Swarthmore

College Bulletin 2002-2003

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Directions for Correspondence

SWARTHMORE COLLEGE, 500 COLLEGE AVENUE, SWARTHMORE, PA 19081-1390

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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, 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.

This *Bulletin* contains policies and program descriptions as of July 15, 2002, 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.

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Table of Contents

COLLEGE CALENDAR 5

I

INTRODUCTION 10
EDUCATIONAL RESOURCES 11
ENDOWED CHAIRS 21

II

ADMISSIONS 25
EXPENSES 29
FINANCIAL AID 31

III

COLLEGE LIFE 48

IV

EDUCATIONAL PROGRAM 69
FACULTY REGULATIONS 80
DEGREE REQUIREMENTS 85
AWARDS AND PRIZES 87
FELLOWSHIPS 92

V

COURSES OF INSTRUCTION

Art 96
Asian Studies 106
Biology 112
Black Studies 118
Chemistry 122
Classics 128
Cognitive Science 134
Comparative Literature 136
Computer Science 139
Economics 146
Educational Studies 153
Engineering 160
English Literature 172
Environmental Studies 191
Film and Media Studies 194
Francophone Studies 197
German Studies 201
History 203
Interpretation Theory 219
Latin American Studies 222
Linguistics 224
Mathematics and Statistics 232
Medieval Studies 242
Modern Languages and Literatures 244
Music and Dance 278
Peace and Conflict Studies 298
Philosophy 301
Physical Education and Athletics 306
Physics and Astronomy 308
Political Science 316
Psychology 327
Public Policy 337
Religion 341
Sociology and Anthropology 351
Theater 367
Women's Studies 376

VI

THE CORPORATION and BOARD OF MANAGERS 380
ALUMNI ASSOCIATION OFFICERS and ALUMNI COUNCIL 384
THE FACULTY 386
ADMINISTRATION 402
VISITING EXAMINERS 2002 416
DEGREES CONFERRED 419
AWARDS AND DISTINCTIONS 425
ENROLLMENT STATISTICS 429

INDEX 430

SWARTHMORE COLLEGE CAMPUS MAP 434

DIRECTIONS FOR REACHING SWARTHMORE COLLEGE 436

2002

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College Calendar

2002	Fall Semester
Aug. 27	Residence halls open for new students.
Aug. 27–Sept. 1	New student orientation and placement days
Aug. 30	Residence halls open for returning students. Board plan starts at dinner for returning students.
Aug. 31	Registration in Sharples Dining Hall, 2 p.m. until finished (about 90 minutes)
Sept. 2	Classes and seminars begin.
Sept. 13	Drop/add ends. Last day to delete a course from or add one to permanent registration and last day to declare credit/no credit (CR/NC) grading option
Sept. 20–21	Board of Managers meeting
	Volunteer Leadership Weekend
Sept. 28	Homecoming
Oct. 11	October holiday begins at end of last class or seminar.
Oct. 21	October holiday ends at 8:30 a.m.
Oct. 25–27	Alumni Council meeting
Nov. 4	Schedule of courses and seminars for next semester available on-line
Nov. 8	Last day to withdraw from a course with the notation "W" or to return to regular grading from a CR/NC option
	Schedule of courses and seminars for next semester available in print for on-campus individuals
Nov. 11–21	Advising period
Nov. 25–27	Pre-enrollment for spring semester
Nov. 27	Thanksgiving vacation begins at end of last class or seminar.
Dec. 1	*Note:* All accounts must show a $0 or positive balance to enroll or select a room for spring semester.
Dec. 2	Thanksgiving vacation ends at 8:30 a.m.
Dec. 6–7	Board of Managers meeting
Dec. 9–10	Monday follows the "Friday" class schedule, replacing the Friday of Thanksgiving break. Tuesday follows the "Thursday" class schedule, replacing the Thursday of Thanksgiving break.
	Advising follow-up days
Dec. 10	Classes end.
	Lottery for spring housing
Dec. 11	Enrollment for spring semester. In Sharples Dining Hall, 2 p.m. until finished (about 40–60 minutes)
Dec. 13	Final examinations begin.
Dec. 13–21	*Note:* Final exams are not rescheduled to accommodate travel plans. If you must make travel arrangements before the exam schedule is published (by Oct. 1), do not expect to be able to leave until after finals end.
Dec. 17	Seminars end.
Dec. 21	Final examinations end at noon.
	Residence halls close at 6 p.m. Board plan ends at lunch.

College Calendar

2003	Spring Semester
Jan. 18	Residence halls open at noon.
Jan. 19	Board plan starts at dinner.
Jan. 20	Classes and seminars begin.
Jan. 31	Drop/add ends. Last day to delete a course from or add one to permanent registration and last day to declare CR/NC grading option.
Feb. 28–March 1	Board of Managers meeting
March 7	Spring vacation begins at end of last class or seminar.
March 15	*Note:* All accounts must show a $0 or positive balance to enroll and select a room for the upcoming fall semester.
March 17	Spring vacation ends at 8:30 a.m.
March 28	Last day to withdraw from a course with the notation "W" or to return to regular grading from a CR/NC option
March 31	Schedule of courses and seminars for next semester available on-line
April 4	Schedule of courses and seminars for next semester available in print for on-campus individuals
April 7–17	Advising period
April 12–13	Family Weekend
April 21–23	Pre-enrollment for fall semester
May 1–2	Advising follow-up days
May 2	Classes and seminars end.
May 2–3	Board of Managers meeting
May 5	Enrollment for fall semester in Sharples Dining Hall, 2 p.m. until finished (about 30 minutes)
May 8	Final course and written honors examinations begin.
May 17	Course examinations end.
May 18	Board plan ends at dinner for all but seniors.
May 19	Written honors examinations end.
	Residence halls close to all but seniors at 8 a.m. (Nonseniors are expected to leave the College within 24 hours after their last examination.)
May 19–20	Senior comprehensive examinations
May 22–24	Oral honors examinations
May 31	Baccalaureate
June 1	Commencement
June 2	Residence halls close to seniors at 9 a.m.
June 6–8	Alumni Weekend

2003 Fall Semester

Tentative

Aug. 26	Residence halls open for new students.
Aug. 26–31	New student orientation and placement days.
Aug. 29	Residence halls open for returning students. Board plan starts at dinner for returning students.
Aug. 30	Registration in Sharples Dining Hall, 2 p.m. until finished (about 90 minutes)
Sept. 1	Classes and seminars begin.
Sept. 12	Drop/add ends. Last day to delete a course from or add one to permanent registration, and last day to declare CR/NC grading option.
Sept. 26–27	Board of Managers meeting
Oct. 10	October holiday begins at end of last class or seminar.
Oct. 20	October holiday ends at 8:30 a.m.
Nov. 3	Schedule of courses and seminars for next semester available on-line.
Nov. 7	Last day to withdraw from a course with the notation "W" or to return to regular grading from a CR/NC option
	Schedule of courses and seminars for next semester available in print for on-campus individuals.
Nov. 10–20	Advising period
Nov. 24–26	Pre-enrollment for spring semester
Nov. 26	Thanksgiving vacation begins at end of last class or seminar.
Dec. 1	*Note:* All accounts must show a $0 or positive balance to enroll or select a room for spring semester.
	Thanksgiving vacation ends at 8:30 a.m.
Dec. 5–6	Board of Managers meeting
Dec. 8–9	Monday follows the "Friday" class schedule, replacing the Friday of Thanksgiving break. Tuesday follows the "Thursday" class schedule, replacing the Thursday of Thanksgiving break.
	Advising follow-up days
Dec. 9	Classes end.
	Lottery for spring housing
Dec. 10	Enrollment for spring semester in Sharples Dining Hall, 2 p.m. until finished (about 40–60 minutes)
Dec. 12	Final examinations begin.
Dec. 12–20	*Note:* Final exams are not rescheduled to accommodate travel plans. If you must make travel arrangements before the exam schedule being published (by Oct. 1), do not expect to be able to leave until after finals end.
Dec. 16	Seminars end.
Dec. 20	Final examinations end at noon.
	Residence halls close at 6 p.m. Board plan ends at lunch.

College Calendar

2004 Spring Semester

Tentative

Jan. 17	Residence halls open at noon.
Jan. 18	Board plan starts at dinner.
Jan. 19	Classes and seminars begin.
Jan. 30	Drop/add ends. Last day to delete a course from or add one to permanent registration and last day to declare CR/NC grading option.
Feb. 27–28	Board of Managers meeting
March 5	Spring vacation begins at end of last class or seminar.
March 15	*Note:* All accounts must show a $0 or positive balance to enroll and select a room for the upcoming fall semester.
	Spring vacation ends at 8:30 a.m.
March 26	Last day to withdraw from a course with the notation "W" or to return to regular grading from a CR/NC option
March 29	Schedule of courses and seminars for next semester available on-line.
April 2	Schedule of courses and seminars for next semester available in print for on-campus individuals.
April 5–15	Advising period
April 16–18	Family Weekend
April 19–21	Pre-enrollment for fall semester
April 29–30	Advising follow-up days
April 30	Classes and seminars end.
April 30–May 1	Board of Managers meeting
May 3	Enrollment for fall semester in Sharples Dining Hall, 2 p.m. until finished (about 30 minutes)
May 6	Final course and written honors examinations begin.
May 15	Course examinations end.
May 16	Board plan ends at dinner for all but seniors.
May 17	Written honors examinations end.
	Residence halls close to all but seniors at 8 a.m. (Nonseniors are expected to leave the College within 24 hours after their last examination.)
May 17–18	Senior comprehensive examinations
May 20–22	Oral honors examinations
May 29	Baccalaureate
May 30	Commencement
May 31	Residence halls close to seniors at 9 a.m.
June 4–6	Alumni Weekend

I

Introduction to
Swarthmore College

Educational Resources
Endowed Chairs

Introduction to Swarthmore College

Swarthmore College, founded in 1864 by members of the Religious Society of Friends as a co-educational institution, occupies a campus of more than 300 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. Its present enrollment is about 1,400 men and women 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 possible cooperation with three nearby institutions, Bryn Mawr and Haverford colleges and the University of Pennsylvania.

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 fullest intellectual and personal potential combined with a deep sense of ethical and social concern.

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.

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 although 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.

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.

Educational Resources

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.

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 $950 million at market value on June 30, 2001. Swarthmore ranks 12th in the country in endowment per student. Income from the endowment during the academic year 2000-2001 contributed approximately $29,000 to meet the total expense of educating each student and provided about 39 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.

LIBRARIES

The library is an active participant in the instructional and research program of the College. The primary mission of the library is to instruct students in effective, efficient use of the library and to encourage them to develop habits of self-education so that they may use books, libraries, and recorded communication in all forms for a lifetime of intellectual development. To this end, the library acquires and organizes books, journals, audiovisuals, and electronic information in a variety of digital and other formats for the use of students and faculty. Although the library's collections are geared primarily toward undergraduate instruction, the scope, nature, and depth of student and faculty research require providing a greater quantity of source materials than is typically found in undergraduate libraries. Further needs are met through interlibrary loan, document delivery, and other cooperative arrangements.

Reference service is where research begins. Reference specialists guide patrons in formulating research strategies and in gaining access to the information and materials contained in the library's vast electronic and print collections. The ever-growing amount of on-line resources has created a variety of new library services including Virtual Library, an online "reference service." The library also provides direct curricular support through an extensive reserve reading and honors collection, a continually increasing proportion of which is available on-line.

The Swarthmore College libraries, together with those of Bryn Mawr and Haverford colleges, are linked through Tripod, their shared online catalog. Tripod as well as other networked information sources can be accessed through the library's home page on the World Wide Web. The URL is http://www.swarthmore.edu/library. Online bibliographic indices and full-text databases have become increasingly important to undergraduate research. Swarthmore College provides a growing selection of research databases (currently about 150) that provide access to historical, statistical, visual, and bibliographic information. The College continues to add to its already considerable digital library of e-journals (more than 5000) in all disciplines.

Total library holdings amount to more than 800,000 volumes with some 20,000 volumes added annually. The library receives about 1,900 print periodicals. 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 4,000 videotapes and DVDs, more than 13,000 classical and jazz music recordings, and 1,400 spoken word recordings of dramatic and poetic literature. The video collection includes U.S. and foreign classic 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, a video classroom with conferencing facilities and administrative offices. A recent renovation has added a small coffee bar, which is located near daily papers and other light reading materials.

The Cornell Library of Science and Engineering houses nearly 60,000 volumes and serves the scientific curricular and research needs of students and faculty. It also provides public computing resources and is home to the SWIL Science Fiction Collection.

The Daniel Underhill Music Library contains 20,000 books on music and dance as well as the sound recordings mentioned earlier. It provides a wide variety of listening and viewing facilities, which overlook the Crum Woods. A small collection of relevant material is located in the Black Cultural Center.

Special Library Collections

The College Library contains certain special collections: *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; the *Bathe Collection* of the history of technology donated by Greville Bathe; and the *Private Press Collection*, representing the work of more than 700 presses, an exemplary collection of "book arts."

Within the McCabe Library building are two special libraries that enrich the academic background 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 William Wade Hinshaw Index to Quaker Meeting Records lists material of genealogical interest. Special collections include materials on various 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 autograph 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.

The Swarthmore College Peace Collection is of special interest to research students seeking the records of the peace movement. The records of the Women's International League for Peace and Freedom and the personal papers of Jane Addams of Hull-House, Chicago, formed the original nucleus of the Collection (1930). Over the years, other major collections have been added including the papers of Devere Allen, Emily Greene Balch, Julien Cornell, Homer Jack, Lucy Biddle Lewis, A.J. Muste, Lawrence Scott, John Nevin Sayre, William Sollmann, E. Raymond Wilson, and others as well as the records of the American Peace Society, A Quaker Action Group, Business

Executives Move, CCCO, Fellowship of Reconciliation, Friends Committee on National Legislation, The Great Peace March, Lake Mohonk Conferences on International Arbitration, National Interreligious Service Board for Conscientious Objectors, National Council for Prevention of War, National Council to Repeal the Draft, SANE, War Resisters League, Women Strike for Peace, World Conference of Religion for Peace, and many others. The Peace Collection serves as the official repository for the archives of many of these organizations, incorporated here in more than 10,000 document boxes. The Collection also houses more than 12,000 books and pamphlets and about 3,000 periodical titles. Four hundred periodicals are currently received from 22 countries. The comprehensive *Guide to the Swarthmore College Peace Collection*, published in 1981, and the *Guide to Sources on Women* in the *Swarthmore College Peace Collection* describe the archival holdings. Web site: http://www.swarthmore.edu/library/peace.

PHYSICAL FACILITIES

When Swarthmore College opened in the fall of 1869, it consisted of one building—Parrish Hall—set on farmland and serving 199 students. Today, it encompasses more than 40 buildings used by 1,400 students on 330 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 campus exemplifying the concept of academic study in an idyllic setting.

Intellectual Growth

Parrish Hall, the original College building, still lies at the heart of the campus with classroom buildings clustered around it. The second oldest building on campus, *Trotter Hall*, was completely renovated and reopened in 1997. Today, in a building that respects the past but embraces modern technology and design, Trotter provides the space for the History, Political Science, and Classics departments; the Center for Social and Policy Studies; programs in Women's Studies, Black Studies, and Asian Studies; the Writing Center; and several classrooms and seminar rooms. At the center of the building is the *Tarble Atrium*, an inspiring wooden staircase crafted from cherry and birch with expansive landings on each level that function as student lounges and are supplied with seating and computer hookups. Views from this building overlook the Rose Garden to the south and the Nason Garden and Outdoor Classroom to the north.

Kohlberg Hall, an entirely new academic building completed in 1996, features spaces for use by the entire College community on the ground floor, including a lounge complete with a coffee bar and fireplace; the Scheuer Room, a popular place for lectures and gatherings with a window wall and modern audiovisual equipment; and the Cosby Courtyard, a dramatic outdoor space with a lawn panel and stone sitting walls that double as an outdoor classroom. On the upper two floors are modern classrooms and intimate seminar rooms, a language resource center, and faculty offices. Kohlberg Hall—home to the Modern Languages and Literatures, Economics, and Sociology/Anthropology Departments—demonstrates that a new building with award-winning architectural design can be integrated into an established campus.

