaism, and Islam Sociology SOCI 010J. War, Sport, and the Construction of Masculine Identity SOCI 010T. 1968 and the Origins of New Left: Social Theory, War and Student Revolt

SOCI 025B. Transforming Intractable Conflict SOCI 035C. Social Movements and Nonviolent Power

# Peace and Conflict Studies

SOCI 071B. Strategy and Nonviolent Struggle (M) Spanish

SPAN 054. Contemporary Cuba: Utopia, Revolution and Reform

SPAN 060. Memoria e identidad

SPAN 067. La guerra civil en la literatura y el cine SPAN 084. México, 1968: La violencia de ayer y hoy

SPAN 088. Pasados desgarradores: trauma y afecto en la literatura centroamericana de posguerra

\* eligible for a Peace and Conflict Studies major or 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.

Please consult www.swarthmore.edu/peacestudies for updates, descriptions, and scheduling.

ALAN R. BAKER, Professor PETER BAUMANN, Professor RICHARD ELDRIDGE, Professor<sup>3</sup> TAMSIN LORRAINE, Professor and Chair CHARLES RAFF, Professor GRACE M. LEDBETTER, Associate Professor<sup>2</sup> KRISTA THOMASON, Assistant Professor DONNA MUCHA, Administrative Assistant

<sup>2</sup> Absent on leave, spring 2018.

3 Absent on leave, 2017-2018.

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 Post-Modernism.

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 (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 (First-Year Seminar 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.

# 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.

Transfer students will be deferred until they have obtained at least 1 philosophy credit from Swarthmore.

Students who are deferred may apply again after addressing the reason(s) for being deferred.

## **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 add/drop period 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 or more 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 or more of the following areas: Moral Philosophy, Social and Political Philosophy, Philosophy of Law, Feminism, Aesthetics.

Note: With the exception of Logic (PHIL 012) introductory level courses and First Year Seminars (PHIL 001-010) do not count toward the distribution requirements.

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 10th week of the fall term. The faculty of the Philosophy Department will then set questions and specify additional readings (1-3 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 five 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.

Philosophy students changing their program from honors to course (or course to honors) must do so by the end of the add/drop period of the fall term of senior year.

#### 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 well-integrated 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).

## **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.

## Deadlines

Students wishing to add a major or minor in Philosophy must do so by the end of the add/drop period of the fall term of the 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 the senior year.

Philosophy honors students must declare their honors preparations by the end of the add/drop period of the fall term of senior year.

Philosophy students wishing to drop an honors major or minor must do so by the end of the add/drop period of the fall term of the senior year.

Philosophy students wishing to drop a course major or minor after the add/drop period of the fall term of the senior year should speak to the chair of the department.

## **Philosophy 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.

Humanities. 1 credit.

#### PHIL 001A. Introduction to Philosophy: 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? What can we know? What is knowledge? Are we just material beings or do we possess an immaterial (and, perhaps immortal) soul? What is consciousness and what is it like to be a bat? 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. Humanities. Writing course. 1 credit. Spring 2018. Baumann.

#### PHIL 001B. Introduction to Philosophy: Criticism & Culture

On how some major philosophers (Plato, Descartes, Marx, with some attention to Hegel and Nietzsche) have criticized forms of social and personal life and argued against the grains of their cultures in favor of life otherwise. Their work will be continuously compared with creative work on problems of human life by some major filmmakers (Herzog, Capra, Hawks).

Humanities. Writing course.

1 credit.

#### PHIL 001C. Introduction to Philosophy: Truth and Desire

How can or should we distinguish what is true about life from what we want from life? How can or should the pursuit of truth relate to our passions, our self-interests, the machinations of social power, and our highest aspirations as human beings? How do unquestioned assumptions inform what we perceive, believe, and desire, and how might investigating these assumptions shift or affirm our perspectives and instigate new approaches, or give fresh impetus to current approaches, to the problems we face? In this course we will take a chronological look at the distinct world-views of philosophers like Plato, Descartes, and Nietzsche, and then look at the perspectives of some contemporary theorists, in order to ask ourselves questions about when and how we know something to be true, what it is that we desire and why, and how revealing the assumptions we take for granted might affect our perceptions of both. Humanities.

Writing course. 1 credit. Fall 2017. Lorraine.

#### PHIL 001D. Introduction to Philosophy: 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. Humanities.

Writing course.

1 credit. Fall 2017. Thomason.

# PHIL 001E. Introduction to Philosophy: Paradox and Rationality

People claim to know lots of things - that the Earth is round; that 2 plus 2 equals 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. In the latter part of the course we shall focus on metaphysical and ethical issues connected with the concept of person, including the mind-body relation, consciousness, personal identity, and free will.

Humanities.

1 credit. Spring 2018. Baker.

## PHIL 001F. Introduction to Philosophy: Classical and Contemporary Problems

Introduction to the problems of philosophy through classical and current readings by, among others: Plato, Aristotle, Aquinas, Descartes, Kant, Mill, Nietzsche, Nagel, Korsgaard, Lewis '62. Topics include: God and Evil, Knowledge and Belief, Life and Thought, Morality and Interests, Taste and Aesthetic Judgment, Personal and Bodily Identity. Humanities 1 credit.

#### 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?

Humanities. Writing course. 1 credit. Fall 2017. Baumann

# PHIL 004. Introduction to Philosophy, Politics, and Economics

Oxford University initiated an interdisciplinary program in PPE in the 1920s. Since then, several dozen colleges and universities throughout the world have established diverse versions of PPE.

# Philosophy

However different, all share the aim of providing an interdisciplinary education of integrating historical and contemporary thought prominent in philosophy, politic theory, and economics. This course is a gateway to a minor in PPE\*. It is open to all students, without prerequisite and whether or not they wish to pursue a minor in the field. Priority, however, will be given to first and second year students.

The course will introduce you to some leading thinkers of the past relevant to PPE (e.g., Hobbes, Locke, Hume, Kant, Smith, Marx, Mill, Hobhouse), those of the more recent past (e.g., Keynes, Hayek, Friedman, and Rawls) as well as those of today (e.g., Sen, Kahneman, Hausman, MacIntyre, Raz, Schwartz). Methodological matters will be explored (e.g., rational choice, Prisoner Dilemmas, cost-benefit/costoffectiones, methodological

effectiveness, methodological

individualism/holism) as well as normative matters that involve freedom, justice, and equality as these occur in political and legal contexts, and some of their implications for public policy.

Note: The Faculty has not yet approved a minor in PPE. If it does, this course will be approved as part of the minor. In any case, it counts as a first course in Philosophy.

Humanities. 1 credit.

Fall 2017. Oberdiek.

#### PHIL 010. First-Year Seminar: Questions of Inquiry

Classical, modern, and contemporary philosophical questions in science, morality, religion, and in philosophy itself approached through readings that defend and apply the theories of inquiry of Socrates, Plato, Aristotle, Descartes, Locke and others. Humanities. Writing course. 1 credit.

Fall 2017. Raff.

## PHIL 011. Moral Philosophy

'What should I do?' This question is as old as philosophy itself. Just as it is one of the oldest and most complex philosophical puzzles, it also frequently occupies the minds of individuals in their day-to-day lives. In this course, we will focus on both ways of approaching this question. From the philosophical direction, we will discuss the ways in which philosophers have attempted to understand and describe our moral beliefs and commitments. From the practical direction, we will ask ourselves what it means to ascribe to these moral theories and how we might be able to actually live them.

PEAC eligible only when taught by PHIL instructor K. Thomason. Eligible with arranged assignment and by obtaining instructor and program coordinator written approval before drop/add period ends.

Prerequisite: First- and second-year students must

complete one course in PHIL 001-PHIL 010, or PHIL 012A, before enrolling in this course. Humanities. 1 credit. Fall 2017. 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 aslo be examined. Logic is required for all philosophy majors. Humanities.

Eligible for COGS

## PHIL 012A. 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 different areas of philosophy, including metaphysics, epistemology, and ethics, will also be examined.

Recommended for students with a strong mathematics or computer science background, and for non-freshmen who have taken no prior philosophy courses.

Humanities. 1 credit.

Eligible for COGS Fall 2017. Baker.

## PHIL 012B. Logic

An introduction to the principles of deductive logic with equal emphasis on the syntactic and semantic aspects of logical systems. This course will cover the same amount of formal logic as PHIL 012A, but with less philosophical material, so that more time can be devoted to mastering the technical and formal apparatus.

Prerequisite: At least one introductory course in philosophy. Freshmen may take PHIL 012.02 without meeting this Prerequisite, and are encouraged to do so if they intend to major or minor in philosophy.

Required of all philosophy majors, unless they have taken PHIL 012 previously. Humanities. 1 credit. Eligible for COGS

Fall 2017. Baker.

## PHIL 013. Modern Philosophy

Seventeenth- and 18th-century theories of knowledge, morals, and metaphysics studied in philosophical masterpieces by Descartes, Spinoza, Leibniz, Locke, Berkeley, Hume, and Kant. Prerequisite: First- and second-year students must complete one course in PHIL 001-PHIL 010, or PHIL 012A, before enrolling in this course. Humanities. 1 credit. Spring 2018. Raff.

## PHIL 016. Philosophy of Religion

(Cross-listed as RELG 015B)

Is there such thing as religion--definable and singular? If there is no agreement, how can we have a philosophy of it? Departing from this predicament, this course will first examine how "religion" has been construed over time and in a variety of contexts. After touching upon various Western medieval endeavors to "prove" God's existence, we'll attend to the nineteenth century and Friedrich Nietzsche's On the Genealogy of Morals . We will consider the ways in which Nietzsche employs Hegel's master/slave dialectic to identify the psychological state of ressentiment as a key factor in the birth and character of Jewish/Christian morality. Also, William James's Varieties of Religious Experience (1902) will be read as a groundbreaking study in the psychological states of religious consciousness. We will also draw Western notions of the "ineffability" of God-especially as appearing in the Pseudo-Dionysian tradition of the via negativainto conversation with the second century (CE) Buddhist philosophy of Nagarjuna and his influences on the Zen/Ch'an tradition. Finally, we'll explore recent reimaginings of religion in light of postmodern themes such as nihilism and the death of God. Readings include: Anselm of Canterbury, Friedrich Nietzsche, William James, Teresa of Avila, Mircea Eliade, Rene Girard, Gianni Vattimo, Pseudo-Dionysius, Nagarjuna, and Shunyru Suzuki.

Prerequisite: First- and second-year students must complete one course in PHIL 001-PHIL 010, or PHIL 012A, before enrolling in this course. Humanities. 1 credit.

Eligible for INTP, CBL

#### PHIL 018. Philosophy of Science

See PHIL 119

Prerequisite: First- and second-year students must complete one course in PHIL 001-PHIL 010, or PHIL 012A, before enrolling in this course. Humanities. 1 credit.

#### PHIL 019. Philosophy and Literature and Film

This course will focus on two interrelated issues 1) the natures of literature and film, and 2) their value for human life. Close attention will be paid to the formal, structural, thematic, aesthetic, and material features of works of literary and film art. Prerequisite: First- and second-year students must complete one course in PHIL 001-PHIL 010, or PHIL 012A, before enrolling in this course. Humanities. 1 credit.

Eligible for INTP, FMST

## PHIL 020. Plato and His Modern Readers

(Cross-listed as CLAS 020) Plato's dialogues are complex works that require literary as well as philosophical analysis. While our primary aim will be to develop interpretations of the dialogues themselves, we will also view Plato through the lens of various modern and postmodern interpreters (e.g., Nietzsche, Heidegger, Derrida, Jung, Foucault, Irigaray, Rorty, Lacan, Nussbaum, Vlastos) Prerequisite: First- and second-year students must complete one course in PHIL 001-PHIL 010, or PHIL 012A, before enrolling in this course. Humanities. Writing course. 1 credit.

Eligible for CLST, INTP

#### PHIL 021. Social and Political Philosophy

What makes a society just? What are the principles of a just distribution of goods and burdens in a society? Is there a basis for state authority? If yes, what is it? If not, why not? Can punishment, especially by the state, be justified? How? Do politicians sometimes have to act immorally and "dirthy their hands"? Is everything in principle up for sale or are there moral limits to markets? This course focuses on the above core questions of political philosophy.

PEAC eligible only when taught by PHIL instructor K. Thomason. Eligible with arranged assignment and by obtaining instructor and program coordinator written approval before drop/add period ends.

Prerequisite: First- and second-year students must complete one course in PHIL 001-PHIL 010, or PHIL 012A, before enrolling in this course. Humanities. 1 credit.

#### PHIL 023. Metaphysics

Metaphysics addresses the most general question about how things are. The goal is understanding the structure of reality: What kinds of entities exist? What are their most fundamental and general features and relations? Specific metaphysical issues raise traditional questions about God, Freedom, and Immortality and contemporary issues about causation, possibility, and personal identity. Metaphysicians with seminal opposing positions include the pre-Socratic Parmenides and Heraclitus (change): Plato and Aristotle (reality), Locke and Leibniz (people), and our contemporaries Saul Kripke and David Lewis'62 (possibility). Prerequisite: First- and second-year students must complete one course in PHIL 001-PHIL 010, or PHIL 012A, before enrolling in this course. Humanities.

1 credit.

Fall 2017. Raff.

#### PHIL 024. Theory of Knowledge

What is knowledge? Can we have it? If not, why not? If yes, how? Can we have a priori, "armchair" knowledge? Is cognition essentially social? What, if anything, is problematic about inductive inferences? How do our different senses relate to each other? In what consists the value of knowledge (if any)? We will discuss classic and contemporary answers to such questions. Prerequisite: First- and second-year students must complete one course in PHIL 001-PHIL 010, or PHIL 012A, before enrolling in this course. Humanities. Writing course. 1 credit. Eligible for COGS

## PHIL 028. Philosophy of Language

(Cross-listed as LING 028)

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 the "classics" Frege, Russell and Wittgenstein and leading up to authors like Austin, Carnap, Grice, Kripke, Putnam, Quine and Strawson.

Prerequisite: First- and second-year students must complete one course in PHIL 001-PHIL 010, or PHIL 012A, before enrolling in this course. Humanities. l credit.

Eligible for COGS.

#### 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. The focus of attention will be various historicphilosophical accounts of the meanings and functions of such musical works in culture. Some attention will be paid both to 20th-century developments (serialism, modal composition, John Cage, New Romanticism, etc.) and to contemporary popular music. Major theorists of music who will be covered include Leonard Meyer, Carl Dahlhaus, Theodor Adorno, Susan McClary, Rose Rosengard, Subotnik, Lawrence Krammer, and Jacques Attali. Prerequisite: First- and second-year students must complete one course in PHIL 001-PHIL 010, or PHIL 012A, before enrolling in this course. Humanities. 1 credit.

#### 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 012A or PHIL 012B Humanities. 1 credit.

Eligible for COGS

#### PHIL 032. History of Analytic Philosophy

Formative predecessors of contemporary philosophy in this chronological treatment include the early 20th century philosophical revolutionaries G. E. Moore, Bertrand Russell, Gottlob Frege, and Ludwig Wittgenstein. The Logical Positivism of Carnap and Quine and the Ordinary Language philosophy of Ryle and Austin, together with the later philosophy of Wittgenstein, dominated the 20th century's middle third. The last years of the 20th century philosophy feature the revival of traditional metaphysical issues, newly informed by 20th century developments, in works by, among others, Saul Kripke and David Lewis '62. Prerequisite: First- and second-year students must complete one course in PHIL 001-010, or PHIL 012, before enrolling in this course. Humanities.

1 credit.

#### 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.

# Philosophy

Prerequisite: First- and second-year students must complete one course in PHIL 001-PHIL 010, or PHIL 012A, before enrolling in this course. Humanities. 1 credit. Eligible for ENVS

Spring 2018. Baumann, Lorraine, Thomason.

#### 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. Prerequisite: First- and second-year students must complete one course in PHIL 001-PHIL 010, or PHIL 012A, before enrolling in this course. Humanities. 1 credit. Eligible for INTP

Spring 2018. Lorraine.

#### PHIL 040. Semantics

(Cross-listed as LING 040) Note: This is not a writing course for PHIL. Prerequisite: First- and second-year students must complete one course in PHIL 001-PHIL 010, or PHIL 012A, before enrolling in this course. Humanities. 1 credit. Fall 2017. Staff. Spring 2018. Staff.

#### 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. Prerequisite: First- and second-year students must complete one course in PHIL 001-PHIL 010, or PHIL 012A, before enrolling in this course. Humanities. 1 credit. Eligible for INTP

#### PHIL 051. Human Rights and Atrocities

Are there such things as human rights? If so, where do they come from and how are they best conceived? What should we do when they are violated? This course examines the theoretical underpinnings of human rights. To try to understand and answer these questions, we will read traditional philosophical arguments and accounts of human rights in addition to philosophical examinations of atrocities like genocide. We will then use the philosophical works to examine specific historical examples of human rights violations such as genocide, war rape, and apartheid.

Prerequisite: First- and second-year students must complete one course in PHIL 001-PHIL 010, or PHIL 012A, before enrolling in this course. Humanities. 1 credit.

Eligible for PEAC

## PHIL 052. Bioethics

Advances in medicine and biological research have no doubt contributed both to the body of human knowledge and to the advances of modern life. But these great strides are accompanied by serious ethical questions and those questions are the topic of this course. We will approach issues in bioethics from two perspectives. First, we will grapple with the ethical issues themselves, such as the use of human subjects in experimentation, physician-assisted suicide, and the rights of reproduction (among many others). Second, we will examine these issues at the level of policy: what can doctors, patients, researchers, and lawmakers actually do about any of these issues and how do we go about making those hard choices?

Prerequisite: First- and second-year students must complete one course in PHIL 001-PHIL 010, or PHIL 012A, before enrolling in this course. Humanities.

1 credit.

Fall 2017. Thomason.

## PHIL 055. Philosophy of Law

In this course, we will examine some of the major theories of law: what exactly is law and why do we have to follow it? We then move to specific questions about criminal law, punishment, and civil disobedience. We conclude with a discussion of issues in international law and just war theory. Prerequisite: First- and second-year students must complete one course in PHIL 001-PHIL 010, or PHIL 012A, before enrolling in this course. Humanities.

1 credit.

## PHIL 069. Phenomenology-Then and Now

In this course we will look at classic figures in phenomenology like Husserl, Heidegger, and Merleau-Ponty, along with contemporary theorists, in order to investigate the kind of light descriptions of the lived experience of specifically human bodies in all their variations might shed on questions we face in the 21st century about what it means to be human,(as opposed to, say, nonhuman life or artificial intelligence), embodied cognition, interdependent living and environmental change.

Prerequisite: First- and second-year students must complete one course in PHIL 001-PHIL 010, or PHIL 012A, before enrolling in this course. Humanities. Writing course. 1 credit. Eligible for INTP

## 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.

Prerequisite: First- and second-year students must complete one course in PHIL 001-PHIL 010, or PHIL 012A, before enrolling in this course. Humanities.

Writing course. 1 credit.

## PHIL 086. Philosophy of Mind

See PHIL 118

Prerequisite: First- and second-year students must complete one course in PHIL 001-PHIL 010, or PHIL 012A, before enrolling in this course. Humanities. 1 credit.

Eligible for COGS

#### PHIL 089. Philosophy and Science Fiction: Time and Consciousness

In a world where technology and our relations to our surroundings are rapidly changing, time itself can appear to be speeding up. In this course, we will consider different conceptions of time and their implications for how we experience our world, the parameters of reality, and the future of the human race. We will read and watch science fiction classics as well as more recent work alongside an exploration of philosophical texts on time, reality, consciousness, and the human subject in order to stretch our minds about what is and what could be for humanity in a time of change. Prerequisite: First- and second-year students must complete one course in PHIL 001-PHIL 010, or PHIL 012A, before enrolling in this course. Humanities. 1 credit.

## PHIL 093. Directed Reading

Requires approval of a department faculty member sponsor. 0.5-1 credit. Fall 2017. Staff. Spring 2018. Staff.

## PHIL 096. Senior Course Thesis

Requires approval of a department faculty member sponsor and the department. Humanities. 1 credit. Spring 2018. Staff.

## PHIL 099. Senior Course Study

Required for all philosophy course majors. Humanities. 1 credit. Spring 2018. Staff.

#### Seminars

#### PHIL 101. Moral Philosophy

This seminar focuses on one of the age-old questions in philosophy: what is the right thing to do? We start with an in-depth look at some of the major historical figures in moral philosophy: Aristotle, Kant, Hume, and Mill. We then introduce critiques and alternatives to these major theories (from feminist ethics) and critiques of moral philosophy as a whole (from Nietzsche). We then move into contemporary discussions of responsibility, practical reason, moral emotions, and moral skepticism. Humanities.

2 credits.

Spring 2018. Thomason.

## PHIL 102. Ancient Philosophy

For the Greeks and Romans, philosophy was a way of life and not merely an academic discipline. With this perspective in mind, we will examine topics in ethics, metaphysics, aesthetics, epistemology, and theology through close readings of Plato's *Republic* and Aristotle's *Nichomachean Ethics*. We will also look more briefly at the thought of the Presocratics and the Stoics. Humanities. 2 credits. Eligible for CLST Fall 2017. Ledbetter.

#### PHIL 103. Selected Modern Philosophers

One or more 17th-or 18th-century philosophers selected for systematic or comparative study. Spring 2017: Descartes Humanities. 2 credits.

## PHIL 104. Topics in Metaphysics

One or more central topics in contemporary metaphysics selected for sustained study: include: freedom, causation, universals, categories, necessity, identity of things and people, fiction, God.

Humanities. 2 credits.

#### 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. Humanities. 2 credits. Eligible for INTP

## 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. Humanities. 2 credits.

Eligible for COGS Fall 2017. Baumann.

## PHIL 114. Nineteenth-Century Philosophy

A survey and assessment of the understanding of knowledge, morality, God's existence, and freedom as historical achievements on the parts of Kant, Fichte, Hegel, Feuerbach, Marx, and Nietzsche. Humanities. 2 credits. Eligible for INTP

## 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. Humanities.

2 credits. Eligible for COGS

## 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. Humanities.

2 credits. Eligible for COGS

## 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. Humanities. 2 credits. Spring 2018. Baker.

## PHIL 121. Social and Political Philosophy

This seminar deals with basic questions in social and political philosophy: What is a good state or a good government? How does politics relate to ideas of a good life? Is there an inescapable tension between politics and morality? How do systems of power and political domination function? Can one justify State authority? What is the nature and role of liberty? What, if any, is the justification of legal punishment? How should benefits and burdens be distributed in a society? What is justice? We will discuss both classical and contemporary approaches. Humanities.

2 credits.

# 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 and existential tradition out of which they emerge. Humanities. 2 credits

Eligible for INTP Fall 2017. Lorraine.

## PHIL 155. Philosophy of Law

In this course, we will examine philosophical approaches to the theory and practice of law. We begin with the classical theoretical questions: what is law and why should we follow it? We cover the legal positivism/natural law debate and as well as examining the roles of lawmakers, citizens, and judges. We examine some of the main theories of justice. We then move to questions about criminal law and punishment. In the practice of law, we discuss issues of racism and sexism in law as well as questions about individual rights, paternalism, privacy, and technology. Humanities.

2 credits.

## 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. 2 credits.

Spring 2018. Staff.

## PHIL 199. Senior Honors Study

Required of all philosophy honors students. 1 credit majors; 0.5 credit minors. Spring 2018. Staff.