Next door to Kohlberg lies the *Lang Performing Arts Center*, home to the English, Dance, and Theater departments. Although most of the spaces in this building provide for cultural enrichment (more about that later), classrooms and offices are found on the second and third floors.

Hicks, Beardsley, and Pearson halls are clustered together on the north end of the academic campus, forming with Trotter Hall a quadrangle now known as the Nason Garden. Hicks is home to the Engineering Department and contains laboratories, with several equipped for computer-assisted and -controlled experimentation. Beardsley, renovated in 1990, houses the Art Department; Pearson, renovated in 1998, is home to the Linguistics, Education, and Religion departments. Completing the cluster of north campus academic buildings is *Papazian Hall*, which houses the Psychology and Philosophy departments.

The *Science Center* will physically link the departments of Biology, Chemistry, Computer Science, Mathematics and Statistics, and Physics and Astronomy and the Cornell Science Library to foster interaction and

exchange among scientists and to meet the expanded space needs of the sciences at Swarthmore College. The project involves additions and alterations to the *DuPont Science Building*, *Martin Hall*, and *Cornell Library*, and new construction linking them with an 80-seat lecture hall, a 120-seat auditorium, and a commons area. The project was designed and is being constructed using criteria developed by the U.S. Green Building Council to produce a sustainable design that will provide opportunities for education about the environment and environmental responsibility. The Science Center will open in several phases. Major milestones are Science Commons, February 2003; Chemistry Department, July 2003; Biology Department, November 2003; Physics and Astronomy, May 2004; and Mathematics and Statistics and Computer Science, June 2004. For further information about the Science Center and to view recent construction photographs, please visit the project Web site at http://sciencecenter.swarthmore.edu.

In 1999, the *Martin Greenhouse* was renovated so it can support a broader research program. *Sproul Observatory*, with its 24-inch visual refracting telescope, is the center of fundamental research in multiple star systems, and a 24-inch reflecting telescope on Papazian Hall is used for solar and stellar spectroscopy.

In the management, design, and construction of all physical facilities, the College recognizes the importance of employing environmentally sound practices and acknowledges its commitment to current and future societies. An example of Swarthmore's commitment to sustainability is the biostream bed, located between McCabe Library and Willets Hall and designed to filter runoff from upper-campus building roofs.

Information Technology Services (ITS), with offices located in *Beardsley Hall*, provides computing and telecommunication resources and support to all faculty, registered students, and College staff. Academic computing resources comprise several components: a number of UNIX servers managed by the Computing Center, a network of SUN Sparc workstations in the Computer Science Department, a network of HP workstations in the Engineering Department, a Power Macintosh lab in the Mathematics Department, and software servers in the Chemistry and the Physics and Astronomy departments. A specialized multimedia facility in Beardsley gives faculty a place to try out new technology and create presentations and multimedia projects for their courses. Servers running Oracle and SCT Banner are used for the College's administrative data management needs. Fiber optic cabling ties these components together into a campuswide network. The campus network is linked to the Internet, allowing communication and data access on a global scale.

Power Macintosh computers are available in public areas in Beardsley, DuPont, Kohlberg, and McCabe and Cornell libraries. Virtually every administrative and faculty office is equipped with computers. Students may connect Macintosh or Windows computers to the campus network from their rooms. Any Macintosh connected to the network can be used to gain access to electronic mail, bulletin boards, the World Wide Web, Tripod (the library system shared with Bryn Mawr College and Haverford College), and a variety of software programs. Windows computers connected to the campus network from residence hall rooms have access to the World Wide Web, electronic mail, and Tripod.

Copies of several commonly used commercial software packages are available on a restricted basis on the public-area hard drives or on file servers connected to the network. Some of these file servers also contain an assortment of shareware and public domain software.

A computer repair service is located in Beardsley. The College Bookstore sells a variety of software at very reasonable prices. The repair service provides on-campus repair services for student-owned computers.

The Telecommunications Department of the Computing Center provides telephone and voice-mail services to faculty, staff, and students. Every student residing in a college dormitory room is provided with a private telephone and personal telephone number as well as a voice-mail account. Long-distance calling is available to students.

Assistance with the use of the College's computing resources is available on several levels. Students may seek help from student consultants who are available most of the day and night, seven days a week. Faculty may seek

assistance through a Help Desk or through ITS staff assigned to their respective division for curricular support.

Housed in Trotter Hall, the *Center for Social and Policy Studies* works with a variety of local organizations and stakeholders to further human capital development in the City of Chester, whether through indirect technical assistance services or the provision of direct services, such as program evaluation, assistance with grant-writing, and technological assistance and support. In addition, the center is a respected convener of scholars, policy makers, journalists, community activists, and students working to provide leadership in ameliorating urban problems.

For students, the center aims to tie academic learning to "real-world problem solving"; provides a rich "hands-on" experience in the broad field of social and public policy; and through their research, education, outreach, and advocacy activities, students have an opportunity to put into practice the convictions of "ethical intelligence" as they work with residents in the Chester community.

Cultural Enrichment

The Lang Music Building, opened in 1973, contains an auditorium seating nearly 400 while providing an expansive view into the Crum Woods. It also is home to the *Daniel Underhill Music Library*, classrooms, practice and rehearsal rooms, and an exhibition area. It is the central facility for the Music Department and for musical activities at the College.

Greatly enhancing performance venues, the *Eugene M. and Theresa Lang Performing Arts Center* (LPAC) opened in 1991. The building contains *Pearson-Hall Theater*, with a seating capacity of 825. The theater can be divided with a 40-ton movable soundproof wall, which is raised and lowered hydraulically. When raised, the space may be used simultaneously as a cinema theater seating more than 300 and a theater space of about equal seating capacity. The stage of the theater may also be transformed from its traditional configuration into a thrust stage.

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

Physical Development

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

Social Development

Several residence halls are close to the core of the campus. Rooms are assigned by a lottery system. All students have private telephone and computer hookup capabilities in their rooms. All halls have common lounges for socializing, and Swarthmore's *Sharples Dining Hall* provides an impressive single dining space, ensuring 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 *Parrish Parlors* in the heart of campus; *Parrish Commons* a level up; *Tarble in Clothier*, with a snack bar, game room, the college bookstore, 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 advisers and religious organizations; *Sharples III*, a student-run art association; and *Olde Club*, the party place.

Scott Arboretum

About 325 acres are contained in the College property, including a large tract of woodland and the valley of Crum Creek. Much of this tract has been developed as a horticultural and botanical collection of trees, shrubs, and herbaceous plants through the provisions of the Scott Arboretum, established in 1929 by Mrs. Arthur Hoyt Scott and Owen and Margaret Moon as a memorial to Arthur Hoyt Scott of the Class of 1895. The plant collections are designed both to afford examples of the better kinds of trees and shrubs that are hardy in the climate of eastern Pennsylvania and suitable for planting by the average gardener and to beautify the campus. All collections are labeled and recorded. There are exceptionally fine displays of hollies, Japanese cherries, flowering crabapples, magnolias, tree peonies, lilacs, rhododendrons, azaleas, and daffodils. Choice specimens from the collections are displayed in several specialty gardens including The Terry Shane Teaching Garden, The Theresa Lang Garden of Fragrance, the Dean Bond Rose Garden, the Isabelle Bennett Cosby '28 Courtyard, the Nason Garden and outdoor classroom, and the Metasequoia Allée. Many interested donors have contributed generously to the collections, and the arboretum is funded primarily by outside grants and restricted endowment funds with a combined market value of $19.3 million as of June 30, 2001.

The arboretum conducts applied research on ornamental plants and serves as a test site for three plant evaluation programs: the Gold Medal Award of Garden Merit through the Pennsylvania Horticultural Society, the performance of hollies through the American Holly Society, and the National Crabapple Evaluation Program.

The arboretum offers horticultural educational 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.

Aiding the arboretum's staff, in all of its efforts, are the "Associates of the Scott Arboretum." This membership organization provides not only financial support but also assistance in carrying out the myriad operations that make up the arboretum's total program, such as plant propagation, public lectures, and tours to other gardens. More than 100 "arboretum assistants" aid in campus maintenance on a regular basis by volunteering. Student memberships are available. The arboretum's newsletter, *Hybrid*, serves to publicize their activities and provides up-to-date information on seasonal gardening topics. Maps for self-guided tours and brochures of the arboretum's plant collections are available at the Scott Offices (610) 328-8025, located in the Cunningham House.

The Scott Arboretum was accredited by the American Association of Museums in 1995, signifying its professional standards of operation as an arboretum.

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

The 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 is awarded annually to provide funding for the summer research of a well-rounded rising senior majoring in chemistry or biochemistry, who, in the opinion of the department, gives great promise of excellence and dedication in the field.

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.

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. Preference will also be given to students par-

ticipating in the WOW program in the city of Chester.

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 example, 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 Baudelaire Award is supported by the Jeannette Streit Rohatyn '46 Fund. It was created by Jeannette Streit Rohatyn '46 in 2000. It is named after one of her favorite poets and is conferred each semester upon a Swarthmore student participating in the Swarthmore College Program in Grenoble. Recipients are chosen by members of the French faculty, with preference for students who show strong academic promise.

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, especially for the Music and Dance Festival.

The Alfred H. Bloom Jr. and Martha B. Bloom, parents of Alfred H. Bloom, Memorial Visiting Scholar Fund is the gift of Frank Solomon Jr. '50. 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.

The Philip A. Bruno Fine Arts Endowment was created by Philip A. Bruno in 1988. The fund supports the acquisition of artwork for the Swarthmore College collections.

The Barbara Weiss Cartwright Fund for Social Responsibility was created in 1993 by a gift from Barbara W. Cartwright '37 and Dorwin P. Cartwright '37. The fund supports new or existing programs that encourage involvement in addressing societal problems through projects initiated by the College or created by current students. In addition, it will provide opportunities for faculty and students to participate in volunteer service projects linked to the academic program.

Wendy Susan Cheek '38 Memorial Fund for Women's Studies. Established in 1998 by Aimee Lee and William Francis Cheek, the fund supports student and/or programming needs of the Women's Studies Program, including the capstone seminar for honors and course students. The fund shall be spent at the direction of the women's studies coordinator.

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 servicing 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. 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, the foundation provides annual funds that are used "in bringing to the College from time to time, eminent citizens of this and other countries who are leaders in statesmanship, education, the arts, sciences, learned professions and business, in order that the faculty, students and the college community may be broadened by a closer acquaintance with matters of world [interest]."

The Cooper Foundation Committee, composed of students, faculty, and staff, 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 Priscilla Hayward Crago '53 Fund was established in 1998. The Crago fund supports the faculty at Swarthmore College.

Bruce Cratsley '66 Memorial Fund was created in 1998 and supports lectures about photography and exhibitions.

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 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 Lee Frank Memorial Art Fund, endowed by the family and friends of Lee Frank, Class of 1921, 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 with preference to those studying in the area of physiology and related sub-specialties. Grants are awarded at the discretion of the chair of the Biology Department.

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 1990-1997. The fund supports the professional development of members of the division.

The Bruce Hannay Fund was established by a gift from the General Signal Corporation in honor of N. Bruce Hannay '42. The fund will provide support for the academic program, with special consideration given to chemistry. Bruce Hannay was a research chemist with Bell Laboratories and received an honorary doctor of science degree from Swarthmore in 1979.

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 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 the differences in culture, sexual orientation, or race.

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.

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 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 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 months.

The Jonathan R. Lax Fund, created by his bequest in 1996, supports an annual Lax Conference on Entrepreneurship and Economic Anthropology. Jonathan Lax, Class of 1971, was class agent and a reunion leader. His parents, Stephen '41 and Frances Lax, and brothers Stephen G. Lax Jr. (Gerry) '74 and Andrew Lax '78 have been actively involved at the College.

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 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.

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 servicing the entire community of Swarthmore College. Income from this endowment will help provide for the compensation of the religious adviser and supporting staff of the Swarthmore Protestant Community.

The 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.

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 Thomas B. McCabe Memorial Fund was established with gifts from alumni and the McCabe Family to support an annual lectureship that brings to campus each fall individuals with distinguished careers in fields such as public service, business, government, education, or medicine.

The James H. Miller '58 Partners in Ministry Endowment was created in recognition of the importance of a distinctive ecumenical program of spiritual nurture servicing the entire Swarthmore College community. Income from the Miller endowment is distributed to Partners in Ministry to help provide for the compensation of the religious adviser and supporting staff of the Swarthmore Protestant community.

The Margaret W. and John M. Moore Endowment was created in September 1999 via a life-income gift contract. Income provides research stipends for selected scholars using the resources of the Friends Historical Library and/or the Peace Collection at Swarthmore College.

The 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 Gene D. Overstreet Memorial Fund, given by friends in memory of Gene D. Overstreet (1924-1965), a member of the Political Science Department (1957-1964), provides income to bring a visiting expert to the campus to discuss problems of developing or modernizing nations and cultures.

The Promise Fund, established anonymously by an alumnus on the occasion of his graduation, is administered by The Cooper Foundation Committee. Income from the Promise Fund brings guest speakers, artists, and performers in music, film, dance, and theater who show promise of distinguished achievement.

The Edgar and Herta Rosenblatt Fund was created in 1967 and supports the work of the faculty at Swarthmore College.

The Ruach Endowment was created in 2000 to support Hillel activities on campus.

The 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.

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. Grants are awarded at the discretion of the chair of the Biology Department.

The Scheuer-Pierson Fund, established in 1978 by Walter and Marge Scheuer '48, supports the Economics Department.

The Gil and Mary Roelofs Stott Concert Fund was established in 1997 on the 25th Anniversary of the Lang Music Building. The fund was created as an expression of deep affection for the Stotts by Eugene M. Lang, Class of 1938, to recognize their special artistic talents and all that they have meant to the Swarthmore community. Each year, a new musical composition will be commissioned by the College to be performed at an annual Gil and Mary Roelofs Stott Concert at which the Gil and Mary Roelofs Stott Resident Student Artist will perform.

The Mary and Gilmore Stott Honors Philosophy Seminar Endowment was created in 1998 by William G. Stott '75 and by Christopher Niemczewski '74. The fund supports a seminar offered by the Philosophy Department. It was established in honor of the parents of William G. Stott '75.

The Swarthmore Chapter of Sigma Xi lecture series brings eminent scientists to the campus under its auspices throughout the year. Local members present colloquia on their own research.

The Thatcher Fund provides individualized assistance to students with disabilities. The purpose of the fund is to enable such students to take full advantage of the academic and extracurricular life of the College and to make Swarthmore a desirable choice for prospective students with disabilities. The fund was established in 1997.

The Phoebe Anna Thorne Memorial Endowment was created by a Thorne family member in 1911. The endowment supports the faculty of Swarthmore College.

The P. Linwood Urban Jr. Partners in Ministry Endowment was created in recognition of the importance of a distinctive ecumenical program of spiritual nurture servicing 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 adviser and supporting staff of the Swarthmore Protestant community.

The Benjamin West Lecture, made possible by gifts from members of the Class of 1905 and other friends of the College, is given annually on some phase of art. It is the outgrowth of the Benjamin West Society, which built up a collection of paintings, drawings, and prints, which are exhibited, as space permits, in the college buildings. The lecture owes its name to the American artist, who was born in a house that stands on the campus and who became president of the Royal Academy.

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.

Endowed Chairs

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 Manager Rachel Hillborn.

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 Albert L. and Edna Pownall Buffington Professorship was established by a bequest from Albert Buffington, Class of 1896, in 1964, 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, Class of 1937, to honor her husband, Dorwin P. Cartwright, Class of 1937. The professorship shall be 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 Professorship of History and International Relations was created in 1888 by Isaac H. Clothier, member of the Board of Managers. Originally in the field of civil and mechanical engineering, he later approved its being a chair in Latin, and in 1912 he approved its present designation.

The Isaac H. Clothier Jr. Professorship of Biology was established by Isaac H. Clothier Jr. as a tribute of gratitude and esteem for Dr. Spencer Trotter, a professor of biology from 1888-1926.

The Morris L. Clothier Professorship of Physics was established by Morris L. Clothier, Class of 1890, in 1905.

The Julien and Virginia Cornell Visiting Professorship was endowed by Julien Cornell '30, and Virginia Stratton Cornell '30, former members of the Board of Managers, to bring professors and lecturers from other nations and cultures for a semester or a year. Since 1962, Cornell professors and their families from every corner of the world have resided on the campus so that they might deepen the perspective of both students and faculty.

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

The Howard N. and Ada J. Eavenson Professorship in Engineering was established in 1959 by a trust bequest of Mrs. Eavenson, whose husband graduated in 1895.

The James H. Hammons Professorship was established in 1997 by Jeffrey A. Wolfson, Class of 1975, to recognize the inspiring academic and personal guidance provided by James H. Hammons, professor of chemistry, who began his distinguished teaching career at Swarthmore in 1964. The professorship may be awarded in any division, with preference given to the Chemistry Department.

The James C. Hormel Professorship in Social Justice, established in 1995 by a gift from James C. Hormel, Class of 1955, 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 Quaker History and Research was endowed in 1924 by Charles F. Jenkins, H '26 and member of the Board of Managers, on behalf of the family of Howard M. Jenkins, 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 '04.

The William R. Kenan Jr. Professorship was 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, 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 Jane Lang Professorship in Music was established by Eugene M. Lang, Class of 1938, to honor his daughter, Jane Lang, Class of 1967. 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, Class of 1938, to honor his son, Stephen Lang, Class of 1973. 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 Eugene M. Lang Visiting Professorship endowed in 1981 by Eugene M. Lang '38, brings to Swarthmore College for a period of one semester to three years an outstanding social scientist or other suitably qualified person who has achieved prominence and special recognition in the area of social change.

The Sara Lawrence Lightfoot Professorship was created by the College in 1992 in recognition of an unrestricted gift by James A. Michener, Class of 1929. The professorship is named in honor of Sara Lawrence Lightfoot, Class of 1966, Doctor of Humane Letters, 1989, and former member of the Board of Managers.

The Susan W. Lippincott Professorship of French was endowed in 1911 through a bequest from Susan W. Lippincott, 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 Astronomy was created in 1888 largely by contributions of interested friends of Edward H. Magill, president of the College from 1872-1889, 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 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, Class of 1929, and in recognition of his unrestricted gift.

The Gil and Frank Mustin Professorship was established by Gilbert B. Mustin '42 and Frank H. Mustin '44 in 1990. It is unrestricted as to field.

The Richter Professorship of Political Science was established in 1962 by a bequest from Max Richter at the suggestion of his friend and attorney, Charles Segal, father of Robert L. Segal '46 and Andrew Segal '50.

The Scheuer Family Chair of Humanities was created in 1987 through the gifts of James H. Scheuer '42; Walter and Marge Pearlman Scheuer '44; and their children, Laura Lee '73, Elizabeth Helen '75, Jeffrey '75, and Susan '78 and joined by a challenge grant from The National Endowment for the Humanities.

The Howard A. Schneiderman '48 Professorship in Biology was established by his wife, Audrey M. Schneiderman, to be awarded to a professor in the Biology Department.

The Claude C. Smith '14 Professorship was established in 1996 by members of the Smith family and friends of Mr. Smith. A graduate of the Class of 1914, Claude Smith was an esteemed lawyer with the firm of Duane, Morris and Heckscher and was active at the College including serving as chairman of the Board of Managers. This chair is awarded to a member of the Political Science or Economics departments.

The Henry C. and Charlotte Turner Professorship was established in 1998 by the Turner family. Henry C. Turner '93 and J. Archer Turner '05 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 Company; 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 current Board member. Howard Turner '33, son of J. Archer Turner, has also been very active as past chair and 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 '93 and J. Archer Turner '05 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 Company; 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 current Board member. Howard Turner '33, son of J. Archer Turner, has also been very active as past chair and member of the Board of Managers over the years.

The Henry C. and J. Archer Turner Professorship of Engineering was established with their 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 Professorship of Physical Education and Athletics was established by Marian Snyder Ware '38 in 1990. It is to be held by the chair of the Physical Education and Athletics Department.

The Joseph Wharton Professorship of Political Economy was endowed by a trust given to the College in 1888 by Joseph Wharton, president 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.

II

Admissions
Expenses

Financial Aid

Admissions

Inquiries concerning admission and applications should be addressed to the Dean of Admissions and Financial Aid, Swarthmore College, 500 College Avenue, Swarthmore PA 19081-1390 or admissions@swarthmore.edu.

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 four-year secondary school program. Under some circumstances, students who have virtually completed the normal four-year program in three 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 process with appropriate substitutions for standard support materials. A descriptive list of all subjects taken and a personal statement describing the applicant's home schooled experience is strongly recommended. Students who have already completed a tertiary degree 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. SAT-I or ACT scores.
4. Three SAT-II scores, one of which must be the SAT-II Writing test. Applicants considering a major in engineering are strongly encouraged to take the SAT-II Math IIC test.
5. A brief statement about why the student is applying to Swarthmore, a brief essay on a meaningful activity or interest, and a longer essay (subject specified).
6. 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.

PREPARATION

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

1. Accurate and effective use of the English language in reading, writing, and speaking.
2. Comprehension and application of the principles of mathematics.
3. The strongest possible command of one or two foreign languages. The College encourages students to study at least one language for four years, if possible.
4. Substantial course work 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 four years of mathematics, including algebra, geometry, trigonometry, and calculus.

APPLICATIONS AND EXAMINATIONS

Application to the College may be submitted through either the Regular Decision or one of the Early Decision plans. Applicants follow the same procedures, submit the same supporting materials, and are evaluated by the same criteria under each plan.

The *Regular Decision* plan is designed for those candidates who wish to keep open several different options for their undergraduate education throughout the admissions process. Applications under this plan will be accepted at any time up to the Jan.1 deadline, but the application should be submitted as early as possible to create a file for the candidate to which supporting material will be added up to the deadline.

The *Early Decision* plans are designed for candidates who have thoroughly and thoughtfully investigated Swarthmore and other colleges and found Swarthmore to be an unequivocal first choice. On applying to Swarthmore College, Early Decision candidates may not file early decision/early action applications at other colleges, but they may file regular applications at other colleges with the understanding that these applications will be withdrawn on admission to Swarthmore College.

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. Timetables for the plans are the following:

Fall Early Decision

Closing date for applications	Nov. 15
Notification of candidate	by Dec. 15

Winter Early Decision

Closing date for applications	Jan. 1
Notification of candidate	by Feb. 1

Regular Decision

Closing date for applications	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-by-case basis. Students granted deferment may neither apply to nor enroll at another degree-granting college/university program.

Swarthmore College places strong emphasis on academic achievement and personal character. An offer of admission to Swarthmore College is dependent on a student maintaining his or her standard of academic achievement before enrolling at the College. An offer of admission is also dependent on a student's continued demonstration of character and high standards for personal conduct. Lapses in either category may be grounds for rescinding an offer of admission.

For U.S. citizens and permanent residents applying as first year or transfer students, admission to Swarthmore is determined without regard to financial need. Information concerning financial aid is on pp. 31-46.

THE INTERVIEW

An admissions interview with a representative of the College is a recommended part of the first-year application process. (Applicants for transfer are not interviewed.) Prospective 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 prior to 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. Interviews with alumni representatives take longer to arrange than interviews on campus. As a result, applicants living in the United States must request an alumni interview by Nov. 15. Applicants living overseas must request an alumni interview by Jan. 1.

Arrangements for on-campus or alumni interviews can be made by writing to the Office of Admissions or by calling (610) 328-8300 or (800) 667-3110.

ADVANCED PLACEMENT

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

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 three years, and signify this intention when she or he applies for a major during the spring of the first year.

Those students who wish to have courses taken at another college considered for either advanced placement or credit must provide an official transcript from the institution attended as well as written work (papers, examinations); syllabi; and reading lists in order that the course work may be evaluated by the department concerned. Such requests for credit must be made within the first year at Swarthmore. Departments may set additional requirements. For instance, students may be required to take a placement examination at Swarthmore to validate their previous work.

INTERNATIONAL ADMISSIONS

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

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

APPLICATIONS FOR TRANSFER

The College welcomes well-qualified transfer students. 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. Transfer applicants must take the SAT-I or the ACT if one of these tests has not been taken previously.

Four semesters of study at Swarthmore College constitute the minimum requirement for a degree, two of which must be those of the senior year. Applications for transfer must be filed by April 1 of the year in which entrance is desired. Swarthmore does not have a midyear transfer application process. Need-based financial assistance is available for transfer students who are U.S. citizens or permanent residents. Transfer applications are not accepted from international students who require financial aid.

Transfer applicants are notified of decisions on or before May 30.

*Directions for reaching the College can be found on p. 440 of this catalog.

Expenses

STUDENT CHARGES

Total charges for the 2002-2003 academic year (two semesters) are as follows:

Tuition	$27,272
Room	4,376
Board	4,154
Student activities fee	290
	$36,092

These are the annual charges billed by the College. Students and their parents, however, should plan for expenditures associated with books, travel, and other personal items. In addition, the College will bill for unpaid library fines, 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 only for a part of a semester, the above charges may be made on a pro rata basis.

Late fees of 1.5 percent per month will accrue on all past due balances. Students with past due balances will not be permitted to enroll for the following semester, participate in the room lottery, graduate, nor obtain a transcript.

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 ($3,409) or half-course ($1,704.50), 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.

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 Office for Foreign Study. Students contemplating study abroad should contact Steven Piker, foreign study adviser, well in advance for academic and administrative planning.

PAYMENT POLICY

Semester bills are mailed in July and December. Payment for the first semester is due by Aug. 12, 2002, and for the second semester by Jan. 13, 2003. 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 month-

WITHDRAWAL POLICY

Charges for tuition and fees will be reduced for students who withdraw for reasons approved by the dean prior to 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		

ly basis rather than in two installments. For this reason, Swarthmore offers a monthly payment plan, which provides for payment in installments without interest charges. Information on the plan is mailed to all parents in April 2003.

HOUSING FINES

Any time you select a room in the lottery that you do not use, the minimum fine is $100. Other fines follow:

Fall Semester

If you select a room in the lottery and

1. Choose to live off-campus but are still enrolled, you will be assessed
   a. A $500 penalty unless everyone in the space notifies the Residential Life Office by June 1 that they will not be occupying the room. If everyone does notify the office, the fine will be $100 each.
   b. Notice between June 1 and the eighth week of classes will cost $500 for each person moving off campus.
   c. Notice after the eighth week will have no room refund.
2. Take a leave of absence and notify the Dean's Office
   a. By Aug. 1, a $100 penalty.
   b. Between Aug. 1 and the eighth week of classes, a penalty of $500.
   c. After the eighth, there will be no room refund.

Spring Semester

If you select a room in the December lottery or already have a room from fall semester and

1. Choose to live off-campus but are still enrolled, you will be assessed
   a. A $250 penalty unless everyone in the unit leaves this space and notifies the Residential Life Office by Dec. 1.
   b. Notice between Dec. 1 and the eighth week of classes will cost $500 each.
   c. Notice after the eighth week will receive no room refund.
2. Take a leave of absence and notify the Dean's Office.
   a. By Dec. 1, no penalty.
   b. Between Dec. 1 and Jan. 5, a $100 penalty.
   c. Between Jan. 5 and the eighth week, $500.
   d. Leave after the eighth week , there will be no room refund.

Inquiries

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

Financial Aid

The College strives to make it possible for all admitted students to attend Swarthmore, regardless of their financial circumstances and to enable them to complete their education if financial reversals take place. About 50 percent of the total student body currently receives aid from the College. About 99 percent of the financial aid awarded by the College is based on demonstrated financial need and is usually a combination of scholarship, loan, and campus employment. The College is committed to meeting all demonstrated financial need, and demonstrated need is assessed by a careful review of families' financial circumstances. In 2002-2003, Swarthmore students need an average of $24,400, thus, to meet that need, our average award is $24,400.

A prospective student must apply for aid and outside assistance when applying for admission to Swarthmore. However, admission and financial aid decisions are made separately. Instructions for obtaining and filing an application are included in the admissions application. Financial assistance will be offered if a family does not have the capacity to meet College costs. 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, and siblings' undergraduate tuition expenses, etc. Family contribution also includes a $1,450 to $1,890 summer earnings contribution as well as a portion of the student's personal savings and assets.

For 2002-2003, the College bill, which includes tuition, room, and board, and a comprehensive fee, will be $36,092. This comprehensive fee covers not only the usual student services—health, library, laboratory fees, for example—but admission to all social, cultural, and athletic events on campus. The total budget figure against which aid is computed is $37,960. This allows $1,868 for books and personal expenses. A travel allowance is added to the budget for those who live in the United States but more than 100 miles from the College.

In keeping with the policy of basing financial aid upon demonstrated need, the College reviews each student's financial situation annually. Each student who would like to be considered for our support for the next year must submit a new financial aid application midyear. A student's aid is not withdrawn unless financial need is no longer demonstrated. Assistance is available only during a normal-length undergraduate program (eight semesters) and while a student makes satisfactory academic progress. These limitations are also applied in our consideration of a sibling's undergraduate educational expenses. Students who choose to live off campus will not receive College scholarship or College loan assistance in excess of their College bill. However, the cost of living off campus will be recognized in the calculation of a student's financial need, and outside sources of aid may be used to help meet off-campus living expenses once the College bill is satisfied.

U.S. students 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, but a contribution from the parents is expected equal to the contribution made were the student single.

The College has, by action of our Board, reaffirmed its need-blind Admission Policy and the related practice of meeting the demonstrated financial need of all admitted or enrolled students. Eligibility for federal aid funds is now limited to those who are able to complete and submit to us the Statement of Registration Compliance, but additional funds have been made available for those who are unable to accept need-based federal aid because they have not registered with the Selective Service.

Financial support for foreign citizens is limited and must be requested during the admission application process. New aid applications from foreign nationals cannot be considered after admission.

A special brochure has been prepared to advise families of the various sources of aid as well as a variety of financing options. Please request a copy from our Admissions Office. You may also find the answers to most of your financial aid questions on our Web site, http//financialaid.swarthmore.edu.

SCHOLARSHIPS

For the academic year 2002-2003, we awarded more than $14 million in Swarthmore scholarship funds. About one-half of that sum was provided through the generosity of alumni and

friends by special gifts and the endowed scholarships listed on pp. 32-44. It is not necessary to apply for a specific College scholarship. The College decides who is to receive endowed scholarships, and others are helped from general scholarship funds. Although the qualifying criteria for awarding most endowed scholarships remain general, some donors have established explicit guidelines that closely mirror the interests of the individual for whom the scholarship is named. However, financial need is a requirement for all College scholarships unless otherwise indicated. The federal government also makes Pell Grants and Supplemental Educational Opportunity Grants available to eligible students.

LOAN FUNDS

The College is able to meet the financial needs of each student through long-term, low-interest loan funds with generous repayment terms combined with Swarthmore's scholarship programs. Although most offers of support from the College include elements of self-help (campus work and borrowing opportunities), the College strives to keep each student's debt at a manageable level.

Aided students are expected to meet a portion of their demonstrated need (from $1,000 to about $4,500 each year) through the federal Stafford Loan Programs, Perkins Loan, or the Swarthmore College Loan (SCL). The College determines which source is appropriate for which student. Each of these programs allows the borrower to defer repayment until after leaving school, and each allows further deferment of the debt if the borrower goes on to graduate school. Up to 10 years may be taken to repay Stafford, Perkins, or SCLs. No separate application is needed for the Perkins or SCL loans because the College administers these funds. Stafford Loan applications must be initiated by the student with a bank.

Parents who wish to borrow might consider the Federal PLUS Loan. Up to $37,000 per year is available at a variable interest rate. Repayment may be made over a 10-year period.

For more information about these loan programs, read our Financial Aid Brochure (available from our Admissions Office), or visit our Website.

The College also maintains the following special loan funds:

The Jay and Sandra Levine Loan Fund

The Thatcher Family Loan Fund

The Swarthmore College Student Loan Fund

STUDENT EMPLOYMENT

Student employment on the Swarthmore campus is coordinated by the Student Employment Office, which is under student direction. Jobs are available in such areas as the library, department offices, the post office and the student-run coffeehouse. Placements can be arranged when students arrive in the fall. On-campus rates of pay run from $7 to $7.50 per hour. Students receiving financial aid are usually offered the opportunity to earn up to $1,490 during the year and are given hiring priority, but there are usually jobs available for others who wish to work on campus.