# **Physical Education**

ADAM HERTZ, Director of Physical Education, Athletics and Recreation NNENNA AKOTAOBI, Associate Director of Athletics, Senior Woman Administrator, Deputy Title IX Coordinator KAREN BORBEE, Professor<sup>2</sup> MICHAEL L. MULLAN, Professor<sup>1</sup> HANNAH R. ALLISON, Head Coach/Instructor TODD ANCKAITIS. Head Coach/Instructor PETER CARROLL, Head Coach/Instructor HARLEIGH CHWASTYK, Head Coach/Instructor<sup>2</sup> KARIN COLBY. Head Coach/Instructor RENEE L. DEVARNEY, Head Coach/Instructor PAT GRESS, Head Coach/Instructor LANDRY KOSMALSKI, Head Coach/Instructor JEREMY LOOMIS, Head Coach/Instructor MATTHEW MIDKIFF, Head Coach/Instructor ERIC WAGNER, Head Coach/Instructor JIM HELLER, Head Coach (part time) MARIAN FAHY, Administrative Assistant SHARON GREEN, Administrative Assistant

<sup>1</sup> Absent on leave, fall 2017.

<sup>2</sup> Absent on leave, spring 2018.

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 non-veteran 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 one-quarter 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 student activity groups (max 2). The approved club sports are as follows: fencing, rugby, Ultimate Frisbee, men's volleyball and men's badminton. The approved student activity groups are as follows: aerobics, aikido, capoeira, folk dance, swing dance, tango, squash, men's soccer, women's soccer and Quidditch.

Under ordinary circumstances, physical education credit will not be awarded for independent study.

## Physical Education and Athletics Courses

#### Fall

Advanced Weight Lifting Bowling Cardio Tennis Core Ball Training Fitness Training RAD (Rape, Aggression, Defense) Step Dance Aerobics Swimming for Beginners Swimming for Fitness Swimming for Intermediates Table Tennis Tennis Volleyball Walk, Jog, Run Wellness Seminar

#### Spring

Advanced Weight Training Badminton Bowling Core Ball Training Fitness Training Pilates RAD (Rape, Aggression, Defense) Step Dance Aerobics Swimming for Beginners Swimming for Fitness Swimming for Intermediates Tennis Walk, Jog, Run Wellness Seminar Yoga

## PE Dance Courses

These courses are offered through the Dance Department. See the Music and Dance: 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

# **Physics and Astronomy**

MICHAEL R. BROWN, Professor of Physics3 DAVID H. COHEN, Professor of Astronomy and Chair AMY LISA GRAVES, Professor of Physics ERIC L.N. JENSEN, Professor of Astronomy CATHERINE H. CROUCH, Associate Professor of Physics CARL H. GROSSMAN, Associate Professor of Physics HILLARY L. SMITH, Assistant Professor of Physics3 TRISTAN SMITH, Assistant Professor of Physics BENJAMIN D. GELLER, Visiting Assistant Professor of Physics and Research Associate CAROL GUESS, Visiting Assistant Professor of Physics ADAM D. LIGHT, Visiting Assistant Professor of Physics MARY ANN KLASSEN, Senior Lecturer ADAM NEAT. Lecturer MANJIT KAUR, Post-Doctoral Researcher PAUL JACOBS, Instrumentation Technician STEVEN PALMER, Machine Shop Supervisor CAROLYN R. WARFEL, Administrative Assistant

1 Absent on leave, fall 2017

<sup>2</sup> Absent on leave, spring 2018

3 Absent on leave, 2017-2018

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, 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-cm reflecting telescope, a high-resolution spectrograph, 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-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, are at a higher level. They are aimed towards students planning to do further work in physics or astronomy and are also appropriate for engineering and chemistry majors. The sequence of courses from PHYS 005 to PHYS 018 is designed to provide a comprehensive introduction to the major topics and mathematical tools of physics.

Additional information is available 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 005 PHYS 007, 008, 013, 015, 017, 018 PHYS 111, 112, 113, 114 PHYS 063, 081, 082<sup>†</sup> MATH\* 015, 025, 027, 033

## Astronomy Core Curriculum

PHYS 005

PHYS 007, 008, 013, 015, ASTR 014 or 016, ASTR 061

Four Astronomy seminars (can include upper-level astronomy courses at Haverford); ASTR 014 or 016 may be substituted for one seminar

MATH\* 015, 025, 027, 033

**Note:** Under some circumstances, PHYS 003, 004 can be substituted for PHYS 007, 008.

<sup>†</sup>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 005 PHYS 007, 008, 013, 015, 017, 018, ASTR 014 or 016

Two 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 20-course 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 005 and either PHYS 004 or PHYS 008. Otherwise it will be impossible to fulfill all program requirements. To be accepted as a major, the applicant must have received grades of C+ or better in Physics, Astronomy, and Math courses.

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 013, PHYS 015, PHYS 017, PHYS 018. In addition, to be accepted into the course major, these courses must be completed with an average grade of 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 013, PHYS 015, PHYS 017, PHYS 018, and ASTR 016. To be accepted into the Honors Program with an astronomy major, the applicant should have completed 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):

# **Physics and Astronomy**

Prerequisites: PHYS 005, 007, 008, 013, 015, 017, and 018 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. Introduction to Nuclear Physics PHYS 135. Condensed Matter 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 005 PHYS 007 PHYS 008

PHYS 013

PHYS 015

PHYS 017

PHYS 018

PHYS 111 and 113†

MATH\* 015, 025, 033

Under some circumstances, PHYS 003 and/or PHYS 004 may be substituted for PHYS 007 and/or PHYS 008.

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 005 PHYS 007 or PHYS 003

#### PHYS 008 or PHYS 004

ASTR 014 or 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 above, 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 astronomy and physics.

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, typically Friday afternoon. 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-English-speaking 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 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. Prerequisite: MATH 015 (can be taken concurrently). Natural sciences and engineering practicum.

Includes one laboratory weekly. 1 credit.

Fall 2017. Light.

#### PHYS 003L. General Physics I: Motion, Forces, and Energy with Biological and Medical Applications

This course discusses the topics from the first semester of introductory physics with the greatest biological, biochemical, and medical relevance, namely motion, forces (both statics and dynamics), torques (primarily statics), work, conservation of energy and momentum, oscillations, fluid statics and dynamics, and thermal and statistical phenomena. A core goal is to develop connections between physics and the other sciences. The course addresses the appropriate medical school competencies (in conjunction with PHYS 004L) and includes a weekly laboratory.

Prerequisite: MATH 015 (may be taken concurrently).

Natural sciences and engineering practicum. Includes one laboratory weekly. 1 credit. Fall 2017. Geller.

## 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. Prerequisite: PHYS 003 or the permission of the instructor, MATH 025 (can be taken concurrently). Natural sciences and engineering practicum. Includes one laboratory weekly. 1 credit. Spring 2018. Light.

#### PHYS 004L. General Physics II: Electricity, Magnetism, and Optics with Biological and Medical Applications

PHYS 004L 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. Students who wish to take PHYS 004L before PHYS 003 must have some high school physics background and obtain permission from the instructor.

Prerequisite: MATH 015 or a more advanced calculus course; PHYS 003 or permission of the instructor.

Natural sciences and engineering practicum. 1 credit.

Spring 2018. Geller.

#### PHYS 005. Spacetime and Quanta

This course presents an introduction to the twin pillars of contemporary physics: relativity and quantum theory. Students will explore the counterintuitive consequences of special relativity for our understanding of space and time, and the nature of the subatomic quantum world, where our notions of absolute properties such as position or speed of a particle are replaced by probabilities. It is the usual entry point to majoring or minoring in astronomy, astrophysics, or physics, and is a pre or co-requisite for the sophomore-level physics major curriculum; it welcomes both non-majors and prospective majors who are interested in engaging rigorously and deeply with both the mathematical and conceptual descriptions of physics. Physics 005 will be taught seminar style with student presentation of problem solutions and ideas playing an essential role.

First-year students and any others who have not previously taken a course in the NSE division are required to register for and participate in the Thursday evening problem session, Physics 5X, led by the course instructors and designed to help students develop strong problem-solving skills. Other students are encouraged to participate if their schedules permit.

Not eligible for NSEP credit. Natural science and engineering. 1 credit. Fall 2017. Graves and Smith.

## 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. Prerequisite: MATH 025 (can be taken concurrently), PHYS 005 or permission of the instructor.

Natural sciences and engineering practicum. Includes one laboratory weekly: used for hands-on experimentation and occasionally for workshops that expand on lecture material. 1 credit.

Fall 2017. Guess.

# 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.

Prerequisite: PHYS 007 (or permission of instructor); MATH 033 (can be taken concurrently).

Natural sciences and engineering practicum. Includes one laboratory weekly.

1 credit.

Spring 2018. Smith.

#### PHYS 013. Thermodynamics / Statistical Mechanics

A half-semester introductory course in thermal and statistical physics. Topics include energy, heat, work, entropy, temperature (the First, Second and "Third" Laws of Thermodynamics), heat capacity, ideal gases, paramagnetism, phase transitions, and the chemical potential. This course serves as a prerequisite for PHYS 114 and for PHYS 135. Prerequisite: single-variable calculus (MATH 025 or MATH 026); may be taken as a corequisite with permission of the instructor.

This class has a weekly laboratory requirement. 0.5 credit.

Spring 2018. Grossman.

## PHYS 015. Optics

A half-semester introduction to geometric and wave optics, including ray diagrams, matrix optics, polarization, Jones matrices, interference, and diffraction.

Prerequisite: single-variable calculus (MATH 025 or MATH 026); may be taken as a corequisite with permission of the instructor.

This class has a weekly laboratory requirement. 0.5 credit.

Spring 2018. Grossman.

#### PHYS 017. Mathematical Methods of Physics

A half-semester survey of mathematical techniques useful in physics. Topics include

eigenvalue problems, Fourier analysis, solutions to ordinary and partial differential equations, special functions, the theory of residues, and numerical methods.

Prerequisite: linear algebra (MATH 027, MATH 028, or MATH 028S); corequisite: multivariable calculus (MATH 033, MATH 034, or MATH 035).

Includes a weekly numerical laboratory. 0.5 credit.

Spring 2018. Crouch.

## PHYS 018. Quantum Mechanics

A half-semester introductory course in quantum mechanics. Topics include waves, photons, the Schrodinger equation, Dirac notation, onedimensional potentials, quantized angular momentum, and central potentials. This course serves as a prerequisite for PHYS 113. Prerequisite: PHYS 005, PHYS 017, and MATH

027

Corequisite: Multivariable calculus (MATH 033, MATH 034, or MATH 035).

This class has a weekly laboratory requirement. 0.5 credit.

Spring 2018. Crouch.

# 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.

Natural sciences and engineering. 1 credit. Eligible for ENVS Fall 2017. Jensen.

## PHYS 027. The Dark Universe

This course introduces non-science students to our modern understanding of cosmology. In the short span of 40 years, modern cosmology has transformed from a purely theoretical field to one overflowing with increasingly precise data. As a result, our picture of how the universe came into being and how it evolves in time has come into near-perfect focus: it seems as though, after thousands of years of thought, we may be on the cusp of understanding the physical nature of our ultimate origin. Although correct in certain respects, this sense of understanding may not be as founded as we might hope. We will critically explore the theoretical motivation and observational evidence that supports our modern cosmological model. We will also discuss the social and philosophical implications of humanity's attempts to understand and order the

cosmos.

Natural sciences and engineering. 1 credit.

#### 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. Fall 2017. Staff. Spring 2018. 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.

Fall 2017. Staff. Spring 2018. Staff.

## PHYS 095. Introduction to Science Pedagogy: Theory and Practice

(Cross-listed as EDUC 075)

This course is designed for students who are interested in learning about issues surrounding science education, particularly at the high school and college level. How do students most effectively learn science? How can we facilitate this learning process as instructors and educators? How do we best assess whether such learning is happening? Since the course will integrate educational theory with concrete, practical strategies for becoming better teachers, it will be particularly relevant for students currently serving as Science Associates (or those who are interested in being Science Associates.) We will touch on issues related to students' conceptual development and conceptual change, collaborative learning, as well as practical issues encountered when engaging in responsive, interactive teaching. This is a seminar course where students are responsible for weekly readings (1-2 papers per week from the education research literature), in class discussions, and brief written reflections. Students will be encouraged to bring to the discussion their own unique experiences as both science students and science teachers.

Prerequisite: Instructor approval for enrollment. 0.5 credit.

## 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.

Prerequisite: PHYS 005, PHYS 007, PHYS 008, and PHYS 017.

Natural sciences and engineering. 1 credit. Fall 2017. Light.

## 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 four-vector formulation of relativistic electrodynamics. Corequisite: PHYS 111. Natural sciences and engineering. 1 credit. Fall 2017. 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 timedependent perturbation theory. Prerequisite: PHYS 018, PHYS 111; PHYS 112 strongly recommended.

Natural sciences and engineering. 1 credit.

Spring 2018. Guess.

## 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.

Prerequisite: PHYS 013, PHYS 111. Natural sciences and engineering. 1 credit.

Spring 2018. Graves.

## 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.

Prerequisite: PHYS 015, PHYS 111, PHYS 112 (or concurrently with instructor's permission), and

#### PHYS 113.

Natural sciences and engineering. 1 credit.

#### 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. Prerequisite: PHYS 111 and PHYS 112. Natural sciences and engineering. 1 credit.

## 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. Prerequisite: PHYS 113 (may be taken concurrently).

Natural sciences and engineering.

1 credit.

## PHYS 134. Introduction to Nuclear Physics

A study of basic nuclear properties, models, stability, nuclear structure, decay modes, forces, nuclear reactions, techniques to detect and measure radiation, nuclear energy, nuclear astrophysics, basic experimental design, particle accelerators, and medical applications. We will look at fundamental questions in research and touch on aspects of history and public policy. Prerequisite: PHYS 018 required, PHYS 113 recommended

Natural sciences and engineering. 1 credit.

## PHYS 135. Condensed Matter 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. Prerequisite: PHYS 113 and PHYS 114. Natural sciences and engineering. 1 credit.

#### 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. Natural sciences and engineering. 1 credit.

## PHYS 139. Biophysics

This seminar will provide an introduction to the study of biological systems using the tools of the physical sciences. Topics will include the role of statistical phenomena in life; feedback and control processes in biological networks; biological electricity; fluid dynamics as they pertain to organisms (both unicellular and multicellular), and topics chosen from the literature by the members of the seminar.

Prerequisite: Prerequisites: PHYS 008, 013, 015, and 017; or PHYS 004 or 004L, CHEM 044, and CHEM 055; or permission of the instructor. Also BIOL 001 or CHEM 038, or permission of the instructor. Students who have not previously taken an honors seminar in the physics department should discuss class format and expectations with the instructor before registering. Natural sciences and engineering.

1 credit.

#### PHYS 139A. Introductory Biophysics

In this half-credit seminar, participants will use the tools of the physical sciences to analyze biological systems. The first two-thirds of the seminar will focus on statistical models for molecular-level phenomena and biological electricity; the last third will be set by the interests of the participants. Prerequisite: MATH 025, and either PHYS 003/PHYS 003L and PHYS 004L, or PHYS 013, PHYS 007, and PHYS 008. 0.5 credit

Fall 2017. Crouch.

## 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. Fall 2017. Staff. Spring 2018. 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 2017. Technical staff.

## PHYS 081, 082. Advanced Laboratory I, II

The first, PHYS 081, and the second, PHYS 082, 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 when both are taken.

0.5 credit each.

Fall 2017. Crouch.

Spring 2018. Grossman.

#### 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.

Fall 2017. Crouch. Spring 2018. Grossman.

## 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.

Natural sciences and engineering practicum. Includes six evening labs. 1 credit.

Spring 2018. Jensen.

#### ASTR 001A. Introductory Astronomy II

This course builds upon the observational and theoretical investigation of the Universe in ASTR 001 to explore a subset of topics in more detail. Topics may include formation of the solar system; planetary geology; evolution of galaxies; dark matter and dark energy; and recent results from missions such as Mars Curiosity, GAIA, and the Hubble Space Telescope. Prerequisite: ASTR 001 Natural sciences and engineering. 1 credit.

## ASTR 002. Tracing the Unseen Universe

The evolution of the universe has predominantly been driven by the presence of dark energy and

## **Physics and Astronomy**

dark matter, neither of which can be directly observed. Aimed at a general audience, this course will review how astronomers have used visible celestial objects as tracers to both discover and deepen our understanding of the nature and role of dark matter and dark energy.

Prerequisite: One semester of college calculus or permission from the Instructor.

Natural Science and engineering.

1 credit.

#### ASTR 014. Astrophysics: Solar System and Cosmology

This course assumes no prior knowledge of astronomy, but knowledge of some basic physics as well as elementary calculus. It focuses on two major topics of current interest in astrophysics: (1) Solar System and planetary science and (2) cosmology, the large-scale study of the universe, its history and content.

Prerequisite: MATH 015 and (concurrently) MATH 025, or equivalent, and some prior work in calculus-based physics (which could include high school physics). Interested students who have not met these prerequisites should consult with the instructor. This course should be accessible to some students who have completed ASTR 001. Natural science and engineering. 1 credit.

Spring 2018. Cohen.

## ASTR 016. Astrophysics: Stars, ISM, and Galaxies

This is a one-semester calculus- and physics-based introduction to astrophysics as applied to stars, the interstellar medium, and galaxies.

Prerequisite: MATH 015 and MATH 025, and some prior work in calculus-based physics (which could include high school physics). Recommended (but not required) pre- or co-requisites are PHYS 013; PHYS 015; and/or PHYS 007 or PHYS 003. Interested students who have not met these prerequisites should consult with the instructor. Natural science and engineering.

The course includes five evening laboratories and observing sessions.

1 credit.

Fall 2017. Cohen.

## 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.

Graded CR/NC. May be repeated for credit. Prerequisite: ASTR 016 0.5 credit. Spring 2018. Staff.

#### ASTR 094. Research Project

Fall 2017. Staff. Spring 2018. Staff.

#### Seminars

Students interested in upper-level work in astronomy are encouraged to also consult Haverford's course schedule, since the two astronomy programs actively work to offer complementary topics.

#### 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; 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. Prerequisite: PHYS 015; ASTR 016. 1 credit.

Spring 2018. 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. Prerequisite: PHYS 013; ASTR 016. PHYS 017 and PHYS 018 recommended. Natural science and engineering. 1 credit.

#### ASTR 125. Stars in the Interstellar Medium

An overview of physics of the stars with related interstellar medium topics. Topics may include hydrostatic and thermal equilibrium, energy transport, nuclear energy generation, degenerate matter and compact objects, interpretation of spectra, stellar evolution, nucleosynthesis, and transitioning to the interstellar medium topics supernovae, star formation, cooling mechanisms, emission nebulae, absorption spectroscopy of interstellar clouds, hydrodynamics and shock waves, interstellar molecules, and dust. Prerequisite: PHYS 013; ASTR 016. PHYS 017 and PHYS 018 recommended. Natural science and engineering.

1 credit.

#### 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. Prerequisite: PHYS 013; ASTR 016. PHYS 017 and PHYS 018 recommended. Natural science and engineering. 1 credit.

#### ASTR 129. Cosmology

Cosmology is the study of the overall structure, history, and future evolution of the universe. This seminar will cover the following topics: the distance ladder; Hubble's law; Einstein's general theory of relativity; Friedmann models of the Universe; high-red-shift supernovae; the cosmic microwave background; dark matter and dark energy; the early universe including big bang nucleosynthesis and inflation; the age of the universe and the "Cosmic Concordance." Prerequisite: ASTR 016, or PHYS 013 and PHYS 017.

Natural science and engineering.

1 credit.

#### ASTR 180. Honors Thesis

1 or 2 credits. Fall 2017. Staff. Spring 2018. Staff. CAROL NACKENOFF, Professor KENNETH E. SHARPE, Professor <sup>2</sup> RICHARD VALELLY, Professor TYRENE WHITE, Professor BENJAMIN BERGER, Associate Professor AYSE KAYA, Associate Professor KEITH REEVES, Associate Professor and Chair DOMINIC TIERNEY, Associate Professor EMILY PADDON RHOADS, Assistant Professor NATHAN THAKKAR, Assistant Professor ERICA DOBBS, Visiting Assistant Professor GINA INGIOSI, Administrative Assistant DEBORAH SLOMAN, Administrative Assistant

<sup>2</sup> Absent on leave, spring 2018.

### The Academic Program

To graduate with the major in political science, a student must complete 8.5 credits in the department- at least eight courses in the department, plus the 0.5 credit requirement for completing the senior comprehensive exercise. At least five of these eight courses must be taken at Swarthmore, including all of the distribution requirements (see below), and two introductory level courses (POLS 002, 003, 004, 010) must be completed at Swarthmore before acceptance as a major. Introductory level course will count as distribution requirements.

Honors majors and minors, course majors, and special majors may take one course in the department credit/no credit after all distribution and department requirements have been fulfilled. Special permission of the chair is required if the credit/no credit course chosen is a theory course.

## 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, American Elections, Lesbians and Gays in American Politics, Political Parties and Elections, Congress and the American Political System, Polling, Public Opinion and Public Policy, Politics of Voting Rights, U.S. Presidency, Race and American Development, Urban Underclass, Democratic Theory and Practice (POLS 019), Politics of Punishment, 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 (POLS 019), and others.

Course majors may take one directed reading within the department for credit with approval from the department chair. No more than two directed readings may be taken within the department for credit and all directed readings must be approved by the chair.

Other courses eligible for Political Science credit are PEAC 003 and PEAC 53. These courses count towards the major/minor but do not satisfy distribution requirements.

#### 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

Only ancient or modern political theory, either the course or the seminar, 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 the course is offered.

#### Application for the Course or Honors 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.

#### **Application for the Honors Minor**

All applicants to the minor are required to have completed one introductory course before applying to the minor or their application will be deferred.

### Course Major

1. *Course prerequisites*. Students must have completed two introductory courses at Swarthmore (POLS 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. Majors will be deferred from acceptance into the department until both intros are completed. Only one intro can be a firstyear seminar.

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 3.0 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 graded exercise. Working with a faculty advisor, 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 graded written thesis, which may be chosen by students who meet the eligibility requirements and get the approval of a faculty advisor and the chair. All junior and senior course majors (unless abroad) are required to attend the

department senior comprehensive exercise conference in March.

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 two-credit 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.

5. To be accepted into the Honors Program students should normally have at least an average of 3.5 inside and 3.2 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.

6. Honors majors are strongly encouraged to attend the department senior comprehensive exercise conference in March.

#### Admission to Seminars

Placement in honors seminars is normally limited to honors students. Occasionally, there is room in a seminar for highly qualified 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 non-honors majors. Seniors, including special majors, are given priority over juniors and non-honors 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 a student will get in. Sometimes seminars are lotteried. It is best to discuss 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 (POLS 002, POLS 003 or POLS 004; a first-year seminar does not count), one course in political theory, and one course in one other subfield. The political theory requirement can be met by enrolling in one of the following: Ancient Political Theory (POLS 011), Modern Political Theory (POLS 012), Ancient Political Theory (POLS 100), Modern Political Theory (POLS 101).

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**

All special majors must have a designated faculty advisor and consult with the chair to receive approval for the proposed program. Within that approved program, 5.5 credits must be taken in the department, including one introductory course (POLS 002, POLS 003, POLS 004; a first-year seminar does not count), and the distribution requirements must be met (see Distribution of Courses within the department section). The political theory requirement for special majors can be met by completing one of the following: POLS 011, POLS 012, POLS 100 or POLS 101. All special course majors are required to participate in the department's Senior Comprehensive Exercise (see item #4 under Course Major) for .5 credit.

### Special Honors Major

All special honors majors must have a designated faculty advisor and consult with the chair to receive approval for the proposed program. Within that approved program, six credits must be taken in the department, including one introductory course (POLS 002, POLS 003, POLS 004; a first year seminar does not count), and the distribution requirements must be met (see Distribution of Courses within the department section) plus one honors seminar in the department.