The Student Employment Office publicizes local off-campus and temporary employment opportunities. Students are generally able to carry a moderate working schedule without damaging their academic performance. Students are encouraged not to work more than seven or eight hours weekly.

Off-campus placements in public or private, nonprofit agencies in the local or Philadelphia area can be arranged through the Financial Aid Office during the academic year or nationwide during the summer (when federal funds are sufficient) for students who qualify under the federal College Work-Study Program. Hospitals, schools, museums, and social service agencies, and local, state, or federal government agencies are suitable employers.

SCHOLARSHIPS

All students who demonstrate financial need are offered scholarship aid, some of which is drawn from the following endowments. However, students should not worry if they do not fit the specific restrictions subsequently listed because their scholarships will be drawn from other sources not listed here.

(Financial need is a requirement for all scholar-

ships unless otherwise indicated. No separate application is needed.)

The Catherine G. Abbott '72 and Ernest B. Abbott '72 Scholarship was established by Catherine '72 and Ernest B. Abbott '72 and is awarded to a man or woman who shows great promise. This renewable scholarship is awarded to a first-year student who demonstrates both need and academic excellence.

The Aetna Foundation Scholarship Grant provides assistance to minority students with financial need.

The Lisa P. Albert Scholarship is awarded to a young man or woman on the basis of scholarship and need with preference given to those with a demonstrated interest in the humanities.

The George I. Alden Scholarship Fund was established as a memorial by the Alden Trust and is awarded on the basis of merit and need with preference to a student from New England studying in the sciences or engineering.

The Vivian B. Allen Foundation 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 Jonathan Leigh Altman Scholarship, given in memory of this member of the Class of 1974 by Shing-mei P. Altman '76, is awarded, on the recommendation of the Art Department, to a junior who has a strong interest in the studio arts. It is held during the senior year.

The Alumni Scholarship is awarded to students on the basis of financial need. Established in 1991, this endowment is funded through alumni gifts and bequests.

The Alumni Council Scholarship was established by the Alumni Council of Swarthmore College. It is awarded based on academic merit and financial need, and is renewable.

The John R. '53 and Joyce B. '55 Ambruster Scholarship was created in 2001. It is awarded on the basis of academic merit and financial need.

The Evenor Armington Scholarship is given each year to a worthy student with financial need in recognition of the long-standing and affectionate connection between the Armington family and Swarthmore College.

The Frank and Marie Aydelotte Scholarship is awarded to a new student who shows promise of distinguished intellectual attainment based upon sound character and effective personality. The award is made in honor of Frank Aydelotte, president of the College from 1921-1940 and originator of the Honors Program at Swarthmore, and of Marie Osgood Aydelotte, his wife.

The David Baltimore '60 Scholarship was established by an anonymous donor in 2000. It is awarded with preference for a junior or senior majoring in biology or chemistry. The scholarship is renewable.

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. It is awarded on the basis of merit and need and is renewable through the senior year. Preference is given to women with interest in the sciences and, in particular, in the environment.

The Philip H. Barley Memorial Scholarship, established in memory of Philip H. Barley '66, by his family and friends and the Class of 1966, which he served as president, provides financial assistance for a junior or senior who has demonstrated outstanding leadership qualities at Swarthmore.

The Franklin E. Barr Jr. '48 Scholarship is awarded to a first-year student who has broad academic and extracurricular interests and who shows promise of developing these abilities for the betterment of society. This scholarship is based on need and is renewable for three years.

The H. Albert Beekhuis Scholarship in engineering is awarded on the basis of merit and 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 is endowed through the generous bequest of Mr. Beekhuis, neighbor, friend, and successful engineer.

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 need, with preference given to students from western Pennsylvania.

The Margaret Fraser Bell '53 Scholarship was created in her memory by her husband, Monroe Bell. It is awarded each year to a junior on the basis of need and merit, with preference given to a student majoring in Russian.

The George and Josephine Clarke Braden Scholarship, established in 1999 by their children in honor of George '38 and in memory of Josephine '41, is awarded to a student with demonstrated need for financial assistance, with preference for a child of immigrant parent(s) or guardian(s), and is renewable through the senior year.

The Brand and Frances Blanshard Scholarship is given in their memory to a deserving student with high academic promise.

The Curtis Bok Scholarship was established in the College's Centennial Year, 1964, in honor of the late Philadelphia attorney, author, and jurist, who was a Quaker and honorary alumnus of Swarthmore. The 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 scholarship is renewable until graduation.

The Edward S. Bower Memorial Scholarship, established by Mr. and Mrs. Ward T. Bower in memory of their son, Class of '42, is awarded annually to a man or woman student who ranks high in scholarship, character, and personality.

The Carol Paxson Brainerd '26 Scholarship is awarded on the basis of financial need and academic merit.

The Daniel Walter Brenner Memorial Scholarship, established by family and friends in memory of Daniel W. Brenner, Class of 1974, is awarded to a senior majoring in biology who is distinguished for scholarship and an interest in plant ecology, wildlife preservation, or animal behavior research. The recipient is chosen with the approval of biology and classics faculty.

The Malcolm Campbell Unitarian Scholarship, established by Malcolm Campbell '44 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 through the senior year.

The William and Eleanor Stabler Clarke Scholarships, established in their honor by Cornelia Clarke Schmidt '46 and W. Marshall Schmidt '47, are awarded to two worthy first-year students with need. Preference is to be accorded to members of the Society of Friends. These scholarships are renewable through the senior year.

The Class of 1925 Scholarship was created on the occasion of the class's 50th reunion. It is awarded on the basis of academic merit and financial need.

The Class of 1930 Scholarship was endowed by the class on the occasion of their 60th reunion. It is awarded alternately to a woman or a man on the basis of sound character and academic achievement, with preference to those who exercise leadership in athletics and community service. The scholarship is renewable through the senior year.

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. It is awarded to a worthy student with need and is renewable through the senior year.

The Class of 1941 Scholarship was created in celebration of the 50th reunion of the class. It is awarded on the basis of merit and need and is renewable through the senior year.

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, 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. It is awarded on the basis of merit and need and is renewable through the senior year.

The Class of 1950 Scholarship, established on the occasion of the class's 50th reunion, is awarded to one or more deserving students. The scholarship is renewable.

The Class of 1952 Evans H. Burn Memorial Scholarship, established on the occasion of the class's 50th reunion in memory of their longtime president, is awarded on the basis of academic merit and financial need. The scholarship is renewable.

The Class of 1956 Scholarship was established on the occasion of the class's 25th reunion. It is awarded on the basis of academic merit and financial need.

The Class of 1963 Scholarship is awarded on the basis of merit and need and is renewable through the senior year. The scholarship was created in honor of the class's 25th reunion.

The Class of 1969 Scholarship was established at the 25th reunion of the class in honor of the contributions made by Courtney Smith, president of Swarthmore College from 1953 to 1969. The scholarship was given with bittersweet memories of the campus turmoil of the 1960s and with confidence in the power of open discussion and reconciliation. The scholarship is awarded on the basis of merit and need and is renewable through the senior year.

The Beatrice R. and Joseph A. Coleman Foundation Scholarship was established by Elizabeth Coleman '69 to be awarded to a student with need from a middle-income family.

The N. Harvey Collisson Scholarship, established by his family and the Olin Mathieson Charitable Trust in memory of N. Harvey Collisson of the Class of 1922, is awarded to a first-year man or woman. Selection will place emphasis on character, personality, and ability.

The Marcia Perry Ruddick Cook '27 Scholarship is awarded to a junior on the basis of merit and need, with preference to an English literature major, and is renewable for the senior year. Both scholarships are endowed by J. Perry Ruddick in memory of his parents

The David S. Cowden Scholarship was established by Professor David S. Cowden, Class of 1942, who taught English literature at Swarthmore from 1949 until his death in May 1983. It is awarded on the basis of financial need.

The Crum Meadow Scholarship was created by an anonymous donor in 2001. It is awarded on the basis of academic merit and financial need. The scholarship is renewable.

The Marion L. Dannenberg Scholarship 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 mother and grandmother of six students who attended Swarthmore.

The Edith Thatcher '50 and C. Russell '47 de Burlo Scholarship is awarded alternately to students intending to major either in engineering or in the humanities. It is awarded on the basis of need and merit and is renewable annually. It is the gift of Edith and Russell de Burlo.

Edward L. Dobbins '39 Memorial Scholarship. Established by Hope J. Dobbins 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. The scholarship is renewable through the senior year. (Preference is given to residents of Berkshire County, Mass.)

The Francis W. D'Olier Scholarship, in memory of Francis W. D'Olier of the Class of 1907, is awarded to a first-year student. Selection will place emphasis on character, personality, and ability. It is renewable through the senior year.

The Agnes B. Doty Memorial Scholarship, established in 2000 by her daughter, Christine M. Doty '70, is awarded each year with a preference for students majoring in Asian studies. The scholarship is renewable.

The Faith and Ross Eckler Scholarship was established in 2002 by A. Ross '50 and Faith Woodward Eckler '51. The Scholarship is awarded on the basis of academic merit and financial need, with preference to a man or woman with a commitment to community service, and is renewable.

The Marjorie VanDeusen '38 and J. Earle Edwards '36 Scholarship was established by an anonymous donor in 2000. It is awarded with preference for a junior or senior who has demonstrated a commitment to socially responsible citizenship with a special interest in peace and conflict studies. The scholarship is renewable.

The Maurice G. Eldridge '61 Scholarship is one of several 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 '61, vice president of college and community relations and executive assistant to the president. The Eldridge fund 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 scholarship is renewable.

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 Philip Evans Scholarship is established in fond memory of a member of the Class of 1948 by his friend Jerome Kohlberg '46 and seeks to expand the diversity of the Swarthmore community by bringing to this campus outstanding students outstanding in leadership, intellectual curiosity, community service and athletic participation. The scholarship is awarded to members of the first-year class and is renewable annually. It provides a summer-opportunity grant as well as internship, mentoring, networking and alumni opportunities.

The Samuel and Gretchen Vogel Feldman Scholarship is awarded to a student interested in pursuing a teaching career. It is awarded on the basis of need and is renewable through the senior year.

The Samuel M. and Gretchen Vogel Feldman 1956 Scholarship II is awarded to a student interested in pursuing a teaching career after graduating from Swarthmore College. It is awarded on the basis of need and is renewable through the senior year.

The Elizabeth Pollard Fetter String Quartet Scholarships, endowed by Frank W. Fetter '20, Robert Fetter '53, Thomas Fetter '56, and Ellen Fetter Gille in memory of Elizabeth P. Fetter '25, subsidize the private instrumental lessons of four top-notch student string players at the College. Interested applicants should write to the chair of the Music Department and should plan to play an audition at the College when arriving for an interview. Membership in the quartet is competitive. Other students may challenge and compete for a place in the quartet at the beginning of any semester.

The Polly and Gerard Fountain Scholarship has been established in their honor by Rosalind Chang Whitehead '58 in appreciation of their kindness and support during her college years. It is awarded to a first-year student with need and merit and is renewable through the senior year.

The David W. Fraser Scholarship. This endowed scholarship has been established 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 need-based scholarship will be awarded each semester to one student enrolled in an approved program of academic study outside the boundaries of the United States. Preference will be given for students studying in Asian, Middle Eastern, and African countries.

The Marianne Durand Frey '57 Scholarship was established by Marianne Durand Frey in 2002 and reflects the donor's gratitude for scholarship aid received during her attendance at Swarthmore. This renewable scholarship is awarded based on merit and financial need to a woman who has attended a public high school.

The Theodore and Elizabeth Friend Scholarship is established 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 is awarded each year on the basis of need to a worthy student.

The Toge and Mitsu Fujihira Scholarship was created in 2000 by their son, Donald Fujihira '69. It 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 scholarship is renewable.

The Ernesto Galarza Scholarship, funded in party by the Ahmanson Foundation and John C. Crowley '41, the scholarship is named in honor of the late Mexican-American labor activist, scholar, and nominee for the Nobel Prize in Literature. The Galarza Scholarship supports students from the Latino/a community, with preference for students from the western states.

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. It is awarded annually to a promising student who demonstrates need and academic excellence. It is renewable through four years.

The Martha Salzmann Gay '79 Scholarship was created in 2000 by Martha S. Gay '79. The award assumes both academic excellence and financial need and is awarded to a first-year student who shows great promise. The scholarship is renewable.

The Joyce Mertz Gilmore Scholarship is awarded

to an entering first-year student and may be renewed for each of the following three undergraduate years. 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 Joyce Mertz Gilmore, who was a member of the Class of 1951.

The Barbara Entenberg Gimbel Scholarship Fund was endowed in memory of Barbara Entenberg Gimbel '39 by her husband, Dr. Nicholas S. Gimbel. The scholarship is awarded on the basis of need to a worthy student, with preference to a black candidate.

The John D. Goldman '71 Scholarship 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 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 Neil R. Grabois '57 Scholarship was created by an anonymous donor in 2001. It 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 Lucinda Buchanan Thomas '34 and Joseph H. Hafkenschiel '37 Scholarship Fund 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 for the senior year, based on need. Preference is given to students who have demonstrated proficiency in water sports, or have shown talent in studio arts and who have been outstanding in service to the College.

The Mason Haire Scholarship is given by his wife, Vivian, in honor of this member of the Class of 1937, a distinguished psychologist and former member of the Swarthmore College faculty. The scholarship is awarded to a first-year student with financial need who is distinguished for intellectual promise and leadership. It is renewable through the senior year.

The Margaret Johnson Hall Scholarship for the Performing Arts is the gift of Margaret Johnson Hall, Class of 1941. It provides financial assistance based on merit and need, with preference to students intending to pursue a career in music or dance.

The Edith Ogden Harrison Memorial Scholarship was created by her daughter, Armason Harrison '35. It 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 scholarship is renewable.

The William Randolph Hearst Scholarship Fund for Minority Students, established by the Hearst Foundation, Inc., provides financial assistance to minority students with need.

The E. Dyson and Carol Hogeland Herting '38 Scholarship was created in 1999 by Eugene M. Lang '38. The scholarship is awarded with preference to a junior or senior woman majoring in political science who plans to attend law school. The scholarship is renewable.

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 scholarship will be selected from the junior class for their interest in a career in the public or nonprofit sectors and is renewable in the senior year.

The Betty Stern Hoffenberg Scholarship, established in 1987 in honor of this member of the Class of 1943, is awarded to a junior or senior with merit and need who shows unusual promise, character, and intellectual strength. Strong preference is given to a student majoring in history.

The Hollenberg-Sher Scholarship was created in 1998 and is awarded to a first-year student. The scholarship is renewable.

The Carl R. Horten '47 Scholarship was created by the Ingersoll-Rand Company. Preference in

the awarding is given to students planning to major in engineering or prelaw.

The Everett L. Hunt Scholarship, endowed by the Class of 1937 in the name of its beloved emeritus professor and dean, provides an unrestricted scholarship to be awarded annually by the College.

The Betty P. Hunter Scholarship Fund. Betty P. Hunter, Class of 1948, one of the first black students to attend Swarthmore College, established this fund through a bequest to provide scholarship aid to needy students.

The Richard M. Hurd '48 Scholarship was created in 2000. It is awarded with preference to a student majoring in engineering. The scholarship is renewable.

The William Y. Inouye '44 Scholarship, established in loving memory by his family, friends, and colleagues in recognition of his life of service as a physician. It is awarded to a worthy junior premedical student with need. The scholarship is renewable in the senior year.

The George B. Jackson '21 Scholarship has been endowed by Eugene M. Lang '38 in honor of the man who guided him to Swarthmore. It is to be awarded on the basis of need and merit with preference given to a student from the New York metropolitan area.

The Howard M. and Elsa P. 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 is the gift of Elsa Palmer Jenkins '22, Swarthmore's first woman graduate in engineering.

The Edmund A. Jones Scholarship Fund 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 1997, this four-year, renewable scholarship was designated for Strath Haven High School graduates who attend Swarthmore College with demonstrated financial need. Edmund A. Jones was the son of longtime Swarthmore residents Adalyn Purdy Jones, Class of 1940, and Edmund Jones, Class of 1939.

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 through the senior year. Preference is given to students with interest in environmental studies.