#### Advanced 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 and all of the distribution requirements must be met by classes taken at Swarthmore. Expectations about off-campus study should be incorporated in the Sophomore Plan. 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. Preestimated 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.

### The Engaging Democracy Project

The Engaging Democracy Project comprises the Department's connection to what the Lang Center for Civic and Social Responsibility calls "Engaged Scholarship." Ernest Boyer coined the term

"Engaged Scholarship" to describe teaching and research that connect "the rich resources of the university to our most pressing social, civic, and ethical problems" (Boyer, 1996). The Department of Political Science employs Engaged Scholarship to incorporate academic theory and political practice to promote a richer understanding of democracy in America (and abroad). Program director Ben Berger (also Executive Director of the Lang Center) practices Engaged Scholarship techniques to involve students with local communities; works with student groups to bring a wide range of speakers and activists to the Swarthmore campus; and supports other faculty offering Engaged Scholarship courses, including fellow Political Science faculty Prof. Keith Reeves (Director of the Urban Inequality and Incarceration Program at the Lang Center), Prof. Ayse Kaya, and Prof. Emily Paddon Rhoads.

### **Political Science Courses**

#### 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. Social sciences.

1 credit.

Fall 2017. Reeves. Valelly.

#### POLS 003. Introduction to Comparative Political Systems

This course provides an introduction to the comparative, cross-national study of states, focusing on the origins of the contemporary system of nation-states, the nature of revolution, political and economic development processes, the theory and practice of democratization, and the role of ideas, philosophies, ideologies, and religious beliefs in shaping patterns of political development. We will examine contemporary examples of political conflict and political violence, and discuss the ways in which international politics, globalization, and technological innovation impinge on domestic politics. The course also provides an introduction to the theories and methods used by political scientists who engage in the art of comparative politics. To illustrate these themes, we will examine a wide variety of countries, cases, and topics.

Social sciences. 1 credit. Fall 2017. Balkan, Dobbs. Spring 2018. White, Balkan.

#### POLS 004. International Politics

In this course, we will explore the fundamental concepts of the field of international relations. Students will learn the basic facts about international conflict, the international economy, international law, development, and the world environment, among other things. Furthermore, we will study the fundamental theoretical concepts and theories of international relations. Using these theories, students will be able to sort through arguments about various topics in international relations and make judgment calls for yourself. Finally, students will learn how these concepts have evolved over time and how we can use them to hypothesize what lies ahead for international relations.

Social sciences. 1 credit. Fall 2017. Tierney. Spring 2018. Paddon Rhoads.

#### POLS 011. Ancient Political Theory

Reason, force, and persuasion are central tools of politics. They are also considered and weighed by political philosophers as they write about the best (or best achievable) organization of political life to achieve some goal, and the best chance of making those arrangements endure. Use of each tool tends to reflect particular views about human nature, capacities, and differences. This course explores these and other key concepts of political thought, drawing on major works in the Western tradition, including Plato, Aristotle, Cicero, Augustine, Aquinas, and Machiavelli. Social sciences. 1 credit.

Fall 2017. Nackenoff.

#### POLS 012. 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. Social sciences. 1 credit. Eligible for INTP Fall 2017. Staff. Spring 2018. Berger.

#### 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.

Social sciences. 1 credit. Eligible for GSST, PEAC

#### POLS 016. Ethnic Politics: Elections, Conflict and Change

In media discourse and social science research, ethnic diversity and ethnic politics are viewed as threats to order and democracy. In this course we will consider the questions of where ethnic identities come from, how they change, and why we see non-violent political competition or violent conflict between groups in some cases and not others. Drawing on theories of social science and case studies from South Asia and sub-Saharan Africa, among others, students will learn to think critically about these questions. This course will be useful for students interested in learning more about the role that ethnicity plays in developing countries and how to approach these questions in a rigorous manner.

Prerequisite: One social science course recommended. Social sciences. 1 credit.

#### POLS 018. Race and American Political Development

The struggle against slavery, Civil War, emancipation, Reconstruction, resistance to black disenfranchisement and Jim Crow, the Great Migration, the civil rights movements of the 1950s, 1960s, and 1970s, the quest for the Civil Rights Act of 1964 and the Voting Rights Act of 1965, the election of President Barack Obama this short list suggests how consequential African-Americans and their white allies-and their opponents-have been in shaping American political thought, associations and groups, national government, Congress, the Constitution and the Supreme Court, federalism, and public policy. Course is historical-and often comparative-in how it traces the continuously racialized nature of American politics. Social sciences.

1 credit.

#### 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.

Social sciences.

1 credit. Eligible for CBL

#### POLS 020. Public Opinion and American Democracy

How do individuals form political opinions? How do those opinions affect American democracy? This course examines political attitude formation and the aggregation of these attitudes to form what we call "public opinion." The course covers individual level attitude formation, sampling and survey methodology, macro-level opinion and topics related to macro-level opinion including democratic values and policy representation. Students will become familiar with democratic theory and the role that the public plays in democratic theory. Readings will cover cuttingedge social science research as well as the classics of public opinion and political behavior. Using social scientific research methods, students will research public opinion on a particular issue over time.

Social sciences.

1 credit.

## 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. Social sciences.

1 credit.

## POLS 022. American Elections: Ritual, Myth, and Substance

An examination of the role of policy issues, candidates images, campaign advertisements, media, polling, marketing, money, and political parties in the American electoral process. We will consider the role of race, gender, class, religion, 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 and will explore the impact of felony disenfranchisement. What are some of the most important recent changes affecting American electoral politics? What is unusual about 2016? Historical trends will provide the basis for analyzing the 2016 elections. Do elections matter, and, if so, how?

Social sciences. 1 credit.

#### 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. Social sciences. 1 credit.

Spring 2018. Nackenoff.

#### POLS 025. Politics By Other Means? The Supreme Court and the Federal Judiciary in Politics

Considers who built judicial review over time, how they did it, and why. Specific topics include the judicial politics of civil rights and civil liberties, party and presidential strategies for controlling - or delegating -- policy outcomes through the federal courts, Supreme Court adaptation to political crisis and pressures, how judges maintain impartiality and jurisprudential identities, changing elite and popular conceptions of the Constitution and of the Court's role in politics and society, how lawyers organize to shift the Court's direction, the terms of access to judicial review, the role of 'repeat players' in litigation and whether these players produce real poitical change, the politics of nominations, and the role of public opinion in sustaining the federal judiciary's legitimacy.

Previous coursework in political science may be helpful. Social Sciences. 1 credit. Fall 2017. Valelly.

## 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.

Social sciences.

1 credit.

#### POLS 030. Citizenship and Migration in Comparative Politics

This course examines how different nations develop institutions of citizenship, and how these institutions shape responses to immigration. Starting with an introduction to various typologies of citizenship, we will then use cases from North America and Europe in order to explore key theoretical and policy debates in the field of citizenship and migration studies. Topics include the evolution of citizenship policy, the multiculturalism debate, denizenship, pluralism, and assimilation. Political sciences.

1 credit.

## POLS 031. Borders and Boundaries: The Politics of Human Mobility

This course offers an introduction to the causes and consequences of international migration and examines the political responses of different national communities to the phenomenon. In the first part of the course we explore why and how people leave their homes for a different country. We will also consider normative questions around the rights and responsibilities of both host countries and migrants. Do states have the right to close their borders and exclude non-citizens from their territories? Our readings address debates around citizenship, multiculturalism, group membership, and minority rights. The second part of the course focuses on the dynamics of incorporation: the processes through which immigrant groups settle and integrate in their new country of residence. The growing ethnic, racial, religious, and linguistic diversity generated by

immigration has spawned fierce debates over national identity and social cohesion. We will analyze different regimes of political, cultural, and economic integration and ask how states accommodate (and fail to accommodate) ethnoreligious minorities by examining struggles over language rights, religious differences, gender and sexuality, and citizenship. Over the course of the semester, students will learn about the politicoeconomic effects and ideological battles over migration in a number of different countries across the globe.

Social Sciences. 1 credit. Spring 2018. Balkan.

#### POLS 033. Diversity and Democracy

This class explores how and why democratic societies that are racially, ethnically, culturally, linguistically, or religiously diverse are able - or unable - to maintain political and social cohesion. Key topics of debate include: is diversity bad for social trust and welfare? To what extent can institutions enhance or inhibit the political representation of minority groups? Do minority group rights threaten individual rights? What, if any, remedies should states offer historically marginalized groups? Is secession ever warranted? Social Sciences. L credit.

#### POLS 036. Policy Making in Practice

What does the policymaking process look like from the view of practitioners? This class focuses on putting students in the position of different political actors - from legislative staffers to issue advocates, to bureaucrats and more - in order to gain both theoretical and practical knowledge of how preferences become policy. Skills to be developed include strategic analysis, writing for internal and external audiences, negotiation strategy, and briefing presentations. Social sciences. 1 credit.

Spring 2018. Dobbs.

#### POLS 040. The Politics of Voting Rights

The right to vote and who has it have been politically constructed and contested since the early 19th century. The course considers why and how this politics has taken so many different forms over the course of American political development, with particular attention to the strange career of African-American voting rights and their party systemic and policy impact, female suffrage, the demobilization of the working class early in the 20th century and its remobilization during the New Deal, the late development of protections for Native American, Latino, and Asian-American voters, and current struggles over election administration and voter qualifications. Social sciences.

## POLS 041. The Presidential Election, Then and Now

How we elect our presidents has changed over time- but at all times political parties, interest groups, social movements, and the voters themselves have been the central protagonists. They have operated in macroeconomic and foreign policy contexts that make the outcomes of presidential elections both relatively predictable and yet quite exciting. We track the continuities and the key changes in presidential electoral politics since the rise of the Electoral College in the 1820s. We ask such questions as: are there game changers? What's the invisible primary? Can billionaires buy the presidency? Do presidents change the policy direction of the country? How representative is the electorate? Do campaigns make a difference? What do activists do in presidential elections? Do personal characteristics of the candidates make a difference? Is the Electoral College a problem for democracy? Political sciences.

1 credit.

#### POLS 042. Why Congress?

If Congress is so widely despised as an institution then what's the point of having it? Without a representative assembly, to be sure, democracy becomes plebiscitary and juristocratic. But a wellfunctioning national legislature is hardly guaranteed because legislatures are inherently unstable - even fluid --- institutions. Congress today is not the same institution it was a decade ago or a century ago. With these premises in hand we explore the evolution of the House and the Senate, We also treat the congressional career, majority and minority rights, parties in Congress, House-Senate differences, enactment productivity, political polarization, and gridlock. Other issues include money and interest group influence given sharp ideological polarization (the puzzle here is: how does money matter if members of Congress already have very firm positions?), the committee system, how congressional elections shape the institution, influence on the bureaucracy, presidential influence on the legislative process, congressional interaction with the federal judiciary, and the difficulty of conceptualizing and measuring representation. Prior course work in or detailed knowledge of American politics is required

Social sciences. 1 credit.

Spring 2018. Valellly.

#### POLS 043. Environmental Policy and Politics

Topics in environmental politics, policy, and law. In the United States, we focus on national regulation and proposals for more flexible responses to achieve environmental goals; environmental movements and environmental justice; the role of science in democratic policy-

1 credit.

making; courts and the impact of federalism, the commerce clause, and rights on regulation. The course also considers the role and efficacy of supranational institutions and NGOs and controversies between more and less developed nations. Topics include most of the following: air and water pollution, common-pool resource problems, toxic and radioactive waste, sustainable development, food, natural resource management, wilderness, environmental racism, effects of climate change. Social sciences.

1 credit. Eligible for ENVS CBL Fall 2017. Nackenoff. Spring 2018. DiChiro.

#### POLS 043B. Environmental Justice: Theory and Action

(Cross-listed as ENVS 043B) Examines historical, political, and activist roots of the field of environmental justice. Using interdisciplinary approaches from political ecology, environmental science, history, geography, cultural studies, and social movement theory, we analyze diverse environmental justice struggles and community activism in contemporary environmental issues such as: air quality and health, toxic contamination and reproductive issues, sustainable agriculture and food security, fossil energy-coal, oil, hydrofracking-and livelihoods, climate change and climate justice. Course incorporates a communitybased learning component. Social sciences.

Social scie 1 credit.

Eligible for PEAC, ENVS, CBL

#### POLS 045. Disaster Politics and Policies

How does the trauma of disaster influence political processes, institutions, and leaders? How do political processes, institutions, and leaders affect disaster events and their aftermath? Do disasters lead to meaningful policy change, or is their impact fleeting? This course examines the political and policy dynamics associated with disasters-those that are predominantly "natural" (e.g., hurricanes and tornadoes), and those that result mainly from human action or inaction (e.g., airplane crashes, mass shootings, building collapses). Using a variety of cases from different historical periods, different regions of the world, and different levels of political analysis (national, regional, and local), this course will examine the causes and consequences of disaster, policymaking and disaster, and the new professional field of disaster management. We will look critically at the role of NGOs and international aid in disaster relief, as well as international institutions.

Not open to students who have taken POLS 010F: The Politics of Disasters. Political sciences. 1 credit. Spring 2018. White.

## POLS 046. Lesbians and Gays in American Politics

Considers the struggle for gay rights historically, treating the political and social construction of homophobic stigma over the course of the 20th century, the early struggle to build a movement, the expansion of gay rights activism during and after the 1970s, and the AIDS crisis and its impact. Why and how gay rights became identified with same-sex marriage and equal military service are considered in some detail. We also treat the roles of the Supreme Court the two political parties, the presidency, Congress, public opinion and federalism in shaping the quest for equality. Social sciences.

1 credit.

Eligible for GSST.

#### 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. Social sciences. I credit.

Eligible for ENVS Fall 2017. 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 macro-economy, 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. Social sciences. 1 credit.

#### POLS 050. The Politics of South Asia

This course explores the origins, historical trajectories and contemporary political and social dynamics of India and Pakistan. We will discuss Partition in 1947 and the making of the two countries, as well as evolving ideas of citizenship and national belonging in the two countries. We will then investigate the transformations of Indian democracy and the rise and fall of dictatorship in Pakistan. We will examine issues of contemporary relevance in the two countries, such as the role of religion and ethnicity in national politics and public life.

Social sciences. 1 credit. Eligible for ASIA

#### POLS 055. China and the World

Examines the rise of China in the late 20th and early 21st 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.

Social sciences. 1 credit. Eligible for ASIA

#### 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. Social sciences. I credit.

Eligible for ASIA

#### 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.

Social sciences. 1 credit. Eligible for LALS

#### 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. Social sciences. 1 credit. Eligible for ASIA Fall 2017. 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. Social sciences.

1 credit.

#### POLS 062. The Politics and Practice of Humanitarianism

Humanitarianism has become a central feature of world politics. It is complex and contested. This course aims to provide the critical, conceptual and theoretical tools necessary to engage with the realities of humanitarian emergencies. It explores a range of questions: What is humanitarianism and how has it evolved historically? What are humanitarianism's core ethical and political dilemmas? What sets of interests and power relations shape the impact of humanitarian action at the global, national and local levels? How are new technologies, innovation and the private sector transforming humanitarian governance? What are the ethical issues involved with the study of humanitarianism? Social Sciences

1 credit. Eligible for PEAC

Fall 2017. Paddon Rhoads.

## POLS 063. The Politics of Sub-Saharan Africa

This class provides an introduction to contemporary African politics with a strong focus on the politics of particular African countries. It examines major debates in the contemporary study of Africa, and situates these issues within their historical, social and cultural contexts. Topics include the impact of colonialism on state structure, structural adjustment, the politics of democratization, identity and ethnicity, religion, regionalism and migration. To explore these topics, students will draw on writing by journalists, anthropologists, economists and historians as well as the work of political scientists. Social sciences.

1 credit.

Fall 2017. Paddon Rhoads.

#### 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.

Social sciences. 1 credit. Eligible for ASIA

#### POLS 065. Chinese Foreign Policy

How does China view the world, and its place in the world? How do issues of regional and global concern look from the vantage point of Beijing, and how do they shape Chinese views and policies? As China rises in global influence and strength, how will it exercise its newfound power? The course will focus on these questions, as well as a number of contemporary issues in Chinese foreign policy, including U.S.-China relations, the China-Taiwan conflict, China's foreign economic policy, and its evolving defense posture and capabilities.

Social sciences. 1 credit. Eligible for ASIA

#### POLS 066. International Political Economy

This seminar examines how political actors (attempt to) govern as well as shape economic events. The seminar introduces the classic texts of International Political Economy (IPE), such as Adam Smith's The Wealth of Nations. It also discusses core contemporary texts and debates in the study of international political economic relations. Topics include the international trading system, global financial and monetary systems, the issue of economic development, the Great Recession, and the role of the United States in global economic governance. Through these discussions, the seminar also examines the key institutions in the contemporary governance as well as private actors such as multinational firms. Students taking this course will not be eligible for POLS116A/B.

Prerequisite: POLS 004 and an introductory Economics course. Social sciences. 1 credit.

Spring 2018. Kaya.

#### 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.

Social sciences. 1 credit.

#### POLS 068. Politics, Economics, Environment, Health and Security

The topics that the full-year course will examine include: analytical approaches to historical (pre-World War I) and contemporary (post-World War II) political-economic globalization; global economic development and the role of international organizations, such as the International Monetary Fund and the World Bank; the United Nations and its role in peacekeeping; global climate governance; global health and their governance, including for instance the role of the World Health Organization; global military issues, such as global arms trade by both state and nonstate actors, the globalized production of weapons, and the issues surrounding the use of private military agents by governments and the UN; the governance of international labor issues, including the International Labor Organization; and the governance of global migration and refugees. The course will also explore cultural globalization. The first part of the course will focus on politicaleconomic globalization, while the second part of the course will examine the remaining topics. This is a full year course, taught both fall and spring semesters and enrollment in both semesters is required. Prerequisite: POLS 004

Social sciences. 1 credit. Eligible for ENVS

#### 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; regional organizations, particularly the EU; and prospects for global democracy. The course will also examine topical issues, such as the recent financial crisis. Social sciences.

1 credit.

#### 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 count-is 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? Enrollment only by permission of the instructor. Social sciences. 1.5 credit. Eligible for BLST Spring 2018. 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 14th-Amendment jurisprudence. Attention will also be given to theories of interpretation. Designed for students who want to deepen their work in constitutional law.

Prerequisite: POLS 024 and permission of the instructor.

Social sciences. 1 credit.

## 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. Social sciences. 1 credit.

Eligible for PEAC Spring 2018. Tierney.

#### POLS 076. Challenges for Developing Democracies

How should we understand the central governance challenges low-income democracies face? What changes need to be made to address problems such as corruption, ethnic conflict, and poor quality public services in developing democracies from South Asia to Latin America and sub-Saharan Africa (with an emphasis on South Asia). In this course, we carefully diagnose these challenges with attention to political and state institutions and the specific contexts of the democracies we study. Drawing on the theoretical and empirical insights of political science, we explore long-term and short-term obstacles to better governance and discuss plausible solutions. This class will be useful to students interested in the politics of developing countries and those interested in how social scientists understand the challenges they face.

Counts toward Asian Studies if all papers and projects are focused on Asian topics. Prerequisite: One social science course recommended. Social sciences. 1 credit.

#### POLS 079. Islam and Muslims in the West

In the post-9/11 West, the figure of the Muslim has become central to heated political debates over the meaning of secularism, democracy, and citizenship. Politicians and pundits on both the left and right have equated Islam with violence and terrorism despite the small minority of selfprofessed Muslims who carry out such attacks. This perception has called into question Islam's compatibility with Western values and ways of life. Such discussions raise new questions about the limits of free speech, the challenges of multiculturalism, women's rights, gender equality, and sexuality, as well as the visibility of religion in the public sphere. This class offers a critical survey of contemporary debates on Islam in the

West and examines the diversity of lived experiences of Western Muslims in Europe and the United States. It focuses on the ways in which ethnic, religious, and racial minorities are incorporated into and/or excluded from processes of nation formation. We will consider how notions of belonging, citizenship, and otherness have been defined in particular locales, how they are socialized through a variety of institutional contexts, and how they change over time. Our readings draw from a broad range of academic disciplines and cover topical issues such as the headscarf affair, cartoon controversies, and rising Islamophobia. Over the course of the semester, students will have the opportunity to develop independent research projects based on their own areas of interest. Social Sciences.

1 credit. Fall 2017. Balkan.

#### POLS 080. Civil Wars

In recent years, civil conflict has occurred more frequently than interstate wars. What are the causes of civil war? Why are some civil wars longer and more severe than others? How do civil wars end - and what can the international community do to facilitate their termination? This course introduces students to key concepts, theories, and debates surrounding the study of civil war, drawing on contemporary and historical cases such as Syria, Sudan, Rwanda, and Yugoslavia. Political sciences. 1 credit.

Eligible for PEAC

#### POLS 081. Strategy and Nonviolent Struggle

(Cross listed as PEAC 071B, SOCI 071B) This one-credit research seminar involves working and updating the Global Nonviolent Action Database website which can be accessed by activists and scholars worldwide at http://nvdatabase.swarthmore.edu The Global Nonviolent Action Database was built at Swarthmore College and includes cases of "people power" drawn from dozens of countries. The database contains crucial information on campaigns for human rights, democracy, environmental sustainability, economic justice, national/ethnic identity, and peace. Students will be expected to research a series of cases and write them up in two ways: within a template of fields (the database proper) and also as a 2-3 page narrative that describes the unfolding struggle. In addition to research/writing methods, students will also draw on theories in the field. Strategic implications for today will be drawn from theory and from what the group learns from the documented cases of wins and losses experienced by people's struggles. Social sciences. Writing course.

1 credit. Spring 2018. Staff.

#### POLS 084. The Politics of Poverty Alleviation in the Developing World

How should we understand the challenge of poverty alleviation and what can be done to fight poverty in developing countries? To understand the mixed record of progress in this area, we will engage three central questions in this course: (1) What are the causes of poverty and its persistence? (2) What are the best strategies for fighting poverty? (3) How do institutions and political incentives support or undermine the success of anti-poverty policies? We will discuss how scholars across the social sciences think about poverty and what this tells us about how to address this problem. Next, we will engage debates over the best strategies for fighting poverty in countries where it is often difficult to ensure that program benefits reach the poor. Cases will be drawn from South Asia, sub-Saharan Africa, and Latin America. This class will be useful to students interested in applying social science concepts to understand policy challenges in developing countries and particularly useful to those interested in careers in development. Prerequisite: One social science course

recommended. Social sciences.

1 credit.

#### POLS 087. Water Policies, Water Issues: China/Taiwan and the U.S.

(Cross-listed as CHIN 087)

Access to fresh water is an acute issue for the 21st century, and yet civilizations have designed a wide range of inventive projects for accessing and controlling water supplies over the centuries. Fresh water resource allocation generates issues between upstream and downstream users, between a country and its neighbors, between urban and rural residents, and between states and regions. This course examines a range of fresh water issues, comparing China and the U.S. Topics include dams and large-scale water projects (e.g., rerouting rivers); water pollution; groundwater depletion; industrial water use (e.g., for hydrofracking); impact of agricultural practices; urban storm water management; wetlands conservation; desertification; desalination. In the U.S. context especially, issues of water rights regimes and property rights, privatization, and commodification of water will receive attention. Which claims upon fresh water resources come first? What role do governments, transnational organizations, corporations, NGOs, and grassroots citizens' movements play in these water decisions? Guest lectures will emphasize science and engineering perspectives on water management. Chinese language ability desirable but not required.

Social sciences.

1 credit. Eligible for ASIA, ENVS

#### POLS 087A. Attachment: Policies and Issues of Fresh Water Resources in China/Taiwan

(Cross-listed as CHIN 087A)

This is an attachment to POLS 087. Students who complete the course have the option of adding a 0.5 credit field work component. Field work will be conducted in China under the supervision of Professors Nackenoff and Kong, and will include specific Chinese language training in the vocabulary used in the field of environmental studies.

0.5 credit.

Eligible for ASIA, ENVS

## POLS 088A. Attachment: Governance and Environmental Issues in China

(Cross-listed as CHIN 088A)

This is an attachment to POLS 088. Students who complete the course have the option of adding a 0.5 credit field work component. Field work will be conducted in China under the supervision of Professors Kong and White, and will include specific Chinese language training in the vocabulary used in the field of environmental studies.

0.5 credit.

## POLS 090. Directed Readings in Political Science

Available on an individual or group basis, subject to the approval of the instructor.

1 credit.

#### POLS 092. Senior Comprehensives

Open only to senior course majors completing the comprehensive requirement. 0.5 credit. Spring 2018. 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.

#### POLS 059. Middle East Politics

This course offers an introduction to the politics of the Middle East and North Africa from World War I to the present. As a region that is popularly perceived as an arena for intractable ethnic and religious conflict, authoritarian political regimes, and social and economic underdevelopment, the Middle East has long been a critical site in global affairs. Recent events such as the toppling of longstanding governments in places like Egypt, Tunisia, and Libya during the so-called "Arab Spring," the electoral successes of Islamist political parties in countries with a history of secular rule such as Turkey, and the repercussions of the on-going civil war in Syria, including the displacement of millions of persons, renewed bids for Kurdish autonomy, and the rise of ISIS have raised new and pressing questions about the future of the region. This course aims to help students contextualize and better understand the current political climate by tracing the roots of these conflicts to the longer history of state and nation formation in the Middle East. Throughout the semester students will learn about political, economic, social, and cultural developments within a number of countries in the Middle East and North Africa. Topics covered include colonialism, imperialism, and nationalism, political Islam, revolutions and social movements, the Arab Spring, and U.S. involvement in the region. No prior knowledge of the Middle East is necessary.

Social Sciences.

#### 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, and Hobbes. Social sciences.

2 credits. Eligible for INTP Fall 2017. Sharpe.

Fall 2017. Berger.

#### 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. Social sciences. 2 credits. Eligible for INTP

#### POLS 102. Comparative Politics: Greater 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 civilmilitary relations.

Social sciences. 2 credits. Fall 2017. White.

#### POLS 103. Power, Identity and Culture

Power, external and objective, is also internal and subjective, invisibly working to shape understandings of who we are even as it performs the visible rituals of regulation typically associated with states and governments. This course takes as its central thesis that immaterial and invisible forms of power are power's most effective form as well as the most difficult for political science to measure and understand. Alternating between case and theory, and looking at power both naked and sublime, we will examine the struggle by the state and other elite actors to shape subjectivities through culture and identity formation in order to secure quiescence and rule. Close attention will be paid to how socializing agents, including schools and the educational system, media and film, and families and local communities, shape and reshape formal efforts to have ordinary citizens internalize what Stuart Hall describes as "the horizon of the taken-for-granted," those ruling ideas and beliefs that consist "of things that go without saying because, being axiomatic, they come without saying; things that, being presumptively shared, are not normally the subject of explication or argument." This course seeks to understand how such efforts succeed, falter, and change as they face the negotiations of the ordinary and the less powerful. Authors include Antonio Gramsci, Steven Lukes, James C. Scott, Clifford Geertz, Michel Foucault, Joel Migdal, Stuart Hall, and Robert Dahl. Social sciences.

2 credits.

#### POLS 104. The State of American Democracy

Is American democracy working well or badly and how would we know besides what we learn from the buzzing punditry we encounter every day? The premise of the seminar is that political scientists know the answers to these questions. An intensive survey of the best political science literature on national institutions, democratic processes, policy evolution and feedback, citizens' attitudes and their attention to and knowledge of politics, political parties, social movements, and interest groups, the behavior of voters and politicians, the "state," the financialized political economy that generates macroeconomic instability, federalism, and, not least, racial and income inequality's political origins Previous background in American politics and history is essential.

Prerequisite: POLS 002 or an intermediate American politics course. Social sciences. 2 credits. Spring 2018. 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.

Social sciences. 2 credits.

Spring 2018. Nackenoff.

## 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.

Social sciences. 2 credits. Eligible for BLST Spring 2018. Reeves.

#### 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. Social sciences. 2 credits. Eligible for ASIA

#### POLS 109. Comparative Politics: Latin America

A 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 economics; 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.

Social sciences. 2 credits. Eligible for LALS Fall 2017. Sharpe.

#### 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. Social sciences. 2 credits.

Fall 2017. Tierney.

#### POLS 115. The Politics and Practice of Wartime Humanitarian Action

This seminar explores the history and politics of humanitarianism. Topics include: charity, religion and the origins of the modern humanitarian system; humanitarian principles and international law; the local, national and global politics of contemporary humanitarian action; the role of innovation and technology; non-western approaches to humanitarianism; new humanitarian actors (private sector, transnational civil society, non-state actors); the psychosocial dimensions of aid work; and humanitarian ethics. Students will draw upon in-depth case studies of humanitarian emergencies and will participate in a simulation exercise.

Social Sciences. 2 credits. Spring 2018. Paddon Rhoads.

### POLS 116. International Political Economy The course studies the main historical and

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. Prerequisite: POLS 004 and ECON 001 Social sciences.

2 credits.

Fall 2017. Kaya.

### POLS 180. Honors Thesis 2 credits.

FRANK H. DURGIN, Professor<sup>3</sup> JANE E. GILLHAM, Professor and Chair<sup>3</sup> ALLEN M. SCHNEIDER, Professor ANDREW WARD, Professor and acting Chair DANIEL J. GRODNER, Associate Professor STELLA CHRISTIE, Assistant Professor CATHERINE J. NORRIS, Assistant Professor JEDIDIAH SIEV, Assistant Professor MICHELE REIMER, Assistant Professor (part time) JOHN C. BLANCHAR, Visiting Assistant Professor LISA PAYNE, Visiting Assistant Professor ELIZABETH D. KRAUSE, Visiting Assistant Professor (part time) AMANDA ELAM, Post-Doctoral Research Fellow KATHRYN TIMMONS, Administrative Coordinator ABIGAIL DEAN, Research Coordinator and Academic Assistant

3 Absent on leave, 2017-2018.

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 006 First-Year Seminar: Happiness or PSYC 007 First-Year Seminar: Early Social Cognition.

#### 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 assistant 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 must include at least 8 credits in psychology. 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 crosslisted in psychology that are taught solely by members of other departments, such as EDUC 021/PSYC 021, EDUC 023/PSYC 023 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 (or equivalent), followed by a core course (those with numbers in the 30s) or PSYC 025 Research Design and Analysis.

#### 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): PSYC 030 Behavioral Neuroscience; PSYC 031 Cognitive Neuroscience; PSYC 031A Social, Cognitive and Affective Neuroscience; PSYC 032 Perception; PSYC 033 Cognitive Psychology; PSYC 034 Psychology of Language; PSYC 035 Social Psychology; PSYC 036 Thinking, Judgment and Decision Making; PSYC 038 Clinical Psychology; PSYC 039 Developmental Psychology.

4. Finally, to graduate with a major in psychology, students must also complete a culminating research experience, described below.

#### 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 103 Research Practicum in Behavioral Neuropharmacology; PSYC 104 Research Practicum in Language and Mind: PSYC 105 Research Practicum in Psychology and Neuroscience: Social Imitation; PSYC 106 Research Practicum in Cognitive Development; PSYC 108 Research Practicum in School- Based Interventions; PSYC 109 Research Practicum in Clinical Psychology. Students may enroll in these practica to conduct original empirical research for one-half (an option for some practica) 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 normally enroll for one credit and participate in the Senior Research Poster Session. 2. Complete PSYC 096 -PSYC 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.

3. Complete a PSYC 090 Field Placement in Clinical Psychology in the spring semester of the senior year. Extensive planning in advance is necessary. See the PSYC 090 description.

4. 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 either one-half or one course credit for satisfactory work on the Senior Research Project, and a letter grade is assigned. Students normally enroll in the course in the fall semester.

#### 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 five 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 Behavioral Neuroscience; 031 Cognitive Neuroscience; 031A Social, Cognitive and Affective Neuroscience; 032 Perception; 033 Cognitive Psychology; 034 Psychology of Language; 035 Social Psychology; 036 Thinking, Judgment and Decision Making; 038 Clinical Psychology; 039 Developmental Psychology.

Note: COG 001: Introduction to Cognitive Science may count towards the completion of a Psychology Minor, though not as a core course, when taught by a Psychology Faculty Member.

#### 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:

Behavioral Neuroscience Clinical Psychology Cognitive Psychology/Perception Developmental Psychology Psycholinguistics Social, Cognitive and Affective Neuroscience 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.

A minimum of four core courses in psychology (those with numbers in the 30s) must be completed: 030 Behavioral Neuroscience; 031 Cognitive Neuroscience; 031A Social, Cognitive and Affective Neuroscience; 032 Perception; 033 Cognitive Psychology; 034 Psychology of Language; 035 Social Psychology; 036 Thinking, Judgment and Decision Making; 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 30s) 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 Behavioral Neuroscience; 031 Cognitive Neuroscience; 031A Social, Cognitive and Affective Neuroscience; 032 Perception; 033 Cognitive Psychology; 034 Psychology of Language; 035 Social Psychology; 036 Thinking, Judgment and Decision Making; 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 in a way that allows students flexibility in choosing the focus of their Neuroscience majors. Approval and advising for this special major are done through both departments. Details about the course and honors special majors can be found online at www.swarthmore.edu/academics/biology/neurosci ence.xml. Students interested in developing a special major in Neuroscience are encouraged to consult faculty in both departments.

#### 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 10-12 credits in the two disciplines, as described below.

#### Requirements

The special major will include 5 credits in courses or seminars taught by members of the department of psychology, including at least 3 core areas (courses numbered in the 30s) 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 interdisciplinary senior thesis, a research practicum (0.5 or 1 credit), a field placement in clinical psychology (PSYC 090, 1 credit) or an integrated comprehensive project (PSYC 098 or EDUC 098, 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 30s) and its corresponding one-credit seminar (numbered in the 130s), 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. Students may wish to consult with an advisor 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.

Students who would like to receive credit for psychology courses taken at another institution must have taken PSYC 001, a first-year seminar in psychology or placed out of this requirement through AP or IB work.

#### 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, PSYC 102: Research

Practicum in Perception and Cognition, PSYC 103: Research Practicum in Behavioral Neuropharmacology, PSYC 104: Research Practicum in Language and Mind, PSYC 105 Research Practicum in Psychology and Neuroscience: Social Imitation, PSYC 106: Research Practicum in Cognitive Development, PSYC 108: Research Practicum in School Based Interventions, PSYC 109: Research Practicum in Social and Emotional Well-Being) 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 (PSYC 096-097 or PSYC 180) 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. The clinical practicum is a Community-based Learning course.

#### Service-Learning Opportunities

Several psychology courses are designated as Community-Based Learning courses. They are PSYC 090 Practicum in Clinical Psychology; PSYC 108 Research Practicum in School-Based Interventions; and PSYC 109 Research Practicum in Clinical Psychology.

#### 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.

### **Psychology Courses**

#### PSYC 001. Introduction to Psychology

An introduction to the basic processes underlying human and animal behavior-studied in experimental, social, and clinical contexts. Analysis centers on the extent to which typical and atypical 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 several 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.

Department student and faculty research projects. PSYC 001 is a Prerequisite for further work in the department.

Social sciences. 1 credit. Fall 2017. Schneider. Spring 2018. Ward.

## 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? Non-distribution. 1 credit. Eligible for COGS Fall 2017. Staff.

#### PSYC 007. First-Year Seminar: Early Social Cognition

Humans are helplessly social: we spend much of our lives interacting with others, continuously encoding and processing information about our social world. What are the origins and developmental trajectory of our social cognition? Are we prejudiced from the start? How do we learn us vs. them distinction? When and how do young children come to appreciate the content of others' minds? This course explores the underlying cognitive processes that shape infants' and children's understanding of the social world. PSYC 007 serves as an alternate prerequisite for further work in the department.

Social sciences. 1 credit. Fall 2017. Christie.

#### PSYC 020. EEG/ERP: Imaging the electrical activity of the brain

Electroencephalography (EEG) allows us to investigate electrophysiological responses in the brain that relate to cognitive processes. What is the EEG signal and how is it analyzed? What does the computation of event-related potentials (ERPs) tell us about the time course of brain processes? How do these techniques contribute to our understanding of the neural mechanisms underlying language, development, attention, perception, and memory? This course will provide a foundation of knowledge and experience with methods, analyses and interpretation for consumers of research as well as those who intend to use EEG and ERP.

Course will meet Fridays 2:15 pm to 5 p.m. from Friday January 22, 2016 through Friday, March 4th, 2016. (this is 7 weeks and ends the last friday before spring break) 0.5 credit

0.5 credit.

#### PSYC 021. Educational Psychology

(Cross-listed as EDUC 021)

The Educational Studies Department offers this course. It does not count toward the minimum required credits for a psychology major or minor. Social sciences.

#### PSYC 023. Adolescence

(Cross-listed as EDUC 023) The Educational Studies Department offers this course. It does not count toward the minimum required credits for a psychology major or minor. Social sciences.

#### 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. STAT 011. Statistical Methods I must be taken prior to or concurrently with the course.

This course may not be taken as pass/fail.

Prerequisite: PSYC 001 and STAT 011 or equivalent.

Corequisite: STAT 011 or equivalent if not taken previously.

Social sciences. Writing course.

Fall 2017. Staff. Spring 2018. Staff.

#### PSYC 026. Special Education: Issues and Practice

(Cross-listed as EDUC 026)

The Educational Studies Department offers this course. It does not count toward the minimum required credits for a psychology major or minor. Social sciences.

## PSYC 028. Stereotypes, Prejudice and Discrimination

Humans are social creatures; interpersonal relationships and group membership are critical to our survival and well-being. The formation of groups, however, can give rise to ingroup favoritism, stereotyping, and discrimination against outgroup members. This course will examine social psychological theory and research on the causes and consequences of stereotypes, prejudice & discrimination, emphasizing sociocultural, cognitive, personality, neuroscience and motivational perspectives. We will study the development and causes of stereotypes and prejudice, and reasons for their persistence and prevalence. We will consider both the effects that stereotypes and prejudice have on people's perceptions of and behaviors toward particular groups or group members, as well as their effects on members of stereotyped groups. Finally, we will explore the implications of research findings on stereotypes, prejudice & discrimination for education, business and government policies; and will discuss possible techniques for reducing prejudice and discrimination. Prerequisite: PSYC 001 Social Sciences. 1 credit

Fall 2017. Norris.

**PSYC 030. Behavioral Neuroscience Course previously titled 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. Eligible for COGS

Spring 2018. 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. Eligible for COGS Fall 2017. Payne.

#### PSYC 031A. Social, Cognitive and Affective Neuroscience

This course focuses on the neural underpinnings of cognitive (memory, attention), social (theory of mind, empathy), and affective (emotion, evaluation) processes, as well as how they interact with and contribute to each other. We consider how such processes are implemented at the neural level, but also how neural mechanisms help give rise to social and emotional phenomena. Many believe that the expansion of the human brain evolved due to the complex demands of dealing with others - competing or cooperating with them, deceiving or empathizing with them, understanding or misjudging them. In this course, we review current theories and methods guiding social, cognitive, and affective neuroscience, taking a multi-level approach to understanding the brain in its social context. Prerequisite: PSYC 001. Social sciences.

1 credit. Eligible for COGS

#### PSYC 032. Perception

Perception is fundamental to both cognition and action. How does perception work? This course covers a variety of scientific theories of perception including biological analyses of comparative functional anatomy of sensory systems and the informational "ecology" in which they have evolved, as well as functionalist information processing theories including computational, statistical and inferential approaches. An integrated series of laboratories and demonstrations provides students with experience testing theories of perception empirically. Prerequisite: PSYC 001 and PSYC 025. Research Design and Analysis: or permission of instructor. Natural sciences and engineering practicum. Required weekly laboratory.

1 credit. Eligible for COGS

#### 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. Social sciences. 1 credit.

Eligible for COGS

#### 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. Eligible for COGS Fall 2017. 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. Prerequisite: PSYC 001. Social sciences. 1 credit. Spring 2018. Blanchar.

## 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.

#### PSYC 038. Clinical Psychology

A consideration of major forms of psychological disorder in adults and children. Cognitive, behavioral, psychodynamic, sociocultural, and biological theories of abnormality are examined, along with their corresponding modes of treatment. Prerequisite: PSYC 001. Social sciences. 1 credit. Fall 2017. Siev. Spring 2018. Reimer.

#### PSYC 039. Developmental Psychology

Do infants have concepts? How do children learn language? These questions and others are addressed in this survey course of physical, cognitive, social, and emotional development during infancy and early childhood. The course asks how and why human minds and behaviors develop, examining the theoretical perspectives and empirical evidence on the nature of developmental change. Prerequisite: PSYC 001. Social sciences. 1 credit. Eligible for COGS Fall 2017. Christie.

#### PSYC 040. Political Psychology

This course is an intensive study of special topics in political psychology, such as political orientation and partisanship, elections and voting, intergroup conflict, social activism and protest, terrorism, and prejudice. An emphasis will be placed on ideology; it's psychological underpinnings, functions, and consequences. An empirical research component may be included in this course.

Prerequisite: PSYC 001 or permission of the instructor. To request approval, please contact Dr. John Blanchar (jblanch2@swarthmore.edu) and indicate why you would like to take this course, any previous relevant coursework or experience, and how the course fits with your academic program and goals.

Social Sciences. 1 credit. Fall 2017. Blanchar.

#### PSYC 041. Children at Risk

Violence, educational inequality, war, and chronic poverty are key contexts for many children's lives. We consider children's responses to adversity from clinical, developmental and ecosystemic perspectives. In addition, we explore the role of psychology in both prevention and social policy affecting children and families. PSYC 001 Prerequisite: PSYC 001 and either PSYC 038. Clinical Psychology or PSYC 039. Developmental Psychology or permission of the instructor. Social sciences. 1 credit.

#### PSYC 042. Cognitive Behavior Therapy

This course is an introduction to cognitive behavior therapy (CBT). Students will learn the theoretical and empirical bases for cognitive and behavioral interventions across the range of clinical disorders in adults. Through classroom role-playing, experiential exercises, and demonstrations, students will get an opportunity to view and practice the techniques presented in both lecture and reading material. Specific CBT elements covered will include Beckian cognitive therapy, exposure therapies, acceptance- and mindfulness-based approaches, motivational interviewing, dialectical behavior therapy, behavioral activation, and others.

This course may not be taken after taking PSYC 138B: Seminar in Clinical Psychology: Anxiety Disorders.

Prerequisite: PSYC 001 and PSYC 038 Social sciences. 1 credit.

Fall 2017. Siev.

#### PSYC 048. Gender and Psychopathology

(Cross-Listed as GSST 048)

Why are certain clinical syndromes, such as depression, overrepresented among women, while others, such as aggression, are more common among men? This course explores gender differences in emotion socialization, coping styles, and mental illness, including depression, eating disorders, posttraumatic stress, aggressive disorders, and substance abuse. It also critiques definitions of sex and gender and methodological approaches to the study of group differences. Prerequisite: PSYC 001 and PSYC 038. Clinical Psychology. Social sciences.

1 credit. Eligible for GSST

#### 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. Prerequisite: PSYC 001 and either PSYC 038. Clinical Psychology or PSYC 039. Developmental Psychology or permission of the instructor. Social sciences. 1 credit. Eligible for GSST

#### PSYC 090. Field Placement in Clinical Psychology

(Course previously titled Practicum in Clinical Psychology)

An opportunity for advanced psychology students to gain supervised experience in off-campus clinical settings. Requirements include 8 hours per week in an off-campus placement, weekly meetings to discuss placement experiences and relevant readings, and a major term paper. Students are expected to have clinical contact with clients/patients and to have an on-site supervisor. Students are responsible for arranging a placement, in consultation with the instructor in advance of the semester. Students applying for this course must have at least a B average in psychology. Contact the instructor for details and an application form. 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 in the Spring Semester must apply by April 25 of the prior year.

Enrollment is limited to seniors and juniors. If the course over-enrolls, priority is given to senior majors and special majors.

This course may not be taken as pass/fail. Prerequisite: PSYC 001 and one of the following: PSYC 038, PSYC 041 or PSYC 050. Social sciences. 1 credit. Eligible for CBL Spring 2018. Krause.

#### PSYC 091. Special 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.

Prerequisite: PSYC 001 and PSYC 030 or permission of the instructor. Social sciences. 1 credit. Eligible for COGS

#### 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. A Psychology Faculty Member must agree to supervise a student before he or she may enroll in PSYC 094.

This course may not be taken as pass/fail. Fall 2017. Staff. Spring 2018. 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.

Registration requires the sponsorship of a faculty member in the Psychology Department who agrees to offer the tutorial.

Social sciences. Fall 2017. Staff. Spring 2018. Staff.

#### PSYC 096. 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 two-semester sequence for 1 credit each semester. Admission requirements include a B+ average in psychology and overall, an approved topic, an advisor, 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 advisor by the end of the junior year. Students are encouraged to begin thesis work during the summer preceding the senior year.

A Psychology Faculty Member must agree to supervise a student before he or she may enroll in PSYC 096.

This course may not be taken as pass/fail. Prerequisite: PSYC 001 and PSYC 025. Research Design and Analysis and permission of a research supervisor.

1 credit each semester. Fall 2017. Staff.

#### PSYC 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 two-semester sequence for 1 credit each semester. Admission requirements include a B+ average in psychology and overall, an approved topic, an advisor, 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 advisor by the end of the junior year. Students are encouraged to begin thesis work during the summer preceding the senior year.

A Psychology Faculty Member must agree to supervise a student before he or she may enroll in PSYC 097.

This course may not be taken as pass/fail. Prerequisite: PSYC 001 and PSYC 025. Research Design and Analysis and permission of a research supervisor.

Social sciences. Writing course. 1 credit each semester. Spring 2018. 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 member. Usually prepared 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 the semester. One-half credit or one credit with a letter grade is awarded for all components of the project. Note that PSYC 98 projects are rare as most faculty do not have capacity to supervise these projects. The common routes for completing the seniors comprehensive requirement include Research Practica courses, Thesis (PSYC 96/97, PSYC 180), and the Field Placement in Clinical (PSYC 90). Registration for PSYC 98 requires the sponsorship of a faculty member in the Psychology Department who agrees to supervise the student's work on the project. See the department website for further details www.swarthmore.edu/academics/psychology/acad emic-program/majors-and-minors.xml. A Psychology Faculty Member must agree to supervise a student before he or she may enroll in PSYC 098.

This course may not be taken as pass/fail. Prerequisite: PSYC 001; PSYC 025. Research Design and Analysis, and permission of a research advisor. 0.5 - 1 credit. Fall 2017. Staff. Spring 2018. Staff.

#### PSYC 099. Senior Neuroscience Thesis

As one means of fulfilling the neuroscience thesis requirement in the Psychology Department (alternatives include a Research Practicum or a full-year 2-credit thesis project), a student may write a report, regarding research conducted in neuroscience, with a psychology faculty advisor. Enrollment is usually during the fall semester of the senior year. In addition to submitting a substantial paper, students participate in a poster conference at the end of the semester. One-half credit or one credit with a letter grade is awarded for all components of the project.

A Psychology Faculty Member must agree to supervise a student before he or she may enroll in PSYC 099.