The Jennie Keith Scholarship is one of several 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 Alexander Kemp Endowed Scholarhsip was established in 2001 by Giles Kemp '72 and Barbara Guss Kemp. This 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 and Jane Kennedy. The scholarship is awarded on the basis of need and merit and is renewable through four years.

The Clark Kerr '32 Scholarship was created by an anonymous donor in 2000. It is awarded with preference to a student entering his or her senior year, who meets the model described by President Aydelotte of the all-around student with strong interests in academic achievement, athletics, and interests in debating and other aspects of student life and community service.

The Florence and Melville Kershaw Scholarship is endowed in their honor by their son Thomas A. Kershaw, Class of 1960. It is awarded to a first-year student on the basis of need and merit, with preference to those intending to major in engineering. It is renewable through the senior year.

The William H. Kistler '43 Scholarship is endowed in his memory by his wife, Suzanne, his friends and former classmates. It is awarded to a needy and deserving student majoring in engineering or economics.

The Paul and Mary Jane Kopsch Scholarship Fund, established through a gift of Paul J. Kopsch of the Class of '46, is awarded each year to a junior premedical student(s) with financial need. The scholarship is renewable in the senior year.

The Walter W. Krider '09 Memorial Scholarship. Established by his wife and daughter in 1965, the Krider scholarship is awarded to a student who ranks high in scholarship, character, and

personality and has financial need.

The Kyle Scholarship, established in 1993 by Elena Sogan Kyle '54, Frederick W. Kyle '54, and Robert B. Kyle Jr. '52, is awarded in the junior or senior year to a student who has shown leadership capability, made significant contributions to the life of the College, and demonstrated the need for financial assistance.

The 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 scholarship is awarded to a needy student showing unusual promise and is renewable through four years.

The Robert E. 1903 and Walter Lamb 1939 Scholarship was established by Walter Lamb '39. It 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. It is renewable in the senior year. This scholarship was established by Eugene M. Lang '38 in honor of his sister.

Eugene M. Lang Opportunity Grants are awarded each year to as many as six entering 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, up to a maximum of $14,000. 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 the gift of Eugene M. Lang '38. (This grant is under review for 2002-2003.)

The Ida and Daniel Lang Scholarship, established by their son, Eugene M. Lang of the Class of 1938, provides financial assistance for a man or woman who ranks high in scholarship, character, and personality.

The Eleanor B. and Edward M. Lapham Jr. '30 Scholarship established in 1996, is awarded to a first-year student on the basis of merit and need. The scholarship is renewable for his or her years of study at Swarthmore.

The Frances Reiner and Stephen Girard Lax Scholarship has been established with preference for minority or foreign students who show both merit and need. This scholarship has been endowed by the family of Stephen Girard Lax '41, who was chairman of the Board of Managers of Swarthmore College from 1971 to 1976.

The Stephen Girard Lax Scholarship, established by family, friends, and business associates of Stephen Lax '41, is awarded on the basis of financial need every two years to a student entering the junior year and showing academic distinction, leadership qualities, and a definite interest in a career in business.

The Carl M. Levin '56 Scholarship was created by an anonymous donor in 2000. It is awarded to a student with merit and need who has overcome obstacles, with a preference for Michigan public high school graduates. The scholarship is renewable.

The Scott B. Lilly Scholarship, endowed by Jacob T. Schless of the Class of 1914 at Swarthmore College, was offered for the first time in 1950. This scholarship is awarded annually in honor of a former distinguished professor of engineering, and students who plan to major in engineering are given preference.

The Lloyd Family Scholarship was established in 2000 by May Brown Lloyd '27, G. Stephen Lloyd '57, and Anne Lloyd '87. It is awarded with preference for a man or woman who gives great promise. The scholarship is renewable.

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. It is awarded on the basis of merit and need and is renewable through the senior year.

Amy Chase Loftin '29 Scholarship. Established in 1998, the Loftin scholarship is awarded to a sophomore, with preference given to Native Americans and African Americans. The scholarship is renewable through the senior year.

The Joan Longer '78 Scholarship was created as a memorial in 1989 by her family, classmates, and friends, to honor the example of Joan's personal courage, high ideals, good humor, and grace. It is awarded on the basis of merit and need and is renewable through the senior year.

Financial Aid

The David Laurent Low Memorial Scholarship was established by Martin L. Low, Class of 1940; his wife, Alice; Andy Low, Class of 1973; 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 scholarship is awarded to a first-year student and is renewable for the undergraduate years.

The Lyman Scholarship was established by Frank L. Lyman Jr. '43 and his wife, Julia, on the occasion of his 50th reunion in 1993. It is awarded to a student who is a member of the Religious Society of Friends or whose parents are members of the Religious Society of Friends, on the basis of need, and is renewable through the senior year.

The Leland S. MacPhail Jr. Scholarship, given by Major League Baseball in recognition of 48 years of dedicated service by Leland S. MacPhail Jr. '39, will be awarded annually to a deserving student on the basis of need and merit.

The Thomas B. McCabe Awards, established by Thomas B. McCabe '15, are awarded to entering students from the Delmarva Peninsula, and Delaware County, Pa. In making selections, the committee places emphasis on ability, character, personality, and service to school and community. These awards provide a minimum annual grant of tuition, or a maximum to cover tuition, fees, room, and board, depending on need. Candidates for the McCabe Awards must apply for admission to the College by Dec. 15. The National McCabe Scholarship will be based on a student's financial need.

The Charlotte Goette '20 and Wallace M. McCurdy Scholarship is awarded to a first-year student on the basis of need and merit and is renewable annually. It has been endowed by Charlotte McCurdy '20.

The Cornelia Dashiell and Dino Enea Petech McCurdy, M.D. '35 Family Scholarship was endowed by Cornelia and Dino E.P. McCurdy, M.D. '35. It is awarded each year to a well-rounded student with need who demonstrates academic and extracurricular interests based upon sound character and healthy personality traits, with preference given to graduates of George School.

The Dorothy Shoemaker '29 and Hugh McDiarmid '30 Scholarship is awarded to a first-year man or woman on the basis of merit and need and is renewable through the senior year. It is the gift of the McDiarmid family in commemoration of their close association with Swarthmore College.

The Helen Osler McKendree '23 Scholarship was created in 1998. The scholarship is awarded to a junior majoring in a foreign language or languages.

The Norman Meinkoth Scholarship, established by his friends and former students, to honor Dr. Norman A. Meinkoth, a member of the College faculty from 1947 to 1978, is awarded annually to a worthy student with an interest in the study of biological problems in a natural environment.

The Peter Mertz Scholarship is awarded to an entering first-year student outstanding in mental and physical vigor, who shows promise of spending these talents for the good of the College community and of the larger community outside. The award was established in 1955 by Harold, LuEsther, and Joyce Mertz in memory of Peter Mertz, who was a member of the Class of 1957. It is renewable for the undergraduate years.

The Mari Michener Scholarship provides financial support to four students on the basis of merit and need. It is the gift of James Michener '29.

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 Fund provides scholarships to foreign students with a preference given to students of South Asian origin.

The Kathryn L. Morgan Scholarship was established by an anonymous donor in 2000. The 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 scholarship is renewable.

The Florence Eising Naumburg Scholarship was named in 1975 in honor of the mother of an alumna of the Class of 1943. It 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 Thomas S. '30 and Marian Hamming Nicely '30 Scholarship is awarded to a first-year student with need who shows promise of academic achievement, fine character, and athletic ability. Preference will be given to a person who has been on the varsity tennis, squash, racquets, golf, or swimming teams in high or preparatory schools.

The John H. Nixon Scholarship was established by John H. Nixon, Class of '35, to assist Third World students, especially those who plan to return to their country of origin.

The Edward L. Noyes '31 Scholarship has been endowed 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. It is awarded on the basis of need and merit to students with broad interests and is renewable through four years.

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 J. Roland Pennock Scholarships were established by Ann and Guerin Todd '38 in honor of J. Roland Pennock '27, 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 Winnifred Poland Pierce Scholarship Fund is awarded on the basis of merit and financial need and is renewable through the senior year.

The Cornelia Chapman and Nicholas O. Pittenger Scholarship, established by family and friends, is awarded to an incoming first-year man or woman who ranks high in scholarship, character, and personality and who has need for financial assistance.

Laurama Page Pixton '43 Scholarship provides financial assistance for foreign students studying at Swarthmore, with preference for those from the former Soviet Union and Eastern Europe. It is a gift of her brother Edward Page, Class of 1946.

The Anthony Beekman Pool Scholarship. This scholarship is awarded to an incoming first-year man of promise and intellectual curiosity. It is given in memory of Tony Pool, Class of 1959.

The Richard '36 and Helen Shilcock Post '36 Scholarship, established in 1995 by Helen Shilcock Post '36, Bill '61 and Suzanne Rekate Post '65, Carl '66 and Margery Post Abbott '67, Barbara Post Walton, Betsy Post Falconi, Richard W. '90 and Jennifer Austrian Post '90 and their families, is awarded to a well-rounded first-year student who demonstrates merit, need, and an interest in athletic endeavors. It is renewable through four years.

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 life-long 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 Henry L. Price Jr., M.D. '44 Scholarship in Natural Sciences was established in 1994 by Hal and Meme Price and is awarded to a student who has declared the intention to choose a major in the Division of Natural Sciences excluding engineering. It is awarded on the basis of merit and need and is renewable through the senior year. This scholarship is in memory of Dr. Price's parents, Sara Millechamps Anderson and Henry Locher Price.

The Martin S. and Katherine D. Quigley Scholarship was established by their son, Kevin F.F. Quigley '74, in honor of his parents' steady commitment to family, lifetime learning, and international understanding. The scholarship is awarded each year on the basis of academic merit and financial need and is renewable. Preference is given to outstanding international students attending Swarthmore.

The Raruey-Chandra and Niyomsit Scholarships are given by Renoo Suvarnsit '47 in memory of his parents. They are given 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, who has high academic standing and real need for financial aid. Preference is given to a candidate who has divorced or deceased parents or a deceased mother or father.

The Byron T. Roberts Scholarship, endowed by his family in memory of Byron T. Roberts '12, is awarded annually to an incoming student and is renewable for his or her years of study at Swarthmore.

The Lewis M. Robbins '40 Scholarship was established by Lewis M. Robbins '40 in 2002. It is awarded on the basis of academic merit and financial need and is renewable.

The Louis N. Robinson Scholarship was established 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 Scholarship provides financial assistance to worthy students with need. It was established in memory of Edwin P. Rome '37 by his wife, Mrs. Rita Rome, and The William Penn Foundation, on whose board he served.

The Alexis Rosenberg Scholarship Fund, established by The Alexis Rosenberg Foundation, provides aid for a first-year student. It is awarded annually to a worthy student who could not attend the College without such assistance.

The Girard Bliss Ruddick '27 Scholarship is awarded to a junior on the basis of merit and need, with preference to an economics major. It is renewable in the senior year..

The Charles F.C. Ruff '60 District of Columbia Scholarship memorializes distinguished alumnus Charles F.C. Ruff '60, who died in 2000. Preference is given to students with financial need who live in the District of Columbia.

The David Barker Rushmore Scholarship, established in honor of David Barker Rushmore, Class of 1894, 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 Scholarship was established by Carl E. Russo '79 in 2000. It is awarded to a man or woman who gives great promise. Preference is given to students demonstrating leadership skills and a desire to pursue entrepreneurship.

The Katharine Scherman Scholarship is awarded to a student with a primary interest in the arts and the humanities, having special talents in these fields. Students with other special interests, however, will not be excluded from consideration. Awarded in honor of Katharine Scherman, of the Class of 1938, it is renewable for the full period of undergraduate study.

The Peter '57 and David '58 Schickele Scholarship was established by an anonymous donor in 2001. Named for Peter '57 and in memory of his brother David '58, 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 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 Howard A. Schneiderman '48 Scholarship, established in 1991 by his family, is awarded to a first-year student and is renewable through the senior year. Preference is given to students with interest in the biological sciences.

The Joe and Terry Shane Scholarship was created in honor of Joe Shane '25, who was vice president of Swarthmore College's Alumni, Development, and Public Relations from 1950-1972, and his wife, Terry, who assisted him in countless ways in serving the College. It 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 merit and need. It is renewable through four years.

The Florence Creer Shepard '26 Scholarship, established by her husband, is awarded on the basis of high scholastic attainment, character, and personality.

The William C. and Barbara Tipping Sieck Scholarship was established in 1980 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 Nancy Baxter Skallerup Scholarship, established by her husband and children, is awarded to an incoming first-year student with financial need. It is renewable through four years.

The Ann Brownell Sloane '60 Scholarship was established by Ann Brownell Sloane '60. It is awarded with preference 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 merit and need.

The Courtney C. Smith Scholarship 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 will be made to a member of the first-year class on the basis of merit and need. It is renewable during the undergraduate years. Holders of this scholarship gain access to a special file in the Friends Historical Library left by the scholarship's creator, the Class of 1957, inviting them to perpetuate the memory of this individual's 16 years of stewardship of the College's affairs and his tragic death in its service.

The W.W. Smith Charitable Trust provides scholarships to students who qualify on the basis of need and merit.

The Harold E. and Ruth Calwell Snyder Premedical Scholarship is the gift of Harold E. Snyder, Class of 1929. It provides support up to full tuition and fees for junior or senior premedical students and is awarded on the basis of merit and need.

The Cindy Solomon Memorial Scholarship is awarded with preference to a young woman in need of financial assistance and who has special talent in poetry or other creative and imaginative fields.

The Frank Solomon Memorial Scholarship was created in 1955. The scholarship is awarded on the basis of academic merit and financial need, and is renewable.

The Helen Solomon Scholarship is given in her memory by her son, Frank Solomon Jr. of the Class of 1950. It is awarded to a first-year student on the basis of merit and need and is renewable through the senior year.

The Babette S. Spiegel Scholarship Award, given in memory of Babette S. Spiegel, Class of 1933, 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 determines those eligible.

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 to a man or woman majoring in mathematics or the fine arts.

The Harry E. Sprogell Scholarship was established in 1981 in memory of Harry E. Sprogell '32 in honor of his class's 50th reunion. It is awarded to a junior or senior with financial need who has a special interest in law or music.

C.V. Starr Scholarship Fund, established by The Starr Foundation as a memorial to its founder, provides scholarship assistance on the basis of merit and need.

The David Parks Steelman Scholarship Fund, 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 merit and need, with a preference for someone showing a strong interest in athletics.

The Stella Steiner Scholarship, established in 1990 by Lisa A. Steiner '54, in honor of her mother, is awarded to a first-year student on the basis of merit and need. This scholarship is renewable through the senior year.

The Clarence K. Streit Scholarship 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 American pre–Revolutionary War 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 Katharine Bennett Tappen, Class of 1931, Memorial Scholarship was established in 1980 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 Award, established by Newton E. Tarble of the Class of 1913, is granted to a first-year man who gives promise of

leadership, ranks high in scholarship, character, and personality and resides west of the Mississippi River or south of Springfield, Ill.

The 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 Audrey Friedman Troy Scholarship, established by her husband, Melvin B. Troy '48, is awarded to a first-year man or woman. The scholarship is renewable through four years at the discretion of the College. In awarding the scholarship, prime consideration 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. Troy '75 Scholarship, established in 1999, is awarded annually to a deserving student on the basis of merit and need, with preference given to art history majors.

The Robert C. and Sue Thomas Turner Scholarship is awarded to a deserving student on the basis of merit and financial need.

The Vaughan-Berry Scholarship was established by Harold S. Berry '28 and Elizabeth Vaughan Berry '28 through life income gifts, to provide financial assistance to needy students.

The Stanley and Corinne Weithorn Scholarship was established in 1981. It is awarded with preference to a student who has expressed a serious interest in the area of social justice and civil rights. The scholarship is renewable.

The Suzanne P. Welsh Scholarship was created by an anonymous donor in recognition of outstanding administrators at Swarthmore College in 2000. The Welsh fund was established in honor of Suzanne P. Welsh, who joined the College staff in 1983 and became its treasurer in 1989. The fund is awarded on the basis of academic merit and financial need and is renewable.

The David '51 and Anita Wesson '51 Scholarship was established on the occasion of their 50th reunion in honor of their parents, Eleanor and Castro Dabrouhua and Marion and Philip Wesson. It is awarded to a first-year student on the basis of academic merit and financial need and is renewable. Preference is given to a student who is the first in his or her family to attend college.