This course may not be taken as pass/fail. Prerequisite: PSYC 001; PSYC 025: Research Design and Analysis, and permission of the faculty advisor.

Social sciences. 0.5 - 1 credit. Fall 2017. Staff. Spring 2018. Staff.

#### PSYC 101. Research Practicum in Political Psychology

In this course, students will conduct empirical research projects individually or in small groups in collaboration with the instructor. This includes designing and implementing a study, collecting and analyzing data, and reporting and presenting the findings. Although project topics are somewhat flexible, they will generally focus on topics related to political ideology, attitudes, and behavior. What are the core psychological dimensions of left-wing and right-wing ideology? What psychological factors underlie why people are more politically liberal or conservative? Do liberals and conservatives construe "the self" differently, and if so, why? What underlies libertarianism? What increases the appeal of novelty and change? What are the antecedents of and remedies for political intolerance and censorship? In addition to the class meeting time, additional time is scheduled as needed to conduct research projects. When taken in the senior year, this course fulfills the comprehensive requirement in psychology. This course may not be taken as pass/fail. Prerequisite: PSYC 001 or the equivalent; PSYC 025: Research Design and Analysis; either PSYC 040: Political Psychology or PSYC 035: Social Psychology.

Corequisite: PSYC 040: Political Psychology may be taken concurrently if it has not been taken in a prior semester.

Social sciences. 1 credit.

#### 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.

## Psychology

This course may not be taken as pass/fail. Prerequisite: PSYC 001; PSYC 025. Research Design and Analysis and permission of the instructor. Social sciences. 0.5 - 1 credit.

#### PSYC 103. Research Practicum in Behavioral Neuropharmacology

In this practicum students conduct research projects in small groups in collaboration with the instructor. Projects include designing, implementing, analyzing and reporting an experiment. Experiments are directed at characterizing and pharmacologically targeting underlying mechanisms mediating abnormal fear memory, based on an animal model of anxiety disorders. When taken in the senior year, this practicum fulfills the comprehensive requirement in psychology and in neuroscience. This course may not be taken as pass/fail. Prerequisite: PSYC 001; PSYC 025. Research Design and Analysis; PSYC 030. Behavioral Neuroscience; prior training in conducting animal research and permission of the instructor. 0.5 - 1 credit.

Fall 2017. Schneider.

#### 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. This course may not be taken as pass/fail. Prerequisite: PSYC 001; PSYC 025. Research Design and Analysis, and permission of the instructor.

Social sciences. 0.5 - 1 credit.

#### PSYC 105. Research Practicum in Psychology and Neuroscience: Social Imitation

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 but will generally focus on topics related to social imitation, including why we tend to imitate others, what purposes social imitation serves, the consequences of social imitation for the experience of empathy, how imitation may give rise to emotional contagion, and how interpersonal factors such as similarity, attractiveness, and race bias may affect imitation. 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.

This course may not be taken as pass/fail. Prerequisite: PSYC 001; PSYC 025. Research Design and Analysis; either PSYC 031A. Social, Cognitive and Affective Neuroscience or PSYC 035. Social Psychology and permission of the instructor.

Social sciences.

1 credit. Fall 2017. Norris.

#### PSYC 106. Research Practicum in Cognitive Development

This course provides experience in conducting research with infants and young children. Students conduct research projects singly or in small groups in collaboration with the instructor. Students will design, implement, analyze, and report an experiment. Project topics are negotiated at the beginning of the semester and are focused on language and concept acquisition as well as the interaction between language and cognition early in development. 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.

This course may not be taken as pass/fail. Prerequisite: PSYC 001; PSYC 025. Research Design and Analysis and permission of the instructor. PSYC 039. Developmental Psychology is strongly recommended. Social sciences.

1 credit. Eligible for COGS

Spring 2018. Christie.

#### PSYC 108. Research Practicum in Clinical Psychology

This course may not be taken as pass/fail. Social sciences. 1 credit each semester. Eligible for CBL Spring 2018. Siev.

#### PSYC 109. Research Practicum in Social and Emotional Well-Being

This course provides experience in conducting research related to clinical psychology, prevention, and well-being promotion. The course focuses on the development and promotion of social and emotional well-being in adolescents and young adults. Students typically work in groups and collaborate on one or more research projects. Students may work on ongoing projects in the lab

## Psychology

and/or develop new projects. Research projects typically focus on: 1) identifying and understanding the psychosocial and contextual factors that promote social and emotional wellbeing and protect against the development of psychological difficulties (e.g., depression and anxiety); and/or 2) evaluating school- and community-based programs designed to promote social and emotional well-being. Students gain experience in many aspects of the research process, including reviewing research literature, developing research questions and hypotheses, implementing research projects, entering and analyzing data, and presenting on projects and findings orally and in writing (in journal article format). In addition to the class meeting time, additional time is scheduled as needed to conduct research projects.

Senior Comprehensive Credit: When taken in the senior year, this course fulfills the comprehensive requirement in psychology.

Commitment: 2 semester (fall and spring) commitment is generally required. Occasionally exceptions can be made with permission from the instructor.

This course may not be taken as pass/fail. Prerequisite: PSYC 001 or the equivalent; PSYC 025 (Research Design and Analysis); PSYC 038: Clinical Psychology is strongly preferred. Permission is required to take the course one semester.

Social sciences.

1 credit each semester.

#### PSYC 110. Research Practicum in Cognitive Neuroscience

Students conduct research projects in small groups in collaboration with the instructor. Projects include designing, implementing, analyzing and reporting on an experiment. Topics are negotiated at the beginning of the semester and are focused on the brain mechanisms underlying the interactions between attention, perception and memory. All students meet together for a weekly lab meeting; additional weekly meeting times are scheduled.

When taken in senior year, the course fulfills the comprehensive requirement in psychology.

This course may not be taken as pass/fail. Prerequisite: PSYC 001, PSYC 025: Research Design and Analysis, and either PSYC 032 Perception, PSYC 033 Cognitive Psychology, or PSYC 031 Cognitive Neuroscience, and permission of the instructor. Social Sciences. 1 credit. Spring 2018. Payne.

#### Seminars

Admission to honors seminars normally requires at least a B+ in the associated core course. Enrollment in seminars is normally limited to 12 students.

#### PSYC 130. Seminar in Behavioral Neuroscience Course previously titled 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. This course may not be taken as pass/fail. Prerequisite: PSYC 001 and PSYC 030. Behavioral Neuroscience or permission of the instructor. Social sciences. 1 credit. Eligible for COGS Spring 2018. Schneider.

#### PSYC 131. Seminar in Cognitive Neuroscience

This seminar is a critical analysis of current cognitive neuroscience literature focusing on processes such as attention, language, and memory. Students consolidate different theories about these functions including evidence from a variety of techniques such as behavioral measures, brain imaging, neurophysiology, and neuropharmacology.

This course may not be taken as pass/fail. Prerequisite: PSYC 001 and PSYC 031, or permission of the instructor. Social Science. 1 credit.

Eligible for COGS

## PSYC 131A. Seminar in Psychology and Neuroscience: The Social Brain

This seminar focuses on a critical analysis of current social neuroscience literature, covering topics such as person perception, empathy, perspective taking, emotion, attitudes, relationships, stereotypes and prejudice. Students consider evidence from studies using a broad spectrum of methods, including behavioral measures, functional neuroimaging, neurophysiological recordings, neuropsychology and computational modeling. This course may not be taken as pass/fail. Prerequisite: PSYC 001 and either PSYC 031A. Social, Cognitive and Affective Neuroscience or PSYC 031 Cognitive Neuroscience or permission of the instructor.

Social sciences. 1 credit. Eligible for COGS Spring 2018. Norris.

#### PSYC 132. Perception, Cognition and the Embodied Mind Seminar

This seminar examines foundational issues and theories in the empirical study of human perception and 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. What counts as an explanation of experience? How could conscious beings evolve? What is the relationship between perception and cognition? Topics vary from year to year. This course may not be taken as pass/fail. Prerequisite: PSYC 032. Perception, PSYC 033. Cognitive Psychology or COGS 001. Introduction to Cognitive Science or permission of the instructor. Social sciences.

1 credit. Eligible for COGS

#### PSYC 133. Metaphor and Mind Seminar

This seminar examines scientific theories of metaphor with an emphasis on using metaphor as a way of understanding the representation of meaning in the brain and the communication of meaning.

This course may not be taken as pass/fail. Prerequisite: PSYC 033. Cognitive Psychology, PSYC 034. Psychology of Language or COGS 001. Introduction to Cognitive Science or permission of the instructor. Social sciences. 1 credit.

#### 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.

This course may not be taken as pass/fail. Prerequisite: PSYC 001 and PSYC 034. Psychology of Language or permission of the instructor. Social sciences. 1 credit. Eligible for COGS Spring 2018. Grodner.

#### PSYC 135. Seminar in Social Psychology

The seminar will provide an opportunity for critical exploration of contemporary topics in social psychology, including findings from crosscultural and social neuroscience research. Various perspectives and methods for investigating how human mind and social behavior interact with situational and environmental factors are considered. Real world implications and applications are also discussed. This course may not be taken as pass/fail. Prerequisite: PSYC 001 and PSYC 035. Social Psychology or permission of the instructor. PSYC 025. Research Design and Analysis is strongly preferred. Social sciences. 1 credit. Fall 2017. Ward.

#### PSYC 138A. Seminar in Clinical Psychology: The Role of Context

This course examines the role of context in both the development and treatment of psychopathology. We consider questions regarding the interplay of biology, development, and social/cultural context as we seek to understand the genesis of different psychological disorders, and the forces that maintain, exacerbate, and ameliorate them. Within this framework, we examine how the subjective experience of illness and of the therapeutic relationship affect treatment outcome, how an ecological perspective has informed empirically supported and alternative treatments for a wide variety of psychological disorders, and several current controversies in the theory and practice of clinical psychology. Students may only use one clinical seminar, either PSYC 138A or PSYC 138B as an honors preparation.

This course may not be taken as pass/fail. Prerequisite: PSYC 001: Introduction to Psychology and PSYC 038: Clinical Psychology, or permission of the instructor. Social Sciences. 1 credit.

Fall 2017. Reimer.

#### PSYC 138B. Seminar in Clinical Psychology: Anxiety Disorders

This course provides an in-depth look at anxiety disorders, including phobias, panic disorder, agoraphobia, GAD, social anxiety disorder, OCD, and PTSD. We will explore the etiology, psychopathology, and treatment of each disorder, as well as current controversies and future directions. We will give attention to different theoretical orientations and methods of investigation; however, we will primarily emphasize empirically supported approaches. That is, we will explore what research tells us about anxiety.

Students may only use one clinical seminar, either PSYC 138A or PSYC 138B as an honors preparation.

This course may not be taken as pass/fail. Prerequisite: PSYC 001: Introduction to Psychology and PSYC 038: Clinical Psychology, or permission of the instructor. Social Sciences. I credit. Spring 2018. Siev.

#### PSYC 139. Seminar in Developmental Psychology: Language and Concept Acquisition

(Cross-listed as LING 139) An advanced study of special topics in development: language and concept acquisition.

## Psychology

We discuss findings from newborn infants, crosscultural, and atypical population research relevant to the issues of language acquisition and conceptual development. This course may not be taken as pass/fail. Prerequisite: PSYC 001 and PSYC 039. Developmental Psychology or PSYC 034. Psychology of Language or permission of the instructor. Social sciences. 1 credit. Eligible for COGS Spring 2018. Christie.

#### **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 advisor 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. This course may not be taken as pass/fail. Prerequisite: PSYC 001; PSYC 025. Research Design and Analysis and permission of a research supervisor. Social sciences. Writing course. 1 credit each semester. Fall 2017. Staff. Spring 2018. Staff.

## Religion

YVONNE P. CHIREAU, Professor STEVEN P. HOPKINS, Professor<sup>1</sup> ELLEN M. ROSS, Professor MARK I. WALLACE, Professor TARIQ al-JAMIL, Associate Professor and Chair GWYNN KESSLER, Associate Professor ALBERTA FERRARIO, Visiting Assistant Professor HELEN PLOTKIN, Visiting Assistant Professor (part time) ANITA PACE, Administrative Assistant

Absent on leave, fall 2017.

The Religion Department plays a central role in the Swarthmore academic program. One attraction of the study of religion is the cross-cultural nature of its subject matter. The discipline addresses the complex interplay of culture, history, text, morality, 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, Afro-Caribbean 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. Majors and minors are required to take one introductory course. These courses are numbered Religion 001-008B. 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 advisor, 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 Plan.

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 two-credit honors or course thesis upon return to Swarthmore.

### **Course Major and Minor**

#### Requirements

General major requirements are eight 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 advisor, however, students are required to take one introductory course. These courses are numbered Religion 001-008B. Majors are also 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 are not required to enroll in the Senior Symposium: Religion Café.

Students may choose to write a thesis. Those seniors who desire to complete a one-credit thesis or a two-credit thesis as part of the major will need to obtain permission from a faculty advisor 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 B/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 2-credit 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. 2-credit 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 threehour 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 double-credit 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 B+/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 applicants: for instructions and forms, please visit the "Sophomore Plan of Study" page under "Academic Advising & Support" on the Dean's Office website.

Junior and senior applicants: please visit the Registrar's Office website for the "Change/Add a Major or Minor" form.

#### Please note:

All applications to the religion major or minor should include 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). 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 the Faculty Advisor 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 Pre-Estimation 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 Off-Campus 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.

### **Religion 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. Humanities.

Writing course. 1 credit.

## 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 teamtaught course in religion, politics, and culture, 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. Humanities. 1 credit.

Eligible for ISLM, PEAC

#### **RELG 002.** 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. Humanities.

1 credit.

#### 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 source-criticism 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. Humanities.

1 credit. Eligible for GSST Spring 2018. Kessler.

## RELG 003A. Hebrew Bible and its Modern Interpreters

When was the last time you read the most important text in the West? The Hebrew Bible isn't what it used to be. In the modern period, the scientific study of the Bible opened up new ways of thinking about sacred texts. This is an introduction to the Hebrew Bible as a literary, historical, political, and religious document. We will explore the use and abuse of the Hebrew Bible by Jews and Christians, paying attention to its role in contemporary culture, politics, and ethics. Reading select books of the Bible, we will emphasize issues of gender and race, revolution and Zionism, genocide and slavery, good and evil. Humanities.

## 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, first-century 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 extra-canonical 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

Humanities. 1 credit. Eligible for CBL

#### **RELG 004B. Biblical Interpretation**

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 any-of both Jewish interpretation and Judaism. Humanities.

1 credit.

#### **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. Humanities. 1 credit.

Fall 2017. Kessler. Wallace.

#### **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. Humanities. 1 credit. Eligible for INTP

#### RELG 006. Judaism: God, Torah, Israel

This course explores Judaism through a survey of its history, literature, practices and beliefs-with 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). Humanities. 1 credit.

#### RELG 006B. The Talmud

This course introduces students to the academic study of the Babylonian Talmud (Bavli)-and through it, the academic study of Judaism. Through close, critical, and engaged readings of both brief selections and more lengthy passages, the course not only explores the vast seas of the Bavli but also considers the Bavli's foundational place within Judaism and its importance to Jewish tradition. We begin by reading selections of the Talmud that both seek to situate the material in its immediate historical-literary contexts and to explore current points of relevance. We proceed to a close reading of one sugya (passage) and then spread out to examine some specific topics, focusing on rabbinic constructions of gender and rabbinic theology. The close readings of texts are supplemented by contemporary scholarship on the Talmud and the rabbis of antiquity. Finally, we read two contemporary mediations on Judaism that use the Talmud as their "anchor," their point of reference.

Humanities. 1 credit. Spring 2018. Kessler.

# RELG 006C. First Year Seminar: Visions of the End: Hope and Despair in the Last Days

(Cross-listed as ENVS 006)

For millennia, speculation about the end of the world has fired the political and religious imagination of Western cultures. Today, arguably, the most potent threat to planetary well-being is the unchecked advance of the fossil fuels extraction industry. This course will study the range of reactions to this threat inside and outside of the academy, including sustainability politics, on the one hand, and the religious-environmental movement, on the other.

Many environmentalists argue we are living at "the end of nature" or the time of the "6th great extinction," while many religious believers, doomsday "preppers" and others, some sympathetic to fossil fuels-apocalypticism, and some not, also assert we are living into the end of the world as we know it.

Questions will be asked about the history and role of the extractive industries in climate change; how the emerging field of environmental studies can shape productive moral and political responses to this change; and the hope, and the anxieties, of new environmental spiritualities (with special reference to Christian, Amerindian, and Pagan worldviews) to challenge neoliberal economics and engender a living passion for the health of human societies in harmony with the wider natural world. Humanities. 1 credit. Eligible for CBL, ENVS Spring 2018. Wallace.

#### **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. Humanities. 1 credit. Eligible for GSST

#### 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. Humanities.

Writing course. 1 credit. Eligible for ASIA Spring 2018. 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. Humanities. 1 credit. Eligible for ISLM, MDST

Singible for ISEWI, MIDS I

#### **RELG 009. The Buddhist Traditions of Asia**

This 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.

Humanities. Writing course. 1 credit. Eligible for ASIA

### **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. Humanities. 1 credit. Eligible for BLST

Eligible for BLST Spring 2018. Chireau.

### RELG 011. First-Year Seminar: Religion and the Meaning of Life

What is the purpose and meaning of life? What does it mean to be human? What constitutes "a life well lived"? Themes include religion and personal and social change, understandings of the Sacred, religion and radical action, community, suffering, despair, love, healing, the living and the dead, and good and evil. Readings include Gospel of Matthew, Gospel of Thomas, Francis of Assisi, Frederick Douglass, Lucretia Mott, Leo Tolstoy, Thich Nhat Hanh, Dorothy Day, Abraham Joshua Heschel, Martin Luther King, Jr., J. K. Rowling, Bryan Stevenson, Greg Boyle, Terry Tempest Williams, and Krista Tippett. Humanities. 1 credit. Fall 2017 Ross

### 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. Humanities.

Writing course. 1 credit. Eligible for ISLM, MDST

#### 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.

Humanities. 1 credit. Eligible for ASIA

### 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. Humanities. 1 credit.

Eligible for ASIA

#### 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. Humanities.

1 credit.

Eligible for ASIA ISLM

### RELG 013A. Indian Religion and Philosophy

What is a person? Do we have souls? What is the nature of ultimate reality and how can we come to know it? What accounts for the inequities of human existence? What constitutes ethical behavior? This course explores these and other questions as they are addressed by Hindu, Buddhist, and Jain philosophical traditions. While our emphasis will be on selected Indian schools of thought in their classical formulations (from 700 B.C.E. to the 14th century), the course will conclude with examples of more recent developments and interpretations by modern Indian thinkers. Humanities. 1 credit. Eligible for ASIA

Eligible for ASIA Fall 2017. Ferrario.

### RELG 014. 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.

Humanities. 1 credit. Eligible for MDST

### **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 Anglo-American 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. Humanities. 1 credit.

Eligible for CBL, INTP

### **RELG 018. Global Christianities**

This course explores Christian beliefs and practices in a global context. We consider Christian worldviews, their cultural expressions, history, and influence upon personal and social self-understanding and action. Examples will be drawn from Christian communities in Asia, Africa, Europe, Latin America, and the United States. Themes include images of the sacred and of Jesus and Mary, mother of Jesus; pilgrimage and festivals; saints; gender; power; and religious authority; politics, conflict, and social transformation; and healing traditions. Humanities. 1 credit.

### 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 "devil's 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. Humanities. 1 credit.

Fall 2017. Chireau.

### **RELG 020. 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. Humanities. 1 credit. Eligible for MDST

#### RELG 021. Prison Letters: Religion and Transformation

Focusing on themes of religion and transformation and prison as a literal and metaphorical space, this course explores themes of life and death, oppression and freedom, isolation and community, agency, and identity. Drawing primarily on Christian sources, readings move from the New Testament through Martin Luther King, Jr., to the contemporary U.S. context where more than 2 million people are incarcerated today. Humanities.

1 credit.

Spring 2018. Ross.

### 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 earthcentered 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 antitoxic 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. Humanities. 1 credit.

Eligible for CBL, ENVS, PEAC Fall 2017. Wallace.

### **RELG 023. Quakers Past and Present**

This course explores the religious beliefs, social teachings, and impact of Quakers in North America from the 1650s to the present. Topics include Quaker beliefs about God and the light within; Quakers and social reform including antislavery work, women's rights advocacy, Indian rights, and peace work; Quakers and education; Quakers and nature; and Quakers and social change today (including the work of Earth Quaker Action Team [EQAT] and the American Friends Service Committee). While focusing on Quakers and social transformation, this course includes discussion of specific concerns and methods in the study of religion. Students will have the opportunity to work with the resources of Swarthmore College's Friends Historical Library and Peace Collection. Humanities. 1 credit. Eligible for PEAC

### 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.

Humanities. 1 credit. Eligible for BLST

### RELG 025. Black Women, Spirituality, Religion

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. Humanities.

1 credit. Eligible for BLST, GSST Fall 2017. Chireau.

### RELG 027. 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

### Religion

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). Humanities. Writing course.

1 credit. Eligible for CBL, INTP

#### RELG 029. Is God a White Supremacist?

This course will focus on representations of race in religious discourses and social practice. Particular attention will be given to discussion of the interpretive practices that are foundational to the process of "whiteness-making" and the construction of white identity. With primary source readings and secondary literature ranging from the biblical interpretation of white supremacist "Christian identity" churches to the articulation of the Yakub theory of racial formation in the Nation of Islam, the course readings will: address religious theories justifying racial domination, engage in critical examination of the influence of religious thought both past and present on comparative global racisms, and transnational whiteness. Themes will include: evil and the nature of suffering, human/anti-human binaries, death and being, and perceptions of the racialized transcendent Other in the social, political, and symbolic order.

Humanities. 1 credit. Eligible for ISLM

### RELG 030. 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. Humanities. l credit.

Eligible for ASIA, MDST

## RELG 031. 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.

Humanities. 1 credit. Eligible for ASIA, MDST

### 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. Humanities.

1 credit. Eligible for GSST, INTP

**RELG 033. Queering the Bible** This course surveys queer and trans\* readings of biblical texts. It introduces students to the complexity of constructions of sex, gender, and identity in one of the most influential literary works produced in ancient times. By reading the Bible with the methods of queer and trans\* theoretical approaches, this class destabilizes long held assumptions about what the bible--and religion--says about gender and sexuality. Humanities 1 credit.

Eligible for GSST

#### RELG 034. Partitions: Religions, Politics, and Gender in South Asia Through the Novel

The course will focus on a close reading of modern and contemporary South Asian novels and short stories structured around the theme of "partition(s)," not only the historical events of the partition of Bengal in 1905, India's Partition in 1947, or the Independence of "Ceylon" and the rise of Buddhist Nationalism and the "Sinhala only" movements, but the long shadows of these events right up to the present. We will focus on many "figures of partition," personal, religious, and political, in Bengali, Malayalam, Tamil, Sinhala, Kannada, Urdu, and English prose literatures of India, Pakistan, and Sri Lanka. Themes will range from from religion and politics, gender/power; sexuality, love, family; caste, class, ethnicity, and race, in Hindu, Parsee, Sikh, Muslim, Christian, and Buddhist settings. Authors

include Rabindranath Tagore, Khushwant Singh, Raja Rao, Bapsi Sidhwa, Rohinton Mistry, Anita Desai, Salman Rushdie, Lalitambika Antharjanam, Arundhati Roy, A. Sivanandan, Permal Murugan, and Michael Ondaatje. Humanities

1 credit. Eligible for ASIA Spring 2018. Hopkins.

### RELG 035. Religion and Medical Ethics

This course will examine some of the major themes, methods, and topics of bioethics through the lens of religion, focusing primarily on the three Abrahamic religions: Judaism, Christianity, and Islam. We will then explore specific bioethical topics and cases, to include: abortion, assisted reproductive technology, end-of-life issues, organ donation and transplantation, research on human subjects, and justice in health care. In addition to the scholarly literature of the field of medical ethics, we will also read three longer texts that deal with many of the pertinent issues. Humanities.

1 credit.

## 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. Humanities. 1 credit.

### RELG 037. 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." Humanities. 1 credit.

Eligible for GSST, INTP, MDST

### **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. Humanities. 1 credit.

### RELG 039. Good and Evil

What do the Western religious traditions have to teach us about the evils of alienation, racism, war, disease, exploitation and the possibility of solidarity, resistance, love, and goodness? This course will be an intense examination of modern philosophical and theological responses to the mysteries of radical evil and radical good. Humanities. 1 credit.

Eligible for PEAC

### RELG 040. Rape, Slavery, and Genocide in Bible and Culture

This course examines biblical "texts of terror." It explores the functions of violence in religious writings as well as their influence and impact on current cultural issues. What are the biblical contributions to or roots of current societal crises about gender, race, and war? What are the limits and limitations placed on rape, slavery, and genocide in the Bible that are obscured in current (mis)uses of biblical precedents in support of such modern day atrocities? Without collapsing the distinctions between or simply blaming the Bible for current manifestations of extreme violence, this class aims to bring these "texts of terror" into the open to help facilitate critical discussion about, and critique of, violence then and now. Humanities. 1 credit.

Eligible for GSST

### RELG 042. Performing Ecstasy Dancing the Sacred

(Cross-listed as DANC 038) Humanities. 1 credit. Eligible for ASIA, GSST

### RELG 043. In Quest of God: The Latin American Religious Arena

(Cross-listed as LALS 025) This course explores distinct historical, sociocultural contexts, political and economic processes in which historical varieties of Catholicism have emerged in Latin America. Understanding religion as generative, this course will examine the foundations, theological themes, and processes of pre-Hispanic indigenous practices, and Spanish Colonial Catholicism, the public role of the Catholic Church in struggles for justice and human rights in the 1960 to-1990 period expressed by Liberation Theology, the recent growth of Protestantism with a focus on Pentecostalism, the "end of revolutionary utopias," the contemporary praxis of Catholicism, the public emergence of native spiritualities, and diaspora religions of the Caribbean, Brazil and Latinos in the United States. Humanities.

1 credit. Eligible for LALS Spring 2018. Machuca-Galvez

### RELG 044. Reading Comics and Religion

This course focuses on how notions of Religion and the Sacred arise in comics and graphic novel texts. Drawing upon world religious traditions, the course will explore how comics use both text and image to frame spiritual identity, sacred practice, and religious experience. Using comics as primary sources, the class will engage the expression, imagination, and critical interpretation of religion through close readings of comics as texts, with analysis of their visual forms. Coursework includes weekly lab meetings within a digital media maker's space. The course will culminate with the production of student-created comics, which will be developed over the semester and supervised by an artist-in-residence. Humanities.

1 credit.

Spring 2018. Chireau.

## RELG 049. Yoga in History, Philosophy, and Practice

This course surveys the history, philosophy, and practices of Yoga from its origins in early forms of Indian religiosity to its contemporary, transnational development. In the West today, Yoga usually refers to a system of bodily postures. However, as we will learn in this course, this constitutes only one aspect of much broader practice systems and worldviews that have developed into distinct traditions with sophisticated philosophies, such as the classical Yoga of Patañjali. The physical disciplines and meditation practices of Yoga aim not only at mastery of one's body and mind, but also at achievement of what was regarded as the highest goal of human life: liberation from the cycle of rebirth. While our main focus will be on the Yoga traditions that developed within the Hindu fold, we will also consider Buddhist forms of Yoga. Humanities. 1 credit. Eligible for ASIA

Fall 2017. Ferrario.

### 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. Humanities.

1 credit. Eligible for GSST, ISLM, MDST Fall 2017. 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 nation-states 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. Humanities. 1 credit. Eligible for ISLM

### 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.

Humanities. 1 credit.

Spring 2018. 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. Humanities.

1 credit.

Fall 2017. Plotkin.

### 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? Humanities. 1 credit.

### RELG 092. Readings in Classical Jewish Texts

Directed Reading. 0.5 credit. Fall 2017. Plotkin. Spring 2018. Plotkin.

### **RELG 093. Directed Reading**

1 credit. Fall 2017. Staff. Spring 2018. 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 multidisciplinary 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. Humanities. 1 credit. Fall 2017. Kessler.

#### **RELG 096. Thesis**

Writing course. 1 credit. Fall 2017. Staff. Spring 2018. Staff.

### **RELG 097. Thesis**

1 credit. Fall 2017. Staff. Spring 2018. 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? Humanities. 2 credits. Eligible for ISLM, PEAC

### RELG 101. Jesus in History, Literature, and Theology

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. Humanities. 2 credits.

Eligible for MDST Fall 2017. Ross.

#### 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. Humanities.

2 credits. Eligible for ASIA, MDST

### **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. Humanities. 2 credits. Eligible for BLST, LALS

## 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.

Humanities.

2 credits.

### **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. Humanities. 2 credits. Eligible for INTP

### **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 Englishspeaking 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. Humanities.

2 credits. Eligible for ASIA, GSST, MDST

### 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.

Humanities. 2 credits. Eligible for ISLM, MDST Spring 2018. al-Jamil.

#### 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 text-critical, 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. Humanities. 2 credits.

### **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? Humanities.

2 credits.

Eligible for ISLM, MDST

#### RELG 037. 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." Humanities.

1 credit.

Eligible for GSST, INTP, MDST

### **RELG 180. Senior Honors Thesis**

1 credit. Fall 2017. Staff. Spring 2018. Staff.

**RELG 199. Senior Honors Study** 0.5 credit. Spring 2018. Staff.

### Sociology and Anthropology

JOY CHARLTON, Professor of Sociology FARHA N. GHANNAM, Professor of Anthropology <sup>1</sup> MICHAEL L. MULLAN, Professor of Sociology BRAULIO MUÑOZ, Professor of Sociology <sup>2</sup> SARAH WILLIE-LEBRETON, Professor of Sociology, Chair CHRISTINE SCHUETZE, Associate Professor of Anthropology LEE A. SMITHEY, Associate Professor of Sociology CHRISTOPHER FRAGA, Assistant Professor of Anthropology NINA JOHNSON, Assistant Professor of Sociology DANIEL LAURISON, Assistant Professor of Sociology MAYA NADKARNI, Assistant Professor of Anthropology ROSE MAIO, Administrative Coordinator

1 Absent on leave, fall 2017.

<sup>2</sup> Absent on leave, spring 2018.

The Sociology and Anthropology Department provides students with intellectual tools for understanding contemporary and historical cultural patterns and social issues such as globalization, nationalism, racism, sexism, embodiment, and the complex layering of 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 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 cultural categories and social structures, including those that appear and feel natural and inevitable. Among the goals of Sociology and Anthropology are to acquire knowledge about different social groups and culture systems and to engage critically with the complexities of social life.

The Department of Sociology and Anthropology offers a Course Major, Honors Major and Minor, and several Special Majors, but no Course Minor.

### The Academic Program

### **Overview of the Curriculum**

Course majors are required to take eight units of work in the department; of the eight, five are assigned. Assigned courses include, "Foundations: Culture, Power, and Meaning (Anthropology)," "Foundations: Self, Culture, and Society (Sociology)" (at least) one designated methods course and a two-credit senior thesis. Students in the classes of 2019 and 2020, who have taken "Introduction to Anthropology and Sociology," (which is no longer offered) need not take the "Foundations" courses.

Introduction to Anthropology and Sociology

The "Foundations" courses offer key introductions to the department's two fields; anthropology and sociology. Each highlights the distinct but complementary theories and methods of the two disciplines and provides a solid background to ongoing debates in each discipline. Throughout the courses, we will examine concepts fundamental to both sociology and cultural anthropology and how these disciplines have changed over time.

### Introduction to Anthropology and Sociology

This course offers a foundational introduction to the department's two fields; anthropology and sociology. Taught by both a sociologist and an anthropologist, it provides a solid background to ongoing debates in the study of culture and society, highlighting the distinct but complementary theories and methods of the two disciplines. Throughout the course, we will examine fundamental theories and concepts of both sociologists and cultural anthropologists and how these have changed over time.

### Application Process Notes for the Major or the Minor

Students intending to major or minor in sociology/ Anthropology must submit a Sophomore Plan application to the department office.

### **Course Major**

Applicants for the major normally have completed at least two courses in the department. Courses numbered ANTH/SOCI/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 (ANTH/SOCI/SOAN 021-099). (Some higher courses may, however, with permission of the instructor, be taken without prerequisite.) Seminars are numbered ANTH/SOCI/SOAN 100 to 199. For current seminar listings, consult the Web site at http://www.swarthmore.edu/sociologyanthropology or contact the department administrative coordinator.

The applicant's performance in department courses is discussed during the application review process; we also consider carefully an applicant's potential for carrying out the department's senior thesis requirement. Please note that the Sociology and Anthropology Department does not offer a course minor.

Note: Course labeling within each of the three tiers of offerings-introductory courses,

(ANTH/SOCI/SOAN 001-019), regular courses (ANTH/SOCI/SOAN 020-099) and seminars (ANTH/SOCI/SOAN 100-199)-reflect internal departmental codes rather than levels of advancement or particular research areas. Consult the listings for prerequisites particular to each course.)

## 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 seeking to complete an honors major are required to complete at least nine ANTH or SOAN credits, five of which are assigned: "Foundations: Culture, Power, and Meaning (Anthropology)," "Foundations: Self, Culture, and Society (Sociology)," (at least) one designated methods course and a two-credit honors senior thesis. In addition, two - 2 credit preparations may be seminars, or, with permission, a course plus attachment, or paired upper-level courses, or off campus study.

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, off campus study. 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. 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.

### 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 syllabus for the attachment, and c) written materials as requested by the instructor. The syllabus for the class and for the attachment, plus the written materials, if any 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 off-campus study can be either integral or complementary to an honors 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 off-campus study possibilities, students must 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 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 complete an Honors minor normally complete at least five SOAN credits, three of which are assigned: "Foundations: Culture, Power, and Meaning (Anthropology)," "Foundations: Self, Culture, and Society (Sociology)," and (at least) one designated methods course.

Minors in the Honors Program must complete a two credit preparation: a seminar or a thesis, a class with an attachment, or with permission paired courses.

The Honors Minor preparations include:

1. One honors preparation in SOAN.

2. Depending on the format of the presentation, the examiner will receive the materials described in (2) or (3), above. The honors minor student's work for this preparation will be similar to the honors major student's work.

### 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.

### **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. Two credits must be "Foundations: Culture, Power, and Meaning (Anthropology)," "Foundations: Self, Culture, and Society (Sociology)," (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 housed in the Sociology and Anthropology Department 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 advisor. The senior thesis project represents the centrality of research to our disciplines, and allows students to develop their research interests through working directly with a faculty member. Students develop their analytical and writing skills and learn the process of developing and conducting a substantial research project from proposal to completed manuscript.

### 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 Experiential Learning Opportunities

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 realworld 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.

Some 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, qualitative research, and statistical analysis are important components of many of our courses, 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 and Service Learning Opportunities

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 foundations of their senior thesis project. Study abroad 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.

### Summer Opportunities

Summer funding opportunities exist and are particularly relevant for juniors planning research towards their senior thesis projects. Grants from a variety of college-administered sources are available to support research by students during the summer. Please have a look at our website: http://www.swarthmore.edu/x8583.xml to learn more about our extensive and generous funds for travel, research, internships, and faculty/student collaboration. We especially encourage our juniors to explore these possibilities. Funded summer research has often 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 advisors in the Educational Studies Department.

### Anthropology Courses

Course labeling within each of the three tiers of offerings-introductory courses (ANTH 001-019), regular courses (ANTH 020-099) and seminars (ANTH 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.

## ANTH 001. Foundations: Culture, Power and Meaning (Req)

This course offers students a foundation in the theories, methods, and history of the discipline of cultural anthropology. Anthropology is a comparative study of culture, practice, and human diversity. This course will introduce students to some of the discipline's key conceptual innovations, theoretical approaches, and past and present debates. Anthropologists study various societies to understand how meaning is constituted and circulated, how daily practices are structured by social norms and power systems, and how people resist, subvert, and transform inequalities and common modes of identification. Drawing on deep engagement with specific groups, communities, and processes, anthropology offers unique insights into pressing questions of our time, such as the effects of the global circulation of capital and people and how social structures, cultural-political ideologies, and everyday life interact. Topics to be covered include ritual and religion, kinship and family, gift and exchange, citizenship and nationalism, gender and sexuality, medicine and healing, media and circulation, and food and consumption. Students will gain familiarity with ethnography, Anthropology's flagship genre. We will also explore the discipline's key field research methods and the ethical issues related to its goals to understand, interpret, and represent the lived experiences of people in diverse contexts. Required course. Social sciences. 1 credit. Fall 2017. Schuetze.

### ANTH 002D. First-Year Seminar: Culture and Gender

The goal of this seminar is to dismantle commonplace assumptions about gender, sexuality, and sexual difference. It brings key texts in gender theory (Foucault, Butler, and others) into conversation with anthropological studies that respond to, problematize, or advance these theoretical claims. Our focus is the gendered body as the site of power and resistance, in contexts that range from past empires to present-day inequalities, and from technologies of reproduction to drag performances of femininity. Theory course. Social sciences. 1 credit. Eligible for GSST Fall 2017. Nadkarni.

## ANTH 002F. Anthropology of Childhood and the Family

The experience of being a child would appear universal, and yet the construction of childhood varies greatly across cultures and throughout history. This course examines childhood and childrearing in a number of ethnographic contexts, investigating children as both social actors and as the target of specific cultural ambitions and anxieties. Topics include new forms of family and reproduction, children as objects (and agents) of violence, and representations of childhood in human rights discourse, among others. Theory course. Social sciences. 1 credit. Eligible for GSST Spring 2018. Nadkarni.

ANTH 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 sub-Saharan Africa. In our readings and in class discussions, we will pay close attention to how worldviews 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."

Social sciences. Writing course. 1 credit. Eligible for BLST

### ANTH 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. Social sciences. Writing course 1 credit. Eligible for ISLM Spring 2018. Ghannam.

### ANTH 020J. Dance and Diaspora

(Cross-listed as DANC 025A) Theory course. Social sciences. Writing course. 1 credit. Eligible for ASIA, GSST

#### ANTH 021D. Anthropology of Art and Aesthetics

This course will familiarize students with the key debates that have shaped the anthropological study of art over the course of the 20th century. After reviewing Franz Boas's path-breaking studies on Native American design motifs, we will go on to survey studies of indigenous artistic traditions, the controversies ignited by metropolitan exhibitions of primitivist modern art, and theoretical disputes over aesthetic paradigms in the anthropology of art, before posing the question of how anthropology can illuminate and engage contemporary art worlds. Social sciences.

1 credit. Fall 2017. Fraga.

### ANTH 023C. Anthropological Perspectives on Conservation

Conservation of biodiversity through the creation of national parks is an idea and a practice that began in the U.S. 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. Social sciences. 1 credit. Eligible for BLST, ENVS

### ANTH 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 understand ing compare to more recent views of anrhropologists 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. Social sciences. Writing course. 1 credit.

### ANTH 031C. Hispanics, Mestizos, Latinxs

In this course we will elaborate an historical anthropological perspective on the diverse identities that have developed in the Americas since the time of the Spanish conquest. As the title of the course is meant to imply, we will trace the evolution of ethnic, racial, and gender identities from roughly the sixteenth century to the present day, putting their development in relation to the major political and economic changes that have shaped the history of Spanish America and its multiple, shifting relations to the United States. Our course materials will be drawn from cultural anthropology, history, and Latin American cultural studies. They will supply us with a framework through which to analyze these identities in terms of specific, culturally meaningful practices embedded in dynamic networks of social relations. Throughout the semester, our emphasis will be on the multiple, interwoven sources of identity in the Americas, from indigenous Meso- and South America to Europe and Africa. This emphasis will in turn enable us to reflect on what an historical anthropological perspective can teach us about the concept of identity in general.

Prerequisite: Previous coursework in Sociology & Anthropology and/or Latin American and Latino Studies is recommended, but not required. Social sciences. 1 credit.

Eligible for LALS Fall 2017. Fraga.

#### ANTH 032D. Mass Media and Anthropology

This intermediate course explores 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 and social relations: from novel images of nationhood to mass experiences of crime, war, and violence. Along the way, the course also asks the impact of new media technologies on how anthropology itself imagines identity, community, and locality. Theory course.

Social sciences. 1 credit. Eligible for FMST, INTP

### ANTH 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. Social sciences. Writing course. 1 credit.

### ANTH 039C. Food and Culture

Food, a daily necessity for human survival, is strongly shaped by social relationships and cultural meanings. Who makes our food, what we eat, how we eat, and with whom we eat all reflect and reproduce various social connections and inequalities. This class explores how food, its making, and its consumption have been analyzed by different scholars, particularly anthropologists. We will also look at how various societies define, manage, and regulate the preparation and consumption of food. The class consider questions such as: Why do we serve specific foods at certain occasions? What constitutes a proper meal? How does class, gender, race, and ethnicity shape the making and serving of certain foods? Why might a particular food be viewed a delicacy in one society, but be seen as disgusting and repulsive in another? How did food become a "problem" that has to be managed in many of our contemporary societies? Through our readings and discussions, we will seek a deeper understanding of edible matters, how we shape them and how they shape

Social Sciences. 1 credit.

## ANTH 040B. Language, Culture, and Society

(Cross-listed as LING 025) Prerequisite: At least one linguistics course. Social sciences. 1 credit.

#### ANTH 040J. Social Movements in Latin America: Gender & Queer Perspective

Since the 1980s, the contemporary forces of neoliberalism, re-democratization and globalization have profoundly reshaped the societies of Latin America. Against this backdrop of change, people who have

long been politically marginalized-indigenous groups, women, peasants, gays, blacks-have struggled to assert their rights and make their voices heard. In this course we will focus on gender and queer identities in Latin America through a social movement lens. Social sciences.

1 credit. Eligible for GSST, LALS

### ANTH 041B. Visions of Latin America

This course is premised on the idea that the forms of a population's political domination depend upon how that population is envisioned-i.e., upon the visual techniques of knowledge/power that make possible the orderly administration of society, as well as upon the cultural imaginaries that shape social desires and fears. Beginning with historical accounts of the cataclysmic encounter between the Spanish Empire and the peoples of the New World, this course will survey the visual technologies through which the Holy Roman Empire and the later Latin American republics attended to their subjects, as well as the colonial and post-colonial fantasies that have haunted Latin America over the past five hundred years. Social sciences. I credit.

Eligible for LALS

## ANTH 041C. Visual Cultures of Mexican and Aztlan

Surveying the visual signifiers with which creole, Mexican, and Chican@ identities have been forged, this course will track a broad sample of figures through the historical and political contexts of New Spain, modern Mexico and occupied Aztlán. We will ground our study of these icons in the social context of their production and circulation, and will critically examine the relationships between image-making and statemaking, and between citizenship, national/ethnic identity, and community building. Visual materials for the semester will include a robust sample of religious and secular art, cinema, and print media. Social sciences.

1 credit. Eligible for LALS

### ANTH 042D. Political Anthropology

This course examines the anthropology of rights, justice, and the state. Its focus is citizenship: as both an ideal of formal equality and a lived practice of political belonging that reflects and reproduces social inequity. The first half investigates how citizenship intersects with forms of difference such as race, class, gender, sexuality, and ability. Ethnographic examples include debates about the legal recognition of gay marriage, spatial struggles over the right to the city, and disability activism and the biopolitics of citizenship. The second half examines how new forms of mobility of people, ideas, and capital challenge the nation-state as the site of political membership. What is the state's responsibility towards its "others": from transnational entrepreneurs to illegal migrant workers, and from political refugees to the detainees at Guantanamo Bay?

Theory course. Social sciences. 1 credit. Fall 2017. Nadkarni.

### ANTH 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, and 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. Topics covered include how beliefs about health, disease and the body are constructed and transmitted, how healers are chosen and trained, social disparities in health and illness, and the importance of narrative and performance in the effectiveness of healing practices. Finally, we will consider the ways in which medical anthropology can shed light upon important contemporary medical and social concerns.

Theory course. Social sciences. 1 credit. Fall 2017. Schuetze.

### ANTH 043F. Culture, Power, 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 sub-Saharan Africa. In our readings and in class discussions, we will pay close attention to how worldviews and systems of meaning shape actions and attitudes, and explore how differing systems of meaning have shaped relationships of power in both historical and contemporary contexts. Throughout the course, we will consider the usefulness of the concept "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."

Social sciences. 1 credit. Eligible for BLST

## ANTH 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.

Social sciences. 1 credit. Eligible for GSST INTP

### ANTH 051B. Drugs and Governance in the Americas

Psychoactive substances offer us an especially powerful prism with which to analyze the techniques of governance that have characterized the political regimes of the Americas since colonization. Hemispheric in scope, this course will trace an anthropological history of the uses and abuses of such diverse substances as chocolate and tobacco, coffee and cocaine, peyote and prescription pharmaceuticals, thereby preparing students to disentangle the multiple forces that over determine contemporary discourses of drugs, intoxication, and their respective places in social life.

Social sciences. 1 credit. Eligible for LALS

### ANTH 053B. Anthropology of Public Health

This course introduces students to the study of "public health" and various problems framed by public health actors through the theoretical and methodological lenses of sociocultural anthropology. The field of public health is typically defined by its commitment to understand not just the manifestations and patterns of illness in populations, but the social, political and economic forces that place certain individuals and populations at greater risk of morbidity and mortality. By critically examining various frameworks for understanding disease in human populations, the class will explore the potentials and challenges of improving health and healthcare in various populations, both within and outside of the United States. Additionally, this class aims to demonstrate the value of anthropology to the field of public health and to efforts to solve national and global health problems. Students will be urged to think about "public health" and "global health" as dynamic cultural artifacts and cultural systems; and likewise, to consider how ethnography is an important methodological tool, both to understand public health agendas as well as to investigate the subjects and elisions of public health interventions. Social sciences.

1 credit.

Spring 2018. Schuetze.

### ANTH 071C. Anthropology of Mind (T)

In this course we will examine how anthropologists (as well as the occasional sociologist, sociolinguist and critical psychologist) have approached questions related to how our mental and emotional experiences are shaped or otherwise affected by the communities to which we belong. Do(es) the language(s) we speak, for example, constrain what we are able to think? Do the meanings encoded in our day-to-day activities reflect deeper structures embedded in our minds? To what extent are different personality traits fostered and valued by different cultures or communities? To what extent is the opposition between mind and body a cultural byproduct of European Christianity, and what kinds of knowledge might reside in our bodies? How have different societies made sense of and dealt with the cognitive differences presented by the members of their populations? What can different responses to "madness" teach us about the operations of power in a given society? This is a theory course, and as such will be very reading intensive. Theory course.

Prerequisite: Previous coursework in Sociology & Anthropology is highly recommended. Social sciences.

#### 1 credit.

### ANTH 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 course 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 numerous sites and contexts, attentive to both the collectivities such commemorations inspire and their points of resistance or failure. Theory course. Social sciences. 1 credit.

Eligible for GSST INTP

### ANTH 072D. Visual Anthropology

This course introduces students to the history, theory, and practice of visual anthropology. Topics include the intertwined histories of colonial photography and anthropology, how anthropologists use visual ethnographic methods as tools of cultural analysis, and how indigenous groups and activists use contemporary visual technologies to gain visibility and to remake their social worlds. The course will include a series of film screenings, as well as a small production component. Theory and methods course.