The Rachel Leigh Wightman Scholarship was created by Anne Bauman Wightman '82 and Colin W. Wightman '82 in memory of their daughter. It 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 and is renewable through the senior year.

The Elmer L. Winkler Scholarship Fund, established in 1980 by a member of the Class of 1952, is awarded annually to a deserving student on the basis of merit and need.

The Ned Winpenny '74 Memorial Scholarship was established in 2000 by an anonymous donor. It is awarded on the basis of academic merit and financial need. The scholarship is renewable.

The Robert Wolf '39 Scholarship was endowed in his memory by his sisters, Ruth Wolf Page '42 and Ethel Wolf Boyer '41. It is awarded each year on the basis of need and merit to a junior or senior majoring in chemistry or biology. The scholarship is renewable in the senior year.

The Letitia M. Wolverton Scholarship Fund, given by Letitia M. Wolverton of the Class of 1913, 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 Frances '28 and John Worth '30 Scholarship was established by Frances Ramsey Worth in 1993 and is awarded to a first-year student with strong academic credentials and with financial need. The scholarship is renewable through the senior year.

The Harrison M. Wright Scholarship was created by friends, colleagues, and former students of Harrison M. Wright, Isaac H. Clothier Professor of History and International Relations, upon the occasion of his retirement from the College. The annual scholarship supports a student for a semester of study in Africa.

The Michael M. and Zelma K. Wynn Scholarship was established in 1983 by Kenneth R. Wynn '73 in honor of his mother and father. It is awarded annually to a student on the basis of need and merit.

The Richard A. Yanowitch '81 Scholarship was established in 2002 and reflects the donor's encouragement of student interest in internation-

al relations and cross-cultural development. It 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/her time at the College, the Yanowitch scholar will study history, languages, and international cultures. The scholarship is renewable through the senior year.

The income from each of the following funds is awarded at the discretion of the College.

The Barcus Scholarship Fund
The Belville Scholarship
The Alphonse N. Bertrand Fund
The Book and Key Scholarship Fund
The Leon Willard Briggs Scholarship Fund
The John S. Brod Scholarship
The Robert C. Brooks Scholarship Fund
The Chi Omega Scholarship
The Class of 1913 Scholarship Fund
The Class of 1914 Scholarship Fund
The Class of 1915 Scholarship Fund
The Class of 1917 Scholarship Fund
The Susan P. Cobbs Scholarship
The Cochran Memorial Scholarship Fund
The Sarah Antrim Cole Scholarship Fund
The Charles A. Collins Scholarship Fund
The Stephanie Cooley '70 Scholarship
The Ellsworth F. Curtin Memorial Scholarship
The Delta Gamma Scholarship Fund
The George Ellsler Scholarship Fund
The J. Horace Ervien Scholarship Fund
The Howard S. and Gertrude P. Evans Scholarship Fund
The Eleanor Flexner Scholarship
The Joseph E. Gillingham Fund
The Mary Lippincott Griscom Scholarship
The Stella and Charles Guttman Foundation Scholarships
The Hadassah M.L. Holcombe Scholarship
The J. Philip Herrmann Scholarship
The A. Price Heusner Scholarship
The Rachel W. Hillborn Scholarship
The Aaron B. Ivins Scholarship
The William and Florence Ivins Scholarship
The George K. and Sallie K. Johnson Scholarship Fund
The Howard Cooper Johnson Scholarship
The Kappa Kappa Gamma Scholarship
The Jessie Stevenson Kovalenko Scholarship Fund
The John Lafore Scholarship
The E. Hibberd Lawrence Scholarship Fund
The Thomas L. Leedom Scholarship Fund
The Sarah E. Lippincott Scholarship Fund
The Mary T. Longstreth Scholarship Fund
The Clara B. Marshall Scholarship Fund
The Edward Martin Scholarship Fund
The Franz H. Mautner Scholarship
The James E. Miller Scholarship
The Howard Osborn Scholarship Fund
The Harriet W. Paiste Fund
The Rogers Palmer Scholarships
The Susanna Haines '80 and Beulah Haines Parry Scholarship Fund
The T.H. Dudley Perkins Scholarship Fund
The Mary Coates Preston Scholarship Fund
The David L. Price Scholarship
The Robert Pyle Scholarship Fund
The George G. and Helen Gaskill Rathje '18 Scholarship
The Reader's Digest Foundation Endowed Scholarship Fund
The Fred C. and Jessie M. Reynolds Scholarship Fund
The Lily Tily Richards Scholarship
The Adele Mills Riley Memorial Scholarship
The Edith A. Runge Scholarship Fund
The Amelia Emhardt Sands Scholarship Fund
The William G. and Mary N. Serrill Honors Scholarship
The Clinton G. Shafer Scholarship
The Caroline Shero Scholarship
The Annie Shoemaker Scholarship
The Sarah W. Shreiner Scholarship
The Walter Frederick Sims Scholarship Fund
The Mary Sproul Scholarship Fund
The Helen G. Stafford Scholarship Fund
The Francis Holmes Strozier Memorial Scholarship Fund
The Joseph T. Sullivan Scholarship Fund

The Titus Scholarships Fund
The Daniel Underhill Scholarship Fund
The William Hilles Ward Scholarships
The Deborah F. Wharton Scholarship Fund
The Thomas H. White Scholarship Fund
The Samuel Willets Scholarship Fund
The I.V. Williamson Scholarship
The Edward Clarkson Wilson and Elizabeth T. Wilson Scholarship Fund
The Mary Wood Scholarship Fund
The Roselynd Atherholt Wood '23 Fund

III

College Life

STATEMENT OF STUDENT RIGHTS, RESPONSIBILITIES, AND CODE OF CONDUCT

Preamble

Under Objectives and Purposes of this publication it is stated that "The purpose of Swarthmore College is to make its students more valuable human beings and more useful members of society.... Swarthmore seeks to help its students realize their fullest intellectual and personal potential combined with a deep sense of ethical and social concern." Although the College places great value on freedom of expression, it also recognizes the responsibility to protect the structures and values 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. The College community also has a responsibility to protect the possessions, property, and integrity of the institution as well as of individuals. The aim of both this statement and the Student Judicial Procedures is to balance all these rights, responsibilities, and community values fairly and efficiently.

Swarthmore College policies and jurisdiction normally apply only to the conduct of matriculated students occurring on Swarthmore College property or at College-sanctioned events that take place off campus. In situations in which both the complainant and accused are matriculated Swarthmore students, however, College policies and jurisdiction may apply regardless of the location of the incident. In the event that a student organization violates a college regulation, the organization, as well as its individual members, can be held accountable for the violation and sanctioned by the College. Finally, students should realize they have the responsibility to ensure that their guests do not violate College policies, rules, and regulations while visiting and that students may be subject to disciplinary action for misbehavior of their guests.

A complaint against a student may be made to the deans by a student, a public safety officer, a member of the College's faculty or staff, or a College department. If the alleged incident represents a violation of federal, state, or local law, the complainant also has the option of initiating proceedings in the criminal or civil court system regardless of whether a complaint is filed within the College system.

The following is a summary and explanation of the rights, responsibilities, and rules governing student conduct at Swarthmore College. This statement serves as a general framework and is not intended to provide an exhaustive list of all possible infractions. Students violating any of the following are subject to disciplinary action. All sanctions imposed by the judicial system must be obeyed or additional penalties will be levied. For a description of the College's judicial process, please see the section below on *Student Judicial System*.

1. Academic and Personal Integrity

Academic Freedom and Responsibility

The following is excerpted from *The Faculty Handbook* (Section II.A.2):

Swarthmore College has long subscribed to the fundamental tenets of academic freedom articulated in the 1940 Statement of Principles on Academic Freedom and Tenure by the American Association of University Professors. This doctrine has been reiterated and amplified in the association's 1970 Statement on Freedom and Responsibility. Swarthmore College adheres to the 1970 Statement, relevant portions of which are reproduced below. The complete texts of the association's 1940 and 1970 statements may be found in A.A.U.P. publications.

Membership in the academic community imposes on students, faculty members, administrators, and trustees an obligation to respect the dignity of others, to acknowledge their right to express differing opinions, and to foster and defend intellectual honesty, freedom of inquiry and instruction, and free expression on and off the campus. The expression of dissent and the attempt to produce change, therefore, may not be carried out in ways that injure individuals or damage institutional facilities or disrupt the classes of one's teachers or colleagues. Speakers on campus must not only be protected from violence but also be given an opportunity to be heard. Those who seek to call attention to grievances must not do so in ways that significantly impede the functions of the institution.

Students are entitled to an atmosphere conducive to learning and to even-handed treatment in all aspects of the teacher-student relationship. Faculty members may not refuse to enroll or teach students on the grounds of their beliefs or the possible uses to which they may put the knowledge to be gained in a course. The student should not be forced by the authority inherent in the instructional role to make particular personal choices as to political action or his own part in society. Evaluation of students and the award of credit must be based on academic performance professionally judged and not on matters irrelevant to that performance, such as personality, race, religion, degree of political activism, or personal beliefs.

If a student has a grievance against a faculty member that cannot be resolved directly through the faculty member involved, the student should take her or his concerns to the department chair. If the grievance remains unresolved, the student should contact the provost.

Academic Misconduct

The following procedures were adopted by the faculty on Feb. 16, 2001, and are excerpted from *The Faculty Handbook* (Section II.B.7):

I. *Considering Academic Misconduct Cases*

i. Academic misconduct is defined as a violation of the college's standards of academic integrity whether these violations are intentional or unintentional.

ii. The College Judiciary Committee (CJC) will adjudicate academic misconduct cases.

iii. In academic misconduct cases the dean of the College, who chairs the CJC, acts as a neutral procedural facilitator, not as an advocate or a judge. The dean of the College, as chair, and the associate dean for student affairs, as observer, are ex officio, nonvoting members of CJC.

II. *Procedures*

i. An instructor who has good evidence to suspect a student or students of academic misconduct (e.g., cheating on an exam; plagiarism on a paper, lab reports, problem sets, or honors work) will, at the instructor's discretion, consult the department chair about the case. Mere suspicion on the part of a faculty member that the student's work does not sound right is normally not by itself sufficient grounds to bring a case forward in the absence of good evidence. Good evidence may include, but is not limited to, the following:

a. Some of the student's work coincides with or closely paraphrases a source that is not properly acknowledged. Sources that must be acknowledged include, but are not limited to, books, articles in books, journal articles, Web pages, graphs, charts, tables, data sets, etc. in any of the sources just mentioned. Proper acknowledgment must indicate both the source and how it served as a source for any specific portions of the student's work that have been based on it.

b. Glaring coincidences in the work of students on exams, papers, problem sets, etc., where cooperation in producing the work was not permitted.

ii. In any event, the instructor will meet with the student (or students) to present evidence to the student and may, at the instructor's discretion, invite the department chair to be present.

iii. After this meeting, if the instructor's suspicions are not allayed, the instructor will submit a report to the College's associate dean for student life. The report will include a narrative of the incident and evidence supporting the charge.

iv. The associate dean will provide copies of the report to all faculty members of the CJC including alternates, and will call a preliminary meeting of the faculty members of the CJC for the purpose of determining the merits of the case. If in the judgment of this group there are sufficient grounds to warrant a hearing, the associate dean will schedule the hearing at a time mutually convenient to the committee members of the CJC and the student charged with academic misconduct. The associate dean will inform the student of the charge and his or her right to have a support person present at the hearing. The support person may be a fellow student, a faculty member, or a member of the staff. Normally, all evidence to be considered must be submitted by the accuser and the defendant to the associate dean for student life prior to the hearing.

v. Before academic misconduct cases are heard, the associate dean will provide the committee with an updated summary of the previous years' cases and their disposition.

III. *Sanctions*

i. The CJC will consider the case, make a finding of guilty or not guilty on the basis of the preponderance of the evidence, and determine an appropriate sanction if a finding of guilty is reached.

ii. In determining a sanction, the committee will consider all the circumstances of the case, including the intent of the student, the character and magnitude of the offense, the considered evidential judgment of the faculty member bringing the accusation, and mitigating circumstances. It is the opinion of the faculty that for an intentional first offense, failure in the course normally is appropriate. Suspension for a semester or deprivation of the degree in that year may also be appropriate when warranted by the seriousness of the offense.

iii. For a second offense, the penalty normally should be expulsion.

IV. *Appeals*

A request for an appeal may be brought to the president and the provost within 10 days following a guilty decision by the CJC, but only on the grounds of new evidence or procedural error. If the president and the provost decide that this new information warrants an appeal, they will appoint a new committee of two faculty and two students to review the case. The decision of the appeal committee is final. The committee may confirm the decision of the CJC, reduce or increase the sanctions, or dismiss the original charges.

V. *Informing Faculty And Students About Swarthmore's Academic Misconduct Policy*

The integrity of a liberal arts education depends on the principle of academic integrity. Educating the community about the Academic Misconduct Policy is essential to the educational goals of the College.

Both students and faculty will be regularly informed about the College's Academic Misconduct Policy in a variety of ways including by their instructors or advisers, by the Dean's Office, and by means of statements in such places as the College catalog, faculty and student handbooks, the College Web site, departmental or divisional handouts, etc. Discussion of the policy may also be part of such sessions as orientation for first-year students in the fall, orientation for new faculty, and in writing associate and student academic mentor training. Students must finally take the responsibility for understanding the rules with respect to proper citation of sources and the College's academic misconduct policy.

Standard Citation Practices

Writers may refer to a handbook on scholarly writing for information about correct citation procedures. The *MLA Handbook* is particularly useful because it also provides examples of plagiarism. Supplementary departmental regulations governing joint projects, etc., may be found on file in departmental offices. The informal nature of some writing may obviate the necessity of rigorously formal citation, but still requires honest attribution to original authors of all borrowed materials. Students should feel free to consult with instructors whenever there is doubt as to proper documentation.

Fear of being charged with plagiarism need not inhibit anyone from appropriately using another's ideas or data in a piece of writing. Even direct quotation frequently serves as an effective device in developing an argument. Academic honesty requires only that writers properly acknowledge their debts to other authors at least by means of quotation marks, footnotes, and references, if not also with in-text phraseology like "Einstein argued in 1900 that..." or "As Melville implies in Chapter 3 of *Moby-Dick*...." Such usage is fully within the tradition of forthright academic work.

Submission of the Same Work in More Than One Course

When submitting any work to an instructor for a course, it is assumed that the work was produced specifically for that course. Submission of the same work in more than one course without prior approval is prohibited. If the courses are being taken concurrently, approval of the professors for both courses is required. If a student wishes to submit a paper that was written for a course taken in a previous semester, the student need only obtain the permission of the professor teaching the current course involved.

Library/Educational Materials Ethics

Students may not hinder the educational opportunity of other students by behavior such as removing, hiding, or defacing educational materials.

Statement on Computing

Use of the Swarthmore College computer system and networks is governed by the general norms of responsible community conduct described in the student, faculty, and staff handbooks, by local, state and federal laws, and by College policies specific to use of the computer systems and networks, which are described in the following sections.

Swarthmore College normally grants access to its computing network and systems to currently enrolled students, to current and emeritus faculty, and to currently employed staff. By users, this document refers to all who use the computers, networks, and peripherals owned or operated by the College, or who gain access to third-party computers and networks through the College's system, whether these individuals have regular accounts or are system administrators.

1. Users of services operated by Swarthmore College have the following obligations and responsibilities:

a. To respect software copyright. The copying or use of copyrighted software in violation of vendor license requirements is strictly forbidden. Not only does such violation ("software piracy") wrongly appropriate the intellectual property of others, but it places the individual user and the College at risk of legal action.

b. To protect their accounts from unauthorized use by others. Users are responsible for all activities under their user ID, and must take reasonable steps to ensure that they alone, or some authorized person under their direct control, have access to the account.

c. To respect the integrity of other user's accounts. Individuals must not use another person's user ID without express permission or attempt to decode passwords or to access information illegitimately. A system administrator is allowed to decode passwords as part of regular operations.

d. Not to send forged e-mail (mail sent under another user's name) or to read e-mail addressed to another user, for example, by accessing their electronic mailbox or mail residing in system files. Potentially offensive electronic communication shall be considered as it would be if conveyed by other media.

e. To avoid excess use of shared resources, whether through monopolizing systems, overloading networks, misusing printer or other resources, or sending "junk mail." Information Technology Services (ITS) will occasionally issue guidelines to the use of shared resources. Because Swarthmore College provides and maintains these systems to further its academic mission, using computers for nonacademic purposes has low priority.

f. To avoid engaging in any activity that may reasonably be expected to be harmful to the systems operated by the College or a third party or to information stored upon them. When a system vulnerability is discovered, users are expected to report it to a system administrator.