Social sciences. 1 credit. Eligible for FMST

### ANTH 077B. The Visual Anthropology of Performance

(Cross-listed as DANC 077B) Theory course. Social sciences. 1 credit.

### ANTH 079B. Dancing Desire in Bollywood Films

(Cross-listed as DANC 079)

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. Social sciences. 1 credit.

Eligible for ASIA, FMST, GSST Spring 2018. Chakravorty.

### ANTH 091B. Cultural Dimensions of Scientific Thought

(Cross-listed as INTP 091)

This seminar will explore the deep and often overlooked connections between physical and cultural ways of understanding the universe. To that end, we will be taking a historical and crosscultural view of scientific forms of thought in order to examine the multiple, complex relationships that obtain between individual human agents and their social milieus in the processes of creating and advancing scientific theories of the universe. How, for example, do we take the measure of what we don't know? How do we ascribe differential values to scientific questions and solutions? In other words, what makes one question more important than another? What makes a scientific theory "elegant" or "beautiful," and why do (Western) scientists place epistemological value on such aesthetic considerations? Potential course topics include: the role of myth in the oral transmission of astronomical knowledge among aboriginal Australians; the materialization of astronomical knowledge in ancient Mesoamerican architecture; early cultures of number and numerology; the technological conditions for advances in scientific thought; the role of social desire in scientific discovery and invention (of the infinitesimally small, of photography, or of relativity, for example); and the role of intercultural interaction in the creation of new approaches to scientific problems.

Social sciences. 1 credit. Eligible for INTP Spring 2018. Fraga.

### ANTH 095. Independent Study

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. Two options exist for students wishing to get credit for independent work.

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 2017. Staff.

Spring 2018. Staff.

### Seminars

### ANTH 103. Humanitarianism: Anthropological Approaches

(Cross-listed as PEAC 103)

This honors seminar will introduce students to the most salient theoretical debates among anthropologists on humanitarian intervention around the world. We will also examine a range of case studies, from the birth of Western Christian humanitarian missions in colonial contexts to humanitarian interventions (e.g. military, foodbased assistance, natural disaster relief, postconflict reconstruction) today. The geographic scope of this seminar will encompass North America, South America, the Caribbean, Europe, sub-Saharan Africa, the Middle East/North Africa, East Asia, and South Asia. We will consider, for instance, how anthropologists have examined relief efforts in the wake of Hurricane Katrina in New Orleans. What social science scholarship has been produced on mental health interventions after political and natural crises in Haiti? How are victims of torture at the hands of the Indian military supported by international organizations in Kashmir? What is the nature of global Islamic humanitarianism today? How are local national staff employed by international organizations shaping humanitarian approaches to gender-based violence in Colombia? These are among the many questions we will address over the course of the semester.

Social sciences. 2 credits.

### ANTH 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.

Social sciences.

2 credits.

### ANTH 116. Anthropology of Capitalism

In the wake of the global financial system's recent paroxysms, it is more urgent than ever that students of anthropology be equipped to understand the social and cultural dimensions of contemporary capitalism. This seminar will therefore examine the defining features of the current capitalist milieu through the lens of comparative ethnography. Combining classic theoretical readings on the structure and development of capitalism with concrete ethnographic studies, we will analyze a broad sample of the many guises under which capital travels across political, economic, and cultural borders. These analyses will then enable us to approach the more pressing question of how individual actors can and do contribute to the transformation of the global cultural economy. Theory course.

Social sciences. 2 credits. Eligible for INTP

### ANTH 122. Urban Ethnographies

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. Theory and methods course. Social sciences. 2 credits. Spring 2018. Ghannam.

### ANTH 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.

Social sciences. 2 credits. Eligible for ISLM

### ANTH 133. Anthropology of Biomedicine

In this seminar we explore biomedicine from an anthropological perspective, exploring the entanglement of bodies with history, environment, culture, and power. We begin the course with a focus on the historical emergence of biomedical technologies and their related discourses and practices and then move into contemporary contexts of their use and circulation. Throughout, we focus on the ways in which the development, use, and distribution of biomedical technologies and discourses are influenced by prevailing medical systems, political interests, and cultural norms. Topics to be covered include biomedicine as technology, medical categorization and ideas of the normal, ethics and moral boundaries, the space of the clinic, the circulation of pharmaceuticals, and health and inequality. Social sciences.

2 credits.

### Sociology Courses

Note: Course labeling within each of the three tiers of offerings-introductory courses

(SOCI 001-019), regular courses (SOCI 020-099) and seminars (SOCI 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.

## SOCI 001. Foundations: Self, Culture and Society (Req)

This course offers a foundational introduction to the discipline of sociology. Throughout the course, we will examine key theories and concepts sociologists use, reading authors like W.E.B. DuBois, Marx, Weber, Durkheim and Bourdieu. We will also explore some of the key issues sociology tackles, including race and racism, gender and sexism, class and inequality, and the role of states and other power structures in shaping these and other facets of our social world. Required course.

Social sciences.

1 credit. Spring 2018. Laurison.

#### SOCI 004B. First-Year Seminar: From Modernity to Postmodernity and Beyond: An Introduction to Social Theory

An account of the rise and development of social theory. The first part of the seminar is a discussion of the ideas about society and culture by such influential theorists as Marx, Weber, Durkheim and Freud. The second part is a discussion of the works by key contemporary theorists such as Adorno, Benjamin, Goffman, Geertz, and Foucault. Among the topics covered are: race and ethnicity, culture and sexuality, globalization and science.

Theory course. Social sciences. 1 credit. Fall 2017. Muñoz.

#### SOCI 006F. Rich and Poor

The U.S. has experienced a remarkable rise in economic inequality since the 1970s. What is driving this trend? Is the U.S. still the land of opportunity or is it a society of haves and havenots largely determined at birth? This course will address these and other pressing questions about economic inequality.

Theory and methods course. Social sciences. 1 credit.

#### SOCI 006G. Social Problems and Social Policy

This course uses theories of class, race, and social policy to analyze the concept of the "underclass" over the past four decades. The class focuses on sociological thinking about the effects of public policies concerning labor markets, housing, incarceration, and the war on drugs. Social sciences. 1 credit.

#### SOCI 006H. Down But Not Out: The Social Problems of Philadelphia

For decades the City of Philadelphia has been plagued by problems of population loss, violent crime, poverty, racial segregation, failing public schools and environmental pollution. While serious problems remain, parts of Philadelphia are experiencing a remarkable rebirth and the city has reversed its decades-long trend of population loss. This class will look at the historical development of economic and educational inequality and an effort to address them in South Philadelphia, a largely poor and working-class area undergoing some of the most dramatic social change in the city. For over a century South Philly has been among the city's most diverse and culturally vibrant areas and a major gateway for immigrants from across the globe-most recently from several Asian countries and the Puebla region of Mexico. The class will travel to South Philly and see the

neighborhood in walking tours. The course has a significant community-based learning component in which students will contribute to an on-going project at one of the city's most diverse public schools: Andrew Jackson Elementary. Jackson's principal has developed a vision for making the school a model of how a green curriculum can be a low-cost vehicle for under-resourced urban schools to achieve academic excellence. We will help build a rooftop garden where Jackson's students will learn the science of environmental sustainability by growing their own food. Students will also work to develop the next phase of Jackson becoming a model green school by designing a science greenhouse for aquaponics and hydroponic vegetable growing systems. Every aspect of this greenhouse will showcase principles of energy efficiency and foster learning of science and math. The goal is to create a classroom that demonstrates daily the potential of passive and active solar energy technologies, allowing Jackson's students to explore first-hand a critical question: which one is really the expensive "alternative" energy source: solar or digging up carbon fuels and burning them? Note: Students who want to enroll/get credit for this as Educational Studies will need to have taken EDUC 014. Social sciences. 1 credit

Eligible for CBL

## SOCI 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 U.S. 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. Social sciences. 1 credit. Eligible for BLST Spring 2018. Johnson.

### SOCI 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 U.S.

Social sciences. 1 credit.

Eligible for BLST, GSST

### SOCI 010B. First Year Seminar: Everyday Life

This seminar will introduce the practice of taking a sociological perspective by way of reading ethnographic accounts of ordinary people in everyday settings (such as bars, Walmarts, school cafeterias, soup kitchens, churches,

neighborhoods), examining the broad social contexts, and exploring the social theory used to understand them. Students will practice skills to become more attentive observers and analysts of social life.

Social sciences. Fall 2017. Charlton.

### SOCI 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.

Social sciences.

1 credit.

#### SOCI 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. Social sciences. 1 credit.

### SOCI 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 19thcentury England and the U.S. 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. Social sciences. 1 credit.

Eligible for GSST, PEAC Spring 2018. Mullan.

## SOCI 010S. Diasporic Ethnicities: Mass Emigration 1860-1924

In this course, we will explore theories and traditions of sociological thought on ethnicity. Working with individual social histories of diaspora peoples as they make their communities in the U.S., students will be introduced to theoretical frameworks that help to explain the differences between sojourners and settlers, migration and exile. Social sciences.

1 credit.

# SOCI 010T. 1968 and the Origins of New Left: Social Theory, War and Student Revolt

The course begins with an ending, the Treaty of Versailles, and the failed socialist revolutions in Germany (1919) and Italy (1920-21) and the subsequent recasting of Marxist theory evident in the writings of Gramsci, Marcuse and eventually Habermas, thinkers who stimulate the rise of the New Left of the 1960s. 1968 symbolizes the massive changes of an era, the Paris student/worker revolt, the Prague Spring, the Chicago Democratic Convention, Vietnam and the Tet Offensive, and the flowering of youth culture and the New Left. Thus, events and social theory form the nucleus of thought and investigation for a course with a year, 1968, as its descriptive title. Social sciences.

1 credit.

Eligible for PEAC

## SOCI 016B. Research Methods in Social Science (M)

This course is a practical introduction to research in the social sciences. We discuss what is and is not knowable about the social world, and the ways in which sociology, anthropology, and adjacent disciplines conduct and evaluate research. We learn about and practice three of the primary methodologies of our disciplines: ethnography, indepth interviewing, and surveys. Students will learn the rudiments of statistical analysis; no prior training in statistics is required (or expected). Methods course.

Social sciences.

1 credit. Fall 2017. Laurison.

## SOCI 024B. Latin American Society and Culture

An 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. Social sciences. 1 credit. Eligible for LALS, PEAC

### SOCI 024C. Latin American Society Through Its Novel

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. Social sciences. 1 credit.

Eligible for INTP, LALS Fall 2017. Muñoz.

### SOCI 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. Social sciences.

1 credit.

### SOCI 025B. Transforming Intractable Conflict

(Cross-listed as PEAC 025B)

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.

Social sciences. 1 credit. Eligible for PEAC

### SOCI 026B. Class Matters/The Class Ceiling

This class examines the ways our social origins (or class backgrounds) impact our lives, and the ways in which class positions are passed down (or not) across generations. We will discuss what we mean by "class"; economic inequality and poverty; intersections of class with racial, gender, and other forms of inequality; cultural and social capital; tastes and lifestyles; the role of education in both promoting social mobility and reproducing class inequalities; and the role of the state in shaping inequalities and mobility chances. Social sciences. 1 credit. Spring 2018. Laurison.

## SOCI 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. Theory course.

Prerequisite: A course in theory, sociology/ Anthropology, literature, or philosophy. Social sciences.

1 credit.

### SOCI 027C. Classical Theory

Through the works of Marx, Weber, Durkheim, Simmel, DuBois, and Freud, the recurrent and foundational themes of late 19th- and early 20thcentury 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. Social sciences. 1 credit.

### SOCI 030B. Practicum: Organizational Cultures

This is a course designed for students to be in the field participating within either non-profit or forprofit organizations, as volunteers, interns, researchers, or staff. The practicum will provide an analytical frame for that experience through the concepts of organizational cultures and social worlds, and enhance the development of research skills by means of participant observation. Social sciences.

Spring 2018. Charlton.

### SOCI 030C. Public Sociology

This course will be concerned with the ways sociological knowledge, research, and perspectives relate to the social worlds outside academia. How does, even should, sociology engage larger social issues directly, or contribute to immediate needs? How does its tools and concepts create bridges to, with, and from broader publics? We will explore examples of public scholarship in multiple arenas, and examine ways they relate to our own intellectual and political interests. Social sciences. 1 credit.

### SOCI 030E. Work and Organizations

Americans may spend up to half their waking hours "at work." Work is perhaps the most

significant means by which American society shapes our own personal experience and life chances, and through which structures and dynamics of society are generated. We will explore: (1) the meaning of work, and its relationships to personal identity and purpose in life, (2) the social organization of work, including occupations and professions, the structure of careers, workplaces, and contemporary changes such as "gig economy," and (3) the relationship of work to the creation and maintenance of power and social inequality.

Social sciences. 1 credit. Fall 2017. Charlton.

### SOCI 035C. Social Movements and Nonviolent Power

Social Movements and Nonviolent Power 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 Arab Spring, among others. Theory course.

Social sciences.

1 credit.

### SOCI 036B. Field Methods

In this course students are introduced to the theory and practice of field methods and their utility to sociologists. Students will design and carry out their own semester long research project employing both participant observation and indepth interviewing.

Methods course. Social sciences.

1 credit.

### SOCI 036C. Sociology of U.S. Labor Movement

Over decades millions of workers struggled together, often at great risk and against great odds and repression, to build the U.S. labor movement. In the process they carved out a place of dignity, prosperity, and political voice for workers at the bottom of the economic ladder. They created a path of economic mobility for minorities, women and immigrants. They provided a counterweight for the average citizen against the increasingly concentrated power and influence of modern capitalism's most fortunate. Because the labor movement empowers the weak it has always been embattled and for decades now it has been in decline. While it contributed some to its own demise, capitalists have systematically attacked the labor movement with a carefully planned and well-funded hegemonic project that has directly challenged it, delegitimized it and legally hamstrung it. The consequences for workers and our society have been terrible. The labor movement is no longer a hedge against economic inequality and over the last several decades an ever-increasing share of the benefits of economic growth go to the top 1% of Americans while wages stagnate or decline for most Americans. Without labor our political discourse is bereft of any meaningful discussion of alternative to the corporate-sponsored neo-liberal ideology of freemarkets and deregulation. The traditional avenues of a strong labor movement-the less-educated, immigrants, women, Latinos, and African-Americans-are closing. Soon, if things don't change, there will be no labor movement to speak of. No other institution in U.S. history has been able to do what the labor movement has done for the average person. What could revitalize it? What, if anything, could replace it? This course will use theories of politics, economics, class and social movements to understand the rise and decline of the labor movement and why it was so critical in determining economic inequality. Theory course.

Social sciences.

### SOCI 036D. Into the Field: Qualitative Methods

This course will introduce students to participant observation, interviewing, and surveys as research methods. We will read and discuss a range of studies employing these methods. Throughout the semester students will gain firsthand experience using these methods. This course will include a significant community-based learning component. Students will help to design a research study for a public elementary school, Andrew Jackson Elementary, in Philadelphia. This study will focus on why parents choose charter schools rather than their local neighborhood school. The project will aid Jackson in its efforts to attract more families from the surrounding neighborhood and may contribute to a critical debate about school choice in Philadelphia.

Methods course. Social sciences. 1 credit. Eligible for CBL

### SOCI 040B. Language, Culture and Society

(Cross-listed as LING 025) Social sciences. 1 credit.

### SOCI 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. Theory course. Social sciences. 1 credit. Eligible for INTP

## SOCI 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 Habermas, Geertz, Foucault, Bourdieu, and Freire. Theory course. Prerequicite: SOAN 044E

Prerequisite: SOAN 044E. Social sciences. 1 credit.

## SOCI 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. Social sciences.

1 credit.

## SOCI 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 suited for students interested in the areas of sociology and anthropology and interpretation theory.

Theory course. Social sciences. 1 credit.

#### SOCI 048G. Between the "Is" and the "Ought" Black Social and Political Thought

(Cross-listed as BLST 040G) Our study of black social and political thought will

include not only the pivotal scholarly texts, but also the social and political practice and cultural production of abolitionists, maroons, Pan-Africanists, club women, freedom fighters, poets, and the vast array of "race men and women" across the spectrum of crusades. We will explore the range of intellectual and cultural production and protest ideology/action of Blacks through the politics and social observation of the preemancipation period, post-emancipation liberation struggles, and the post-colonial and post-civil rights period. Social sciences. 1 credit. Eligible for BLST

## SOCI 048I. Race and Place: A Philadelphia Story (Inside-Out Exchange Course)

Using Philadelphia neighborhoods as our site of study, this course will analyze the relationship between race/ethnicity and spatial inequality, emphasizing the institutions, processes, and mechanisms that shape the lives of urban dwellers. We will survey major theoretical approaches and empirical investigations of racial and ethnic stratification in cities, their concomitant policy considerations, and the impact at the local level in Philadelphia. We will focus particular attention on the role of narrative and racialized discourse in relation to the distribution of an array of economic, social, and political resources to city residents. Prerequisite: Must have permission of the instructor.

Social sciences. 1 credit. Eligible for BLST Fall 2017. Johnson.

## SOCI 048K. Political Sociology: The Mafia and the State

This course will introduce students to the comparative study of criminal organizations across the globe. In it, we will explore the social, political and economic conditions in which organized crime develops. Analyses will be focused on the organization of criminal networks, rules and codes, activities both in legitimate business and illegal markets, and their relationship to politics. This comparative approach will enable students to identify those factors facilitating the emergence, migration and persistence of organized crime across nation states and global polities emphasizing the mechanisms, processes and institutions that structure and are structured by criminal organizations. We will survey the major theoretical approaches and empirical investigations of Mafias and like organizations in Italy, Russia, China, Japan, Central Asia, Central and South America, the United States, and locally in Philadelphia. Theory course.

Social sciences. 1 credit. Fall 2017. Johnson.

### SOCI 048L. Urban Crime and Punishment

This course takes a sociologically based yet interdisciplinary approach to the study of the politics of crime and the criminal justice system in U.S. cities. We investigate the origins of the politics of law and order from the mid-twentieth century to today, against a broader backdrop of macro-structural changes in the social, economic,

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and political landscape including but not limited to urban de-industrialization and suburbanization. Using Philadelphia neighborhoods as our site of study, this course will analyze the relationship between urbanity, criminality and spatial inequality, emphasizing the institutions, processes, and mechanisms that shape the lives of urban dwellers. We will survey major theoretical approaches and empirical investigations of politics, crime and stratification in cities, their concomitant policy considerations, and the impact at the local level in Philadelphia. Readings and inclass discussions will be supplemented by experiences in the field and guest speakers drawn from organizations involved in the crime/criminal justice system.

Social sciences. 1 credit.

Eligible for BLST

### SOCI 050B. Medicine as a Profession

This course will bring a sociological perspective to the history of the healing arts; the professionalization of medicine; the corporatization of health care; the elaboration of health occupations and specializations; public health; socialization and medical education; emotional labor; caring work; and organizational contexts within which health care work is embedded.

Social science. 1 credit. Spring 2018. Charlton.

## SOCI 055C. Climate Disruption, Conflict, and Peacemaking

(Cross-listed as PEAC 055, ENV 066) The course will examine several ways in which climate change is a driving force of violent and nonviolent conflict and creates opportunities for peacemaking and social justice. Already, climate change has been identified by the U.S. military as a threat to national security, offering a new rationale for expanding the military industrial complex. Demands on scarce resources generate and exacerbate regional conflicts and drive mass movements of refugees. Behind these dramatic manifestations of climate stress lie extensive corporate and national interests and hegemonic silences that emerging conflicts often reveal. Conflict also brings new opportunities for peacebuilding, cooperation, and conflict resolution. Climate crises have renewed and expanded local and global movements for environmental justice and protection, many of which have historical connections with the peace movement. In support of the college's carbon charge initiative, we will dedicate part of the course to understanding what constitutes the social cost of carbon and how it is represented in carbon pricing, particularly with respect to increasing frequencies of armed conflict and extension of the military industrial complex.

Social sciences. 1 credit. Fall 2017. Smithey.

### SOCI 056C. American Democracy: Elections and Political Participation

In this course, we use the unfolding 2018 elections as a case study for understanding some of the most pressing issues in American Democracy: the stark inequality in political participation, the sense many people have that electoral politics doesn't represent them, and the ways in which the rules & structure of our electoral system skew representation towards those with more resources. We will be embarking on a collective research project over the course of the semester to better understand how non-voters and others in disadvantaged groups understand their relationship to American democratic politics. Social sciences. L credit.

### SOCI 062B. Sociology of Education

(Cross-listed as EDUC 062) Theory course. Social sciences. 1 credit.

## SOCI 071B. Strategy and Nonviolent Struggle (M)

This research seminar involves working with The Global Nonviolent Action Database built at Swarthmore College. This website is accessed by activists and scholars worldwide. The database contains crucial information on campaigns for human rights, democracy, environmental sustainability, economic justice, national/ethnic identity, and peace. Students will investigate a series of research cases and write them up in two ways: within a template of fields (the database proper) and also as a narrative describing the unfolding struggle. Strategic implications will be drawn from theory and from what the group is learning from the documented cases of wins and losses experienced by people's struggles. Methods course. Social sciences.

Writing course. (Cross-listed as PEAC 071B, POLS 081) 1 credit. Eligible for PEAC Spring 2018. Smithey.

### SOCI 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 2017. Staff. Spring 2018. Staff.

### Seminars

### SOCI 109. Distinction: On Class and the Judgment of Tastes

This honors seminar is centered on reading Bourdieu's Distinction: A Social Critique of the Judgment of Taste. We will read the entire book carefully, in conversation with a number of strains of classical and contemporary sociology and social theory that inform or are informed by it. Some topics we will tackle include: how earlier theories & theorists informed Bourdieu's work: how people make judgments about one another; the role of judgments of taste, style, and embodiment in reproducing class advantages & disadvantages; the "omnivore" debate about the distinguishing (or not) meaning of "highbrow" culture; applications, extensions and critiques of Distinction from the US, Europe, and elsewhere; and the role of class and class cultures in politics. Social sciences.

2 credits. Fall 2017. Laurison.

### SOCI 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 U.S. is the focus, but other countries will be examined. Without exception, an introductory course on race and/or racism is a prerequisite. Theory course.

Social sciences. 2 credits. Eligible for BLST Spring 2018. Willie-LeBreton.

#### SOCI 148. Topics in Political Sociology: Power, Governance and the State (T)

Using the US case, this course will examine the influence of social forces on formal politics as well as politics in non-formal settings, emphasizing the institutions, processes, and mechanisms that shape the lives of citizens. We will survey major theoretical approaches and empirical investigations of key issues and debates in political sociology, their concomitant policy implications, and the impact on the populace-

including definitions of power, elites and decision making, social cleavages in participation, and the role of economic interests in governance. Theory course. Social Sciences.

1 credit.

### SOAN 180. Honors 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 2017. Staff. Spring 2018. Staff.

### Sociology/ Anthropology Courses

#### SOAN 001A. Introduction to Anthropology and Sociology

This course offers a foundational introduction to the department's two fields; anthropology and sociology. Taught by both a sociologist and an anthropologist, it provides a solid background to ongoing debates in the study of culture and society, highlighting the distinct but complementary theories and methods of the two disciplines. Throughout the course, we will examine fundamental theories and concepts of both sociologists and cultural anthropologists and how these have changed over time. Social sciences. L credit

### SOAN 020B. Urban Education

(Cross-listed as EDUC 068) Theory course. Social sciences. 1 credit. Eligible for BLST, CBL

### SOAN 020D. Music Cultures of the World

(Cross-listed MUSI 005A) Social sciences. 1 credit. Fall 2017. Bryant.