Violations of these rules that come to the attention of ITS will be referred as appropriate to the offices of the dean, provost, or human resources. These offices will consider violations using information provided by ITS. In cases of violation of "f" above, ITS may temporarily withhold services from students, faculty or staff. The case will then be referred in a timely manner to the appropriate College authorities.

2. Swarthmore College for its part assures users that College personnel are obliged:

a. To grant personal files on College computers (e.g., files in a user's account) the same degree of privacy as personal files in College-assigned space in an office, lab, or dormitory (e.g., files in a student's desk); to grant private communications via computer the same degree of protection as private communications in other media; and to treat an article on a USENET newsgroup or other bulletin board analogously to a poster or a College publication.

b. To take reasonable steps to protect users from unauthorized entry into their accounts or files, whether by other users or by system administrators, except in instances where a system-related problem requires such entry.

c. To take reasonable steps to prevent the dissemination of information concerning individual user activities, for example, records of users entering a bulletin board network.

Acknowledgments. Some of the above rules and guidelines have been adapted from earlier statements in the *Swarthmore College Student Handbook* and from materials made available from the Electronic Frontier Foundation, in-

cluding the policy statements of the American Association of University Professors, Columbia University, the University of Delaware, the University of Southern California at Los Angeles, and Virginia Tech University.

False Information, Misrepresentation, and Identification

A student may not knowingly provide false information or make misrepresentation to any College office. Students are obligated to provide College personnel with accurate identification on request.

Forgery, Fraud, and Unauthorized Possession

In addition to the forgery, alteration, or unauthorized possession or use of College documents, records, or instruments of identification, forged communications (paper or electronic mail) are prohibited.

2. Violence, Assault, Intimidation, and Harassment (for sexual violations see Sexual Misconduct)

Swarthmore College seeks to maintain an environment of mutual respect among all its members. All forms of violence, assault, intimidation, and harassment, including that based on sex, race, color, age, religion, national origin, sexual preference, or handicap, undermine the basis for such respect and violate the sense of community vital to the College's educational enterprise. This statement of policy should not be taken to supersede the Colleges commitment to academic freedom, which it hereby reaffirms. The reasoned expression of different views plays a particularly vital part in a college community. Freedom of expression, fundamental to an exchange of views, carries with it corollary responsibilities equally basic to reasoned debate.

Violence and Assault

Students may not engage in physical violence against others. Those who do will be subject to serious sanctions.

Intimidation

Verbal, written, or electronic threats of violence or other threatening behavior directed toward another person or group that reasonably leads the person or persons in the group to fear for their physical well-being constitutes intimidation and is prohibited. Anyone who attempts to use intimidation or retaliation against someone who reports an incident, brings a complaint, or participates in an investigation in an attempt to influence the judicial process will be subject to serious sanctions.

Harassment

The College seeks to sustain an environment in which harassment has no place. Those who harass others will be subject to serious sanctions.

Definition, principles, and criteria. Harassment can take many forms, and it needs to be emphasized that harassment can be and often is nonphysical, including words, pictures, gestures, and other forms of expression. To count as harassment, such expression must be reasonably regarded as (a) taunting,[1] vilifying,[2] or degrading[3] whether (b) directed at individuals or groups (subject to the clarification and qualification below) and (c) where reasonable people may suppose that such expression harms its target(s) by substantially interfering with their educational opportunities, peaceful enjoyment of residence and community, or terms of employment. Further, to count as harassment subject to possible formal grievance procedures, such expression must (d) be taken *either* with the intent to interfere with the protected interests mentioned in (c), above, *or* with reckless disregard to the nature of the conduct. Such intent or recklessness must be inferred from all the circumstances. Finally, (e) such expression must be repeated and persistent. To be "repeated and persistent," the offending conduct must have been brought to the attention of the defendant (though not necessarily by the complainant), be of the same kind, and repeated. There are two reasons for adding (e):

1 Derisive, mocking, ridiculing, or jeering expression.

2 Forceful defaming or degrading expression with intent to make the target of the offending expression vile or shameful or recklessly disregarding the effects of one's expression in these respects.

3 Subjecting one to public shame that normally cause feelings of inferiority or loss of self-respect.

first, the College wishes to have the opportunity to educate those who may not realize that certain expression constitutes harassment; second, by requiring that the expression be repeated and persistent, the College helps establish intent or recklessness. However: (f) before *any* expression can be considered for possible formal grievance procedures, it must be clear that no substantial free expression interests are threatened by bringing a formal charge of harassing expression. This strict criterion for possible formal grievance procedures must be imposed to ensure that the College does nothing that would tend to diminish free expression or compromise principles of academic freedom in the vigorous and often contentious examination and criticism of ideas, works of art, and political activity that marks Swarthmore College.

Because *groups* have been included in (b), above, the following clarification and qualification is in order. If expression that would be regarded as harassing if directed at an individual is directed at a group—where no individuals are specifically named or referred to as targets—any member of that group will have an adjudicable complaint *only if* it can be established that a reasonable person would regard that offending expression as harassing each and every member of the group as *individuals*.

Stalking

Stalking is a form of harassment, which, following the Pennsylvania Criminal Code, occurs when a person engages in a course of conduct or repeatedly commits acts toward another person, including following the person without proper authority, under circumstances that demonstrate either of the following: placing the person in reasonable fear of bodily injury; or reasonably causing substantial emotional distress to the person.

3. Sexual Misconduct

Sexual misconduct represents a continuum of behaviors ranging from physical sexual assault and abuse to sexual harassment and intimidation and is a serious violation of the College's code of conduct. Both women and men can be subject to and can be capable of sexual misconduct. It can occur between two people whether or not they are in a relationship in which one has power over the other, or are of different sexes.

Charges of sexual misconduct may be handled according to either informal or formal procedures. Regardless of whether or not options for resolution are pursued within the College system, complainants always have the option of filing charges in civil or criminal court. It is important to note that discussing concerns with or seeking clarification or support from the gender education adviser, a dean, or others does not obligate a person to file a formal complaint initiating judicial procedures. The gender education adviser will register each request for assistance in resolving a case involving charges of sexual misconduct, whether formal or informal. These records will be kept confidential to the extent permitted by law.

Sexual Assault and Abuse

Students are prohibited from engaging in sexual assault or abuse of any kind.

Definition. Sexual assault is defined as any sexual contact that occurs without the consent of the other person. Specifically, it is intentional physical contact with an intimate part of the body or with clothes covering intimate body parts without the consent of the person touched. Sexual assault includes but is not limited to sexual penetration of an unwilling person's genital, anal, or oral openings; touching an unwilling person's intimate parts such as genitalia, groin, breasts, lips, buttocks, or the clothes covering them; or forcing an unwilling person to touch another person's intimate parts or clothes covering them. When sexual assault occurs repeatedly between individuals, it is referred to as sexual abuse.

Consent. Students have the responsibility to ensure that any sexual interaction occurs only with mutual consent. If a person indicates that she/he does not want sexual contact, then any further sexual contact is considered to be without the person's consent. If the person has agreed to sexual interaction, she or he has the right to change her/his mind and indicate that she/he no longer wants to continue the interaction. A person has the right to indicate she/he does not want any further sexual contact no matter how much sexual interaction has already taken place. Valid consent cannot be obtained from someone who is asleep, unconscious, coerced, or is otherwise unable to give informed, free, and considered consent. It must be emphasized that the consumption of alcohol and other drugs may substantially im-

pair judgment and the ability to give consent. Those who willingly permit themselves to become impaired by alcohol or other drugs may be putting themselves at greater risk, but this impaired state provides no defense for those who take advantage of people whose judgment and control are impaired.

Sexual Harassment

The following definition is based on that formulated by the Federal Equal Opportunity Commission. Sexual harassment, a form of discrimination based on sex, gender, or sexual orientation, clearly endangers the environment of mutual respect and is prohibited. Because behavior that constitutes sexual harassment is a violation of federal law (Title VII of the Civil Rights Act of 1964, Title IX of the Education Amendments of 1972), any individual who feels that she or he has been subjected to sexual harassment has the right to initiate legal proceedings in criminal or civil court in addition to or in lieu of a complaint pursuant to this policy.

Definition. Sexual harassment is of two basic types: (a) any action, verbal expression, usually repeated or persistent, or series of actions or expressions that have either the intent, or are reasonably perceived as having the effect, of creating an intimidating, hostile, or demeaning educational, employment, or living environment for a student or College employee, by focusing on that person's gender. A hostile environment is defined as one that interferes with the ability to learn, exist in living conditions, work (if employed by the College), or have access and opportunity to participate in all and any aspect of campus life (harassment creating a hostile environment); (b) any action in which submission to conduct of a sexual nature is made either explicitly or implicitly a term or condition of an individual's education or employment, or submission to or rejection of such conduct is used as the basis for academic or employment decisions affecting that individual. (quid pro quo harassment).

Because at Swarthmore it is not unusual for students to supervise other students or for students to have actual or perceived power or influence over another students academic performance (e.g., student graders, student laboratory assistants, and student writing associates), there can exist a power imbalance between students that makes it possible for quid pro quo harassment to occur between them.

Descriptions. Sexually harassing behaviors differ in type and severity and can range from subtle verbal harassment to unwelcome physical contact. Sexual harassment includes but is not limited to (a) unwelcome verbal or physical advances, persistent leers, lewd comments; (b) the persistent use of irrelevant references that insult or degrade a person's gender, or the use of sex stereotypes to insult or degrade; (c) the use by a person in authority of his or her position to coerce another person to do something of a sexual nature that she or he would not otherwise do. Coercion need not involve physical force.

Scope and resolution. There is a wide range of behaviors that falls within the general definition of sexual harassment and many differing notions of what behaviors are and are not acceptable. Key factors that determine instances of sexual harassment are that the behavior is unwelcome, is gender based, and is reasonably perceived as offensive and objectionable. Such behavior need not produce or threaten some tangible loss to the receiver in order to be deemed harassment. If it is unclear that the behavior constitutes harassment, a person who thinks she or he has been harassed should not spend considerable time struggling alone with this issue. Students are strongly encouraged to bring their issues to the gender education adviser, a dean, the equal opportunity officer, or others trained in this area for support, clarification, and to discuss options for informal resolution or formal adjudication.

In cases in which the harassment is subtle, it cannot be assumed that the offending person is aware of the way in which his or her behavior has been interpreted. There are several ways to make a person aware that his or her behavior constitutes sexual harassment. The grievant is never under any obligation to take any steps that would cause him or her to come into contact with the harasser in ways he or she is unwilling to do. Instead, the grievant can consider all the informal and formal means open to him of her for resolution and choose what seems most useful and workable in his or her particular case. The grievant must also weigh, however, the fact that without in some way being made aware of his or her actions, the harasser may continue the offensive behavior. In

the most serious instances of sexual harassment, it is unreasonable to expect grievants to confront their perceived harassers. In these cases the grievant should enlist the help of a trained third party such as the gender education adviser, a dean, the equal opportunity officer, or another person trained in this area.

It is important to remember that any member of the community can be guilty of sexually harassing any other member regardless of position of authority or status. Although students have often found it difficult to come forward when the perceived harasser is in a position of authority or is threatening, procedures are in place to respond and to provide support throughout the resolution process.

Support

Support is available through the gender education adviser, a group of trained faculty and staff members comprising the response team, and the deans for students who feel that they have been subjected to any form of sexual misconduct. Consultation with any of these individuals in no way limits a student's options for resolution nor commits the student to a particular course of action. The College also provides support when requested through the Dean's Office to those students charged with sexual misconduct. There are specific rights for complainants of sexual misconduct and for those students accused of sexual misconduct; these rights are listed in detail in the *Student Handbook*. In addition, students are encouraged to discuss their concerns with a dean when deciding whether to file a formal complaint.

Related Policies

The College also has sexual misconduct policies as they relate to staff-student behavior and faculty-student behavior. The College policy governing staff and the related grievance procedure can be found in the *Staff Handbook*. The College policy governing faculty and the related grievance procedure can be found in the *Faculty Handbook*.

4. Actions Potentially Injurious to Oneself or Others

Alcohol and Other Drugs

The possession and use of alcoholic beverages on the campus are regulated by federal, state, and local law and are limited to those areas of the campus specified by Student Council and the dean. The observance of moderation and decorum with respect to drink is a student obligation. In addition to accountability for specific behavior and guidelines described in the College policy on alcohol and other drugs, it is important to note that being under the influence of alcohol or other drugs is not an excuse for violation of the *Statement of Student Rights, Responsibilities, and Code of Conduct* and does not reduce a student's accountability. For a complete description of the College's Alcoholic Beverage Policy guidelines, please see the section in the *Student Handbook*.

The use, possession, or distribution of injurious drugs or narcotics without the specific recommendation of a physician and knowledge of the deans subjects a student to possible suspension or expulsion.

Smoking

Smoking is prohibited in all public spaces throughout the College meeting rooms, lounges, offices, and halls. A $25 fine will be charged for violating this policy, and students can be removed from nonsmoking College housing if they smoke in rooms on nonsmoking halls. Smoking is allowed outdoors and in the student's room (in certain residence halls), provided that the door remains closed.

Climbing on College Buildings or Structures

Climbing on any College building, or being present on building roofs is not allowed. In unusual circumstances, arrangements to climb predesignated locations may be coordinated through the Public Safety Department.

Fires, Fire Safety Equipment, and Alarms

Tampering or interference with, as well as destruction or misuse of, fire safety and fire prevention equipment is prohibited and is a violation of state law. An automatic fine of $125 for each piece of equipment plus the cost of replacement of equipment is charged to any student violating this regulation, and further disciplinary action may be taken. Any student who causes an alarm to be set off for improper purposes is liable for the expenses incurred by the fire department(s) in responding to the alarm. If no individuals accept responsibility when a violation of this policy occurs in a residence hall, all residents of that residence hall are subject to fines and charges for costs in-

curred by the College and/or fire department(s). Open flames are not permitted in residence halls. Any student with an open flame (e.g., candle or incense) will be subject to a $500 fine. Students are financially responsible for any damages resulting from reckless conduct or violation of college rules regulating residence hall safety.

Firearms; Fireworks

No student may possess or use a firearm on Swarthmore College property or its environs. Firearms, including rifles, shotguns, handguns, air guns, and gas-powered guns and all ammunition or hand-loading equipment and supplies for the same are not allowed in any student residence or in any College building. Requests for exceptions must be made to the dean. No student may possess or use fireworks on Swarthmore College property or its environs.

Reckless Conduct

Conduct that places oneself or another in imminent danger of bodily harm is prohibited. The standard as to what constitutes imminent danger is solely at the discretion of the dean and/or the judicial body hearing the case.

5. College and Personal Property

Illegal Entry

Unauthorized entry into or presence within enclosed and/or posted College buildings or areas, including student rooms or offices, even when unlocked, is prohibited and may subject a student to fines and other sanctions.

Locks and Keys

Tampering with locks to College buildings, unauthorized possession or use of College keys, and alteration or duplication of College keys is against College policy.

Theft or Damage

Theft and negligent or intentional damage to personal or College property will subject a student to paying for the repair or replacement of the damaged property as well as to disciplinary action. In the event that damage occurs in a residence hall for which no one assumes responsibility, payment for damages will be divided equally among all residents of that hall. For damage that occurs during a student event in a space other than a residence hall and for which no individual student(s) accept(s) responsibility, the sponsoring students and/or organization will be held accountable for the money for replacement or repair of the damaged property and may be subject to further disciplinary action.

Parking

No student may park an automobile on College property without permission from the Car Authorization Committee, a student-administration group.

6. Guests

Friends of Swarthmore students are welcome on campus. If a guest of a student will be staying in a residence hall over night, the resident assistant and the housekeeper must be notified. A guest is not permitted to stay in a residence hall more than four consecutive nights. Requests for exceptions must be made to the director of residential life.

Student hosts are responsible for the conduct of their guests on campus and will be held accountable for any violation of the code of conduct or other rules of the College committed by a guest.

7. Disorderly Conduct

Students at Swarthmore College have the right to express their views, feelings, and beliefs inside and outside the classroom and to support causes publicly, including by demonstrations and other means.

These freedoms of expression extend so far as conduct does not impinge on the rights of other members of the community or the orderly and essential operations of the College. Disorderly conduct is not permitted.

Violation of the orderly operation of the College includes but is not limited to (1) excessive noise, noise, once identified, which interferes with classes, College offices, dorm neighbors, or other campus and community activities; (2) unauthorized entry into or occupation of a private work area; (3) conduct that restricts or prevents faculty or staff from performing their duties; (4) failure to maintain clear passage into or out of any College building or passageway.

8. Violation of Local, State, or Federal Law

Violation of the laws of any jurisdiction, whether local, state, federal, or (when on foreign study) foreign, may at the discretion of the

dean, subject a student to College disciplinary action. A pending appeal of a conviction shall not affect the application of this rule.

STUDENT JUDICIAL SYSTEM

The formal judicial system at Swarthmore College has two main components: (1) adjudication by individual deans of minor infractions of College regulations, where a finding of guilt would result in a sanction less severe than suspension; and (2) adjudication by the CJC of serious infractions of College regulations, including all formal charges of academic dishonesty, assault, harassment, or sexual misconduct. The CJC is composed of faculty, staff, and administrators who have undergone training for their role.

In all cases of formal adjudication, whether by a dean or by the CJC, the deans will keep records of the violation(s) and of the sanction(s) imposed on a student. Sanctions are cumulative, increasing in severity for repeat offenders. Notational sanctions are recorded permanently on the back of the students record card but do not appear on the face of the academic record. Therefore, an official transcript of an academic record, which is a copy of the face of the record card, does not reflect notational sanctions. Non-notational sanctions are not so recorded but are entered into the students personal file as a separate letter that is destroyed at the time of the student's graduation.

These formal procedures are separate from the various informal methods of conflict resolution available such as facilitated discussion by a dean or other trained facilitators, or mediation, a nonadversarial method of resolving interpersonal disputes. It is important to remember that all possible avenues of conflict resolution be considered thoroughly when deciding on a course of action. A more complete description of the judicial system is available from the Office of the Dean or in the *Student Handbook*.

HOUSING

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

Residence Halls

Twelve residence halls, ranging in capacity from 21 to 214 students, offer a diversity of housing styles. Several of the residence halls are a five- to 15-minute walk to the center of campus. Swarthmore's residence halls are Dana and Hallowell halls; one building on the Mary Lyon School property; Mertz Hall, the gift of Harold and Esther Mertz; Palmer, Pittenger, and Roberts halls on South Chester Road; the upper floors in the wings of Parrish Hall; 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; and Worth Hall, the gift of William P. and J. Sharples Worth, as a memorial to their parents.

About 85 percent of residence hall areas are designated as coeducational housing either by floor, section, or entire building. The remaining areas are single-sex housing. Although single-sex options are offered, they are not guaranteed. Students should not expect to live in single-sex housing for all four years. In these single-sex sections, students may determine their own visitation hours up to and including 24-hour visitation.

First-year students are assigned to rooms by the deans. Efforts are made to follow the preferences indicated and to accommodate special needs, such as documented disabilities. Other students choose their rooms in an order determined by lot or by invoking special options—among these are block housing, allowing friends to apply as a group for a section of a particular hall. There is also the opportunity to reside at neighboring Bryn Mawr and Haverford colleges in a cross-campus housing exchange that proceeds on a matched one-for-one basis. First- and second-year students typically reside in one-room doubles, whereas juniors and seniors have a wider selection of room types. 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. Permission must also be obtained from the

deans to reside outside College housing.

Resident assistants, selected from the junior and senior classes, are assigned to each of the residence hall sections. These leaders help create activities for students, serve as support advisers to their hallmates, and help enforce College rules for the comfort and safety of the residents.

Residence halls remain open during October, Thanksgiving, and spring breaks but are closed to student occupancy during winter vacation. No meals are served during October and spring breaks. At the end of the fall semester, students are expected to vacate their rooms within 24 hours after their last scheduled examinations. Freshmen, sophomores, and juniors are expected to leave immediately after their last examination in the spring so that their rooms may be prepared for use by commencement visitors. Storage areas are provided in each residence hall plus a limited-access storage room for valuables.

The insurance program for the College is designed to provide protection for College property and does not include the property of students or others. Students and their parents are strongly urged to review their insurance program in order to be sure that coverage is extended to include personal effects while at college.

More detailed housing rules and regulations are found in the *Student Handbook*, updated and distributed each year, and in the *Guide to the Housing Lottery*, published before the spring housing lottery.

Sharples Dining Hall

All students living on campus are required to subscribe to the College Board Plan for meals in Sharples Dining Hall. Students living off campus may purchase the board plan if they wish or a $400 debit card is available from the dining services. Within the contracted 20-meal program, each student has access to three admissions to Sharples Dining Hall Monday through Saturday and two admissions on Sunday, based on our weekly meal programming. Dining Services offers a 14-meal plan with a $100 declining balance per semester for sophomores, juniors, and seniors. There are 14 meals offered per week that can be used for a meal at Sharples or Essie Mae's in Tarble in exchange for meal credit. The $100 per semester declining balance can be used as cash at Sharples, Essie Mae's or the coffee bar at Kohlberg Hall. If you do not use the $100 in a semester, there is no refund or credit.

Although an effort is made to meet the dietary needs of all students, not all special requirements can be accommodated. Permission to reside off campus after their first year at Swarthmore will be extended to students not able to participate in the Board Plan. The dining hall is closed during the fall, winter, and spring breaks.

SOCIAL CENTERS

Tarble Social Center

Through the original generosity of Newton E. Tarble of the Class of 1913 and his widow, Louise A. Tarble, the reconstructed Tarble Social Center in Clothier Memorial opened in April 1986. The facility includes recreational areas, a snack bar, lounge, student activities offices, a multipurpose performance space as well as the bookstore. Under the leadership of a student activities coordinator, student co-directors, and the Social Affairs Committee, many major social activities (parties, concerts, plays, etc.) are held in Tarble.

Other Centers

The Women's Resource Center (WRC) is a space 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.

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 director, Tim Sams, with the assistance of a committee of black students, faculty, and administrators. See the BCC's Web site at www.swarthmore.edu/admin/bcc/, or contact us at (610) 328-8456.

The Intercultural Center (IC) is a multipurpose center devoted to developing greater awareness of Asian American, Latino/Hispanic, gay/lesbian/bisexual, and Native American contributions to Swarthmore College as well as the broader society. The IC provides a supportive environment where students are welcomed to discuss and understand the educational, political, and social concerns that affect their groups. The IC fosters the education of its members and the wider community about cultural, ethnic, class, gender, and sexual orientation differences. Through co-sponsoring programs and building alliances with the administration, other campus groups and departments, the IC increases diversity and respect for differences at all levels of campus life. The Resource Center will include Asian American, Hispanic/Latino/a, Native American and queer books, journals, films, videos, scholarships, academic resources and alumni outreach information such as the alumni database, alumni mentor program, and alumni speaker series. The IC center and its programs are directed by Director Rafael Zapata. See the IC Web site at www.swarthmore.edu/admin/IC, or telephone (610) 328-7360.

The director, interns, and the administrative assistant are responsible for the center's programming and operational functions. The IC is located in the far southern corner of Tarble in Clothier. The center is open Monday through Sunday, 8:30 a.m. to midnight. To reach the IC director or any of the three organizations, please call (610) 328-7350.

Adjunct centers. There are two fraternities at Swarthmore: Delta Upsilon, affiliated with a national organization, and Phi Omicron Psi, a local association. The fraternities are student organizations considered adjuncts to the College social program. They receive no College or student activities funds. The fraternities maintain separate lodges on campus that they rent from the College. The lodges do not contain dormitory accommodations or eating facilities. New members usually join fraternities after at least one semester at the College. In recent years, about 7 percent of male students have decided to affiliate with one of the fraternities.

RELIGIOUS ADVISERS

Religious advisers are located in the Interfaith Center in Bond Hall and currently consist of Jewish, Catholic, and Protestant professionals. The advisers and the Interfaith Center provide members of the Swarthmore community opportunities and resources, in an atmosphere free from the dynamics of persuasion, in which they can explore a variety of spiritual, ethical, and moral meanings; pursue religious and cultural identities; and engage in interfaith education and dialogue. The center comprises offices, a large common worship room, and a private meditation room.

Student groups of many faiths also exist for the purpose of studying religious texts, participating in community service projects, and exploring common concerns of religious faith, spirituality, and culture.

Various services are available on campus, and area religious communities welcome Swarthmore students.

HEALTH

Worth Health Center

The Worth Health Center, a gift of the Worth family in memory of William Penn Worth and Caroline Hallowell, houses offices of the nurses, consulting physicians, nutritionist, HIV test counselor, outpatient treatment facilities, offices of Psychological Services staff, and rooms for students who require inpatient care. Psychological Services is administered separately from the Health Service and is housed in the North Wing of Worth Health Center. Health and Psychological Services open with the arrival of the first-year class in the fall and close for the winter break and for the summer following commencement in the spring. Students must make their own arrangements for health and psychological care when the

Worth Health Center is closed.

The College contracts with the Crozer Keystone Health System for physician services. Should in-hospital treatment be indicated, one of these consultant physicians will oversee the care if the student is admitted to Crozer Chester Medical Center, a medical school-affiliated teaching hospital.

Insurance

Students may consult the medical facilities of the College when ill or injured in athletic activities or otherwise, free of charge. The College cannot assume financial responsibility for medical, surgical, or psychological expenses incurred when seeking or referred for care elsewhere. For this reason, we expect students to be responsible for these expenses and to be insured through family or other plans. Insurance plans should provide some coverage for prescription medications. For those who have not health insurance or whose insurance does not meet our specifications, we offer a functional plan at a cost of $665 for the year beginning Aug. 17, 2002, through Aug. 17, 2003. Students receiving financial aid may have a portion of the cost of the premium defrayed.

Students and family are responsible for medical expenses incurred while students are enrolled at the College. Students who have no insurance, or students with insurers who have no local office or arrangements with local HMOs, do not provide for emergency and urgent care locally, do not cover hospital admissions locally, or do not provide coverage while studying abroad should enroll in the College Plan. The College provides health insurance for students who are actively participating in intercollegiate and club sports. For further information, please consult the insurance leaflet mailed to all students at the beginning of each academic year, the Worth Health Center administrative assistant, or the trainer.

Health Services

Physicians and nurse practitioners hold hours every weekday at the College, where students may consult them without charge. Students should report any illness to the Health Center staff but are free to seek treatment at another facility if they prefer to do so. Also, the Health Service staff members are willing to coordinate care with personal health care providers.

As part of the admission process, each student must submit a medical history and health certificate prepared by a personal or school health care provider. The Health Center provides a health certificate in the pre-admission packet for your convenience. Pertinent information such as medical or psychological problems, allergies, handicaps, medications will be especially valuable to the College Health Service when assisting each student. All information is kept confidential.

Each student is allowed 10 days in-patient care without charge in the infirmary each academic year. Students suffering from communicable disease, such as chicken pox, may not remain in their residence hall room and must stay in the infirmary or go home for the duration of their illness. The Health Center each academic year dispenses up to $300 in various medications without charge, but we do charge for special medications, contraceptives, immunizations, and certain laboratory tests. Students are responsible for securing transportation to off-campus appointments, although the nurses will assist with arrangements.

The Health Center staff works closely with the Department of Physical Education and Athletics. Students who need to defer from a portion of the physical education requirement, such as the swim requirement, must provide medical documentation to the director of the Health Center, who will evaluate the request and make a recommendation for an alternative plan.

Psychological Services

Services for students include counseling and psychotherapy, after-hours emergency-on-call availability, consultation regarding the use of psychiatric drugs or other concerns, and educational talks and workshops. Psychological Services participates in training resident assistants and provides consultation to staff, faculty, and parents.

The staff of Psychological Services comprises a diverse group of psychological, social work, and psychiatric professionals. The director and staff collectively provide regular appointment times Monday through Friday. Students may be referred to outside mental health practitioners at their request or when long-term or highly specialized services are needed.

We maintain a strict policy of confidentiality except where there may be an imminent threat

of life or 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. In the event of an after-hours emergency, contact the Health Center (x8058) or Public Safety (x8333).

Information regarding readmission after withdrawal for health-related reasons may be found in the section of Student Leaves of Absence, Withdrawal, and Readmissions (pp. 82-83).

For more detailed information about our services, please check our pages on the World Wide Web at http://swarthmore.edu/Admin/-deans/psychservices.html.

STUDENT ADVISING

Academic Advising

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

The deans hold overall responsibility for the advising system. They are available to all students for advice on any academic or personal matter and for assistance with special needs, such as those arising from physical disabilities.

Academic Support

Various forms of academic support are available to help all students succeed in their course work. These include a Student Academic Mentoring program open especially to first-year students, tutors, special review selections and clinics attached to introductory courses in the natural sciences and economics, a mathematics lab, a multiday study skills workshop, a multiday reading workshop, and training sessions on time management and test taking. No fees are required for any of these services.

Particular support is available to help students develop their writing skills. 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 via e-mail and on a drop-in basis.

Career Services

The Career Services Office works with students to help them develop knowledge of themselves, of careers, and of the world of work, to advance their career planning and decision-making abilities, and to help them develop job-finding and application skills. Individual counseling and group sessions help students expand their career options through exploration of their values, skills, interests, abilities, and experiences. Programs are for students in all classes and are developmental in nature.

Career exploration and experiential education are encouraged during summer internships and jobs, during a semester or year off, and during the school year. Students taking a leave of absence from Swarthmore can participate in the College Venture Program, which assists undergraduates taking time off from school with finding worthwhile employment during their time away. Assistance is provided in helping students locate and secure appropriate jobs, internships, and volunteer opportunities and to gain the most they can from these experiences. Sophomore and junior students, in particular, are encouraged to test options by participating in the Extern Program. This program provides on-site experience in a variety of career fields by pairing students with an alumnus/a to work on a mutually planned task during one or more weeks of vacation.

Additional help is provided through career information panels and presentations, attendance at off-campus job and career fairs, field trips to work sites, workshops on topics such as resume writing and cover letter writing, interviewing skills, and job search techniques. The office cooperates with the Alumni Office, the Alumni Association, and the Parents Council to help put students in touch with a wide network of people who can be of assistance to them. The Career Services library includes many publications concerning all stages of the job search process. The office hosts on-campus recruiting by representatives from business, in-

dustry, government, nonprofit organizations, and graduate and professional schools. Access is provided to the programs and information of Experience.com, an on-line provider of recruiting and career information. On-campus and off-campus recruiting processes are managed through eRecruiting.com software. Notices of job vacancies are collected, posted, and made available to students, alumni, and the campus community. The office maintains a significant Web site to make information about many of its activities and programs available to students wherever they are around the world. Credential files are compiled for interested students and alumni to be sent to prospective employers and graduate admissions committees.

STATEMENT OF SECURITY POLICIES AND PROCEDURES

Swarthmore College's Statement of Security Policies and Procedures is written to comply with the (PA) College and University Security Information Act – 24 P.S., Sec. 2502-3©, and the federal "Jeanne Clery Disclosure of Campus Security Policy and Campus Crime Statistics Act." This annual report includes statistics for the previous three 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. To obtain a full copy of this document, or to discuss any questions or concerns, contact Owen Redgrave, director of public safety.

COCURRICULAR ACTIVITIES

Student Council

The 13-member, semiannually elected Student Council is the chief body of student government and exists to serve and represent the students of Swarthmore College. The powers and responsibilities of the Student Council are (1) the administration of the Student Activities Fund; (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 operation of just elections; (5) the execution of referendums; (6) the representation of the student body to the faculty, staff, and administration, and to outside groups, as deemed appropriate; and (7) the formulation of rules needed to exercise these powers and to fulfill these responsibilities. 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.

Major committees of the Student Council include the Appointments Committee, Budget Committee, and Social Affairs Committee. The