### SOAN 020E. Music & Mao: Music & Politics in Communist China

(Cross-listed as MUSI 008A) Social sciences. 1 credit. Fall 2017. Bryant.

### SOAN 020M. Race, Gender, Class and Environment

(Cross-listed as ENGL 089)

This course explores how ideologies and structures of race, gender, sexuality, and class are embedded in and help shape our perceptions of and actions in the "environment." Drawing on key social and cultural theories of environmental studies from anthropology, sociology, feminist analysis, and

### Sociology and Anthropology

science and technology studies, we will examine some of the ways that differences in culture, power, and knowledge construct the conceptual frameworks and social policies undertaken in relation to the environment. The course draws on contemporary scholarship and social movement activism (including memoir and autobiography) from diverse national and international contexts. Topics addressed include, for example, ideas/theories of "nature," toxic exposure and public health, environmental perception and social difference, poverty and natural resource depletion, justice and sustainability, Indigenous environmentalisms, eco-imperialism, and disparate impacts of global climate change. The course offers students opportunities for community-based learning working in partnership with local organizations. Social sciences.

1 credit. Eligible for ENVS, GSST, BLST

### SOAN 030P. Introduction to Geographic Information Systems (M)

(Cross-listed as ENVS 070)

This course is designed to introduce the foundations of Geographic Information System (GIS) with emphasis on applications for environmental analysis. It deals with basic principles of GIS and its use in spatial analysis and information management. Laboratory exercises provide practical experiences that complement the theory covered in lecture. By the end of this semester students should be capable of analyzing and managing environmental geospatial data. Social sciences. 1 credit.

Eligible for ENVS

### SOAN 096. Thesis (Req)

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 students must attend SOAN 098.

Required for course major. 1 credit. Fall 2017. Staff. Spring 2018. Staff.

### SOAN 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 students must attend SOAN 098.

Required for course major. Writing course. 1 credit. Fall 2017. Staff. Spring 2018. 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 advisors. 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 2017. Willie-LeBreton.

K. ELIZABETH STEVENS, Associate Professor, Chair ALLEN KUHARSKI, Professor<sup>3</sup> MATT SAUNDERS, Assistant Professor, Co-Chair for Production LAILA SWANSON, Assistant Professor (part time)<sup>2</sup> ELIZABETH ATKINSON, Visiting Assistant Professor (part time) GABRIEL QUINN BAURIEDEL, Visiting Assistant Professor (part time) JAMES MAGRUDER, Visiting Assistant Professor (part time) ALEX TORRA, Visiting Assistant Professor ADRIANO SHAPLIN, Visiting Instructor (part time) JAMES MURPHY, Associate in Theater Performance (part time) SCOTT CASSIDY, Production Manager and Technical Director JEAN TIERNO, Administrative Assistant TARA WEBB, Costume Shop Manager, Arts Administrator, Visiting Assistant Professor (part time)

<sup>2</sup> Absent on leave, spring 2018.

<sup>3</sup> Absent on leave, 2017-2018.

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. First- and second-year students thinking about a theater major should read these requirements and recommendations closely and should consult with their faculty advisor 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 long-range planning essential. Almost all theater courses and seminars are offered on a regular, annual schedule.

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

Ten credits of work including:

Fundamentals of Dramaturgy THEA 001 Acting I THEA 002A **or** Foundation Drawing ARTT 001 (*for design emphasis students only*) Any course in design, THEA 003, THEA 004A, THEA 004B, THEA 004C, THEA 004D, THEA 004E, Performance Theory and Practice, THEA 015

One credit from following list: Playwriting Workshop THEA 006, or Solo Performance THEA 025, or Directing I THEA 035, or an additional course in design THEA 003, 004A-E Production Ensemble THEA 022 or Special Project in Design THEA 034

Senior Company THEA 099

Theater Seminar 100-level

One additional credit in acting, design, directing, theater history, playwriting, or dramaturgy

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 advisors, 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. 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 advisor 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:

Fundamentals of Dramaturgy THEA 001

Acting I THEA 002A or Foundation Drawing ARTT 001 (for design emphasis students only)

Any course in design THEA 003, THEA 004A, THEA 004B, THEA 004C, THEA 004D, THEA 004E

Performance Theory and Practice THEA 015

One credit from following list: Playwriting Workshop THEA 006, **or** Solo Performance THEA 025, **or** Directing I THEA 035, *or* an additional course in design THEA 003, 004A-E Production Ensemble THEA 022 **or** Special Project in Design THEA 034

Each minor will choose an area of specialization and take one additional course or seminar 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.

### **Honors Major**

General requirements include:

Fundamentals of Dramaturgy THEA 001

Acting I THEA 002A or Foundation Drawing ARTT 001 (for design emphasis students only)

Any course in design THEA 003, THEA 004A, THEA 004B, THEA 004C, THEA 004D, THEA 004E

Performance Theory and Practice THEA 015 One credit from following list: Playwriting Workshop THEA 006 or Solo Performance THEA 025 or Directing I THEA 035, *or* an additional course in design THEA 003, 004A-E Production Ensemble THEA 022 or Special

Project in Design THEA 034 Senior Company THEA 099 Theater Seminar (100-level; counts as one honors preparation)

One additional credit in acting, design, directing, theater history, playwriting, or dramaturgy

Two additional thesis projects or seminars to be arranged individually in consultation with the student's major advisor.

Total credits for the honors major will vary depending on the student's program.

All potential honors majors need to fulfill the same technical/crew requirement described for course majors above.

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: Theater Seminar in the spring of junior year; fall of senior year, THEA 099 and prerehearsal thesis project preparation in the fall of senior year; and, rehearsal and performance of the thesis project in the spring of senior year.

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 Plan 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 advisor before committing to any extracurricular or off-campus projects during the junior or 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. Production project in one of the following fields: Acting, Design, Directing, Dramaturgy, Playwriting, or Solo Performance (*see descriptions below*).

3. A third preparation for honors will be approved at the discretion of the faculty at the end of the student's junior year.

In the student's Sophomore Plan of study and again in the junior year, they will be asked to indicate their first and second preference for their third honors preparation, only one of which may be for an additional production thesis. In addition to thesis preparations in the form of performance projects, the third preparation may consist of a second seminar, staged readings in playwriting or production dramaturgy, portfolio projects in design, written thesis work in performance theory, playwriting, dramaturgy, etc. Due to scheduling and staffing constraints, the department can only guarantee one individual performance thesis project per student. Decisions on the third preparation in honors will be made on a case-bycase basis, in part on the quality and completeness of each student's coursework in the department through the end of the junior year.

#### Acting

The student, together with their advisor, will undertake a project that will take place over the course of two semesters. The fall semester will consist of a series of workshops and assignments designed to further develop the critical and practical skills required for performance. This preparatory work in the fall semester will be put to use in the spring through the production of a play or performed by the students and directed by the acting faculty. An 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 full-scale 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.

The student may also prepare a portfolio project in design as an honors thesis, with all appropriate studio work but without being linked to a specific production in the department. Such a project permits the student to create a project beyond the givens of the department's specific production environment.

### 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 advisor 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 Fundamentals of Dramaturgy class (THEA 001) or Production Dramaturgy Seminar (THEA 121) 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 presskit 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 nondramatic 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.

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 one-credit 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 dramaturge. In a second semester, the department will hire a professional director for a set number of rehearsal hours in preparation for a staged reading, with whom the student will work through a rehearsal and revision process based on the earlier work with the production dramaturgy. The faculty advisor 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 advisor, 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 advisor 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:

Fundamentals of Dramaturgy THEA 001 Acting I (THEA 002A) *or* Foundation Drawing (ARTT 001) (*for design emphasis students only*) Any course in design (THEA 003, THEA 004A, THEA 004B, THEA 004C, THEA 004D, THEA 004E)

Performance Theory and Practice (THEA 015) One credit from following list: Playwriting Workshop (THEA 006) or Solo Performance (THEA 025) or Directing I (THEA 035) or an additional course in design (003, 004A-E) Theater Seminar (100-level) or two-credit Honors Thesis in Dramaturgy (180-181) or twocredit Honors Thesis in Playwriting (180-181)

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 advisors before preparing their sophomore papers.

All potential honors minors need to fulfill the same technical/crew requirement described for course majors above.

#### Department Policies for All Theater Majors and Minors

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.

While the theater faculty recognizes the value of co-curricular and extra-curricular performance work by students, such commitments at times can create serious stress and scheduling conflicts that can negatively impact a student's health and academic performance. The department therefore requires all majors and minors to receive written pre-approval from either their advisors or the chair before committing to any performance work outside of the department.

In the case of conflicts for students between dress rehearsals or performances in the department and other classes, the faculty will gladly make arrangements for excused absences with professors in other departments. Students should alert the department faculty about any such conflicts in the first weeks of rehearsals for any given production in the department, and never less than two weeks before the date of the conflict with dress rehearsals.

Working consistently with faculty on such timemanagement issues is essential for all rising theater majors and minors, and is of the highest priority for students planning to participate in the Honors Program.

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.

### Recommended Course/Seminar Sequence for Majors and Minors

\* indicates requirements for all course and honors majors in Theater.

### Freshman Year

Fundamentals of Dramaturgy (001)

Acting I (002A), fall or spring semester\*

Any course in design (003 or 004 sequence), fall or spring semester\*

Production Ensemble (022), fall semester\* (by audition; open to first-year students)

### Sophomore Year

Fundamentals of Dramaturgy (001) (if not taken freshman year)

Performance Theory & Practice (015), fall semester\* (counts for Writing Intensive Course Credit in the Humanities)

Playwriting Workshop (006), or Solo Performance (025)

Production Ensemble (022), fall semester\*, or Special Project in Design (034), fall or 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

Playwriting Workshop (006), **or** Solo Performance (025), **or** Directing I (035)

Performance Theory & Practice (015), fall semester\*

Production Ensemble (022), fall semester\* (if not taken in previously)

Special Project in Design (034), fall or spring semester

THEA Seminar (100-level) spring semester\* (counts for Writing Intensive Course Credit in the Humanities)

NB: A seminar 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, playwriting, or production dramaturgy\* Completion of the technical/crew hours requirement

### Senior Year

Senior Company (099), fall semester\* (honors majors add at least one credit of thesis credit each semester of the senior year)

### **Theater Courses**

### Introductory Courses

All introductory courses are open to all students without prerequisite.

### 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 improvisational exercises (from Stanislavsky, Viola Spolin, Uta Hagen and other sources) to unleash the actor's imagination, expand the boundaries of accepted logic, encourage risk taking, and free the body and voice for the creative process. We will also focus on beginning to analyze text, understanding scene-work and monologues in relation to an entire play, listening and responding to self, others and space, and developing the ability to play actions. Finally, each student will have the opportunity to test our principles of work through one scene with a partner, no longer than ten minutes, to be assigned by the instructor. This scene will be performed in front of the class.

Fulfills a general requirement for all theater majors and minors.

Humanities. 1 credit. Fall 2017. Bauriedel. Torra. Spring 2018. Torra.

### 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.

### 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. CR/NC grade. Prerequisite: Concurrent or past enrollment in THEA 002A 0.5 or 1 credit.

### 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.

Fulfills a general requirement for all theater majors and minors.

Humanities.

Spring 2018. 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. Fulfills a general requirement for all theater majors and minors.

Humanities.

1 credit.

Fall 2017. 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.

Fulfills a general requirement for all theater majors and minors.

Humanities. 1 credit. Fall 2017. 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 mixed-media 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.

Fulfills a general requirement for all theater majors

and minors. Humanities. 1 credit. Eligible for FMST Spring 2018. Webb.

### 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.

Fulfills a general requirement for all theater majors and minors.

Humanities. 1 credit. Spring 2018. Atkinson.

#### THEA 005A. Special Project in Interdisciplinary Performance

By individual arrangement with directing, acting, or design faculty in theater for interdisciplinary performance projects under department faculty mentorship and advising. Graded CR/NC. 0.5 - 1 credit. Fall 2017. Staff. Spring 2018. Staff.

### 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.

Fulfills a general requirement for all theater majors and minors.

Humanities.

1 credit.

Spring 2018. Shaplin.

### 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. Prerequisite: THEA 002A, any dance course numbered 040-044, or consent of the instructor. Humanities. 1 credit.

Spring 2018. Bauriedel.

### Intermediate Courses

#### THEA 011. Special Topics in Theater History, Dramaturgy and Performance Theory Humanities

1 credit.

#### THEA 011A. First-year Seminar: Carnival Culture: Dance, Music and Drama in Early Modern Europe

(Cross-listed as DANC 002, MUSI 002) As enlightenment ideals gave way to revolutionary impulses, dancers doubled as singers, circus performers shared their stages, and entertainments took place on the fairgrounds and in aristocratic palaces. Performances in these distinctive multigenre traditions raise a number of questions that are equally relevant for us today: What is the artwork? How can we restate a history that was intended to be fleeting? What is the relationship between "text" and performance? This course explores the hybrid genres of dance, mime, music and drama from the past to analyze their present relevance as "art."

This course fulfills a requirement for Music or Dance majors and minors. Open to all students. Humanities

1 credit.

Fall 2017. Sabee.

### THEA 012. Acting II

In this course students will explore and develop the skills necessary to perform Shakespeare with specificity and confidence. In addition to vocal and physical exercises intended to strengthen and free the actor's body and voice, students will delve into Shakespearean scene study. The course provides a strong foundation in basic acting technique that can be applied to multiple dramatic genres. In addition students will explore Shakespearean scenes using rigorous textual analysis, learning to use the clues in Shakespeare's text to make smart, useful acting choices. While working on scenes from Shakespeare's plays, students will learn how to rehearse, how to develop a character and how to increase their vocal, physical and emotional flexibility. Prerequisite: THEA 002A. Humanities. 1 credit.

Spring 2018. 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 THEA 012.

Graded CR/NC.

Prerequisite: THEA 002A, THEA 002C, and THEA 008 or THEA 012 or THEA 022. 0.5 - 1 credit.

## 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.

Graded CR/NC.

Prerequisite: THEA 003 or any 004 design class. 0.5 - 1 credit.

### THEA 014. Special Projects in Stage Management

By individual arrangement for a production project in connection with department directing workshops, Production Ensemble, honors thesis projects, or Senior Company. 0.5 - 1 credit.

THEA 014A. Special Project in Set Design Prerequisite: THEA 004A

### THEA 014B. Special Project in Lighting Design

Prerequisite: THEA 004B.

### THEA 014C. Special Project in Costume Design

Prerequisite: THEA 004C.

## THEA 014D. Special Project in Integrated Media Design

Prerequisite: THEA 004D.

## THEA 014E. Special Project in Sound Design

Prerequisite: THEA 004E.

### 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. Humanities. Writing course. 1 credit. Fall 2017. Stevens.

### 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. Prerequisite: THEA 006.

Humanities.

1 credit.

### THEA 021. Special Project in Production Dramaturgy

Production dramaturgy in connection with a production completed on or off campus. By individual arrangement between the student and the department faculty. Prerequisite: THEA 001 Corequisite: THEA 001 if not taken previously 0.5 - 1 credit. Fall 2017. Staff.

### 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.

Humanities.

Fall 2017. Torra.

### THEA 023. Special Project: Intermediate 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. Graded CR/NC. Prerequisite: THEA 003 or any 004 design class, and THEA 013. 0.5 - 1 credit.

## THEA 024. Special Project: Intermediate 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 - 1 credit.

### 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. This course fulfills the intermediate acting requirement for acting majors and minors (Acting I is still required for all majors and minors).

Fulfills a general requirement for all theater majors and minors.

Humanities. 1 credit. Spring 2018. Torra.

## THEA 034A. Special Project: Intermediate Set Design

Prerequisite: THEA 004A and THEA 014A.

### THEA 034B. Special Project: Intermediate Lighting Design

Prerequisite: THEA 004B and THEA 014B.

### THEA 034C. Special Project: Intermediate Costume Design

Prerequisite: THEA 004C and THEA 014C.

### THEA 034D. Special Project: Intermediate Integrated Media Design

Prerequisite: THEA 004D and THEA 014D.

#### THEA 034E. Special Project: Intermediate Sound Design

Prerequisite: THEA 004E and THEA 014E.

### 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 playscripts. The student's directorial self-definition 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.

Fulfills a general requirement for all theater majors and minors.

Prerequisite: THEA 001A, THEA 002A Humanities. 1 credit.

Fall 2017. Stevens.

### THEA 042. Production Ensemble II

Available by audition or consent of instructor to students who have successfully completed THEA 022.

Humanities. 1 credit. Fall 2017. Torra.

#### THEA 045. Special Project: Solo Performance

An independent study in solo performance by individual arrangement between the student and department faculty. Prerequisite: THEA 025 Humanities. 1 credit.

### Advanced Courses

### THEA 052. Production Ensemble III

Available by audition or consent of instructor to students who have successfully completed THEA 022 and THEA 042. Humanities. 1 credit. Fall 2017. Torra.

#### 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. Graded CR/NC. Prerequisite: THEA 003 or any 004 design class, and THEA 013, and THEA 023. 0.5 or 1 credit.

### THEA 054A. Special Project: Advanced Set Design

Prerequisite: THEA 004A and THEA 014A and THEA 034A.

#### THEA 054B. Special Project: Advanced Lighting Design

Prerequisite: THEA 004B and THEA 014B and THEA 034B.

#### THEA 054C. Special Project: Advanced Costume Design

Prerequisite: THEA 004C and THEA 014C THEA 034C.

### THEA 054D. Special Project: Advanced Integrated Media Design

Prerequisite: THEA 004D and THEA 014D and THEA 034D.

## THEA 054E. Special Project: Advanced Sound Design

Prerequisite: THEA 004E and THEA 014E and THEA 034E.

## THEA 055. Directing II: Advanced Directing Workshop

Directing II requires students to apply the exercises from THEA 035. Directing I: Directors' Lab 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.

Prerequisite: THEA 001, THEA 002A, THEA 015, THEA 035, and any class in design. Humanities. 1 credit. Spring 2018. Kuharski.

### THEA 061. Intermediate Special Project in Production Dramaturgy

Production dramaturgy in connection with a production complete on or off campus. By individual arrangement between the student and the department faculty.

Prerequisite: THEA 001, and THEA 021. 0.5 or 1 credit.

### THEA 062. Production Ensemble IV

Available by audition or consent of instructor to students who have successfully completed THEA 022, THEA 042, and THEA 052. Humanities. 1 credit.

Fall 2017. Torra.

## THEA 064. Advanced Special Project in Scenography, Sound, and Technology

A portfolio design or other design project in connection with a production completed on or off campus. To be taken concurrently or following THEA 054A, THEA 054B, THEA 054C, THEA 054D, or THEA 054E. By individual arrangement between the student and the department faculty. Prerequisite: Any course in the THEA 034 group, THEA 014 group, and THEA 034 group. 0.5 or 1 credit.

## 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. Graded CR/NC.

Prerequisite: THEA 002A, THEA 002C, THEA 008 *or* THEA 012 *or* THEA 022, THEA 012A. 0.5 - 1 credit.

### THEA 074. Special Project: Senior Projects in Design Courses

Special Project courses are independent studies. The special projects 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, 014, 034 and 054 in chosen curriculum. 0.5-1 credit.

### THEA 074B. Special Project: Senior Project in Lighting Design

Prerequisite: THEA 004B, THEA 014B, THEA 034B, and THEA 054B.

### THEA 074C. Special Project: Senior Project in Costume Design

Prerequisite: THEA 004C, THEA 014C, THEA 034C, and THEA 054C.

#### THEA 074D. Special Project: Senior Project in Integrated Media Design

Prerequisite: THEA 004D, THEA 014D, THEA 034D, and THEA 054D.

## THEA 074E. Special Project: Senior Project in Sound Design

Prerequisite: THEA 004E, THEA 014E, THEA 034E, and THEA 054E.

#### THEA 075. Advanced Special Project in Directing

By individual arrangement with the directing faculty. With faculty approval, directing or assistant directing off campus may qualify for this credit.

Prerequisite: THEA 001, THEA 015 or THEA 021, THEA 022, THEA 035, THEA 106. Humanities.

### THEA 091. Advanced Special Project in Production Dramaturgy

Production dramaturgy in connection with a production complete on or off campus. By individual arrangement between the student and the department faculty.

Prerequisite: THEA 001, THEA 021, 051, and THEA 061.

0.5 or 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. Prerequisite: appropriate preparation in the major. Humanities. 1 credit.

### THEA 093. Directed Reading

1 credit.

### THEA 094. Special Projects in Theater

Humanities. 1 credit.

### 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 cannot 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.

Fulfills a general requirement for all theater majors and minors.

Prerequisite: THEA 001, THEA 002A; any course in design; THEA 015; THEA 006, THEA 025, or THEA 035; THEA 022; a 100-level seminar; and the completion of one three-course sequence in theater.

Humanities. 1 credit. Fall 2017, Swanson.

### Seminars

#### **THEA 102. Acting Capstone**

This project will take place over the course of two semesters. The fall semester will consist of a series of workshops and assignments designed to further develop the critical and practical skills required for performance. This preparatory work in the fall semester will be put to use in the spring through the production of a play or performed by the students and directed by the acting faculty. By arrangement with the theater faculty. Humanities. Fall 2017. Stevens.

#### THEA 106. Theater History Seminar

A comparative study of theater history from its origins through the 21st century, along with a critical examination of a given theatrical company as a case study. Emphasis on the coherence of specific performance traditions and periods, significant companies as well as individual artists, the placement of theatrical performance within specific cultural contexts, and their relevance to contemporary theatrical practice. Readings will include, but not be limited to, dramatic texts as one form of artifact of the theatrical event. The spring 2015 seminar will focus on the work of Ariane Mnouchkine and the Théâtre du Soleil. Prerequisite: THEA 015. Humanities. Writing course.

2 credits. Spring 2018. Kuharski.

### THEA 121. Dramaturgy Seminar

How does a "monstre sacré" like Phaedra or Don Juan repeat across the centuries? What does Joe Orton owe to Wycherley and *Ralph Roister Doister*? In this cross-temporal comparative study of the post-classical western dramatic canon, emphasis will be placed equally on works from famous "periods" (Spanish Golden Age, Restoration comedy, French Classicism, Sturm und Drang, etc.) and on examples of forgotten or usurped genres-e.g., masque, melodrama, ballad opera, *le parade*, tragicomedy, *Grand Guignol*. Readings will also include critical texts by Castelvetro, Jonson, Boileau, Rousseau, Diderot, Dryden, Lessing, Schiller, Hegel, Hugo, Kierkegaard, Strindberg, Shaw, Nietzsche, and others.

Fulfills a general requirement for all theater majors and minors.

Prerequisite: THEA 001 or by permission of instructor. Humanities.

Writing course. 2 credits.

THEA 180A. Honors Thesis Preparation in Acting

THEA 180B. Honors Thesis Preparation in Directing

THEA 180C. Honors Thesis Preparation in Playwriting

THEA 180D. Honors Thesis Preparation in Design

THEA 180E. Honors Thesis Preparation in Dramaturgy

THEA 180F. Honors Thesis Preparation in Solo Performance

THEA 180G. Honors Thesis Preparation in Performance Theory

THEA 181A. Honors Thesis Production in Acting.

THEA 181B. Honors Thesis Production in Directing

THEA 181C. Honors Thesis Production in Playwriting

THEA 181D. Honors Thesis Production in Design

THEA 181E. Honors Thesis Production in Dramaturgy

THEA 181F. Honors Thesis Production in Solo Performance

THEA 181G. Honors Thesis Production in Performance Theory

### **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, D.C. 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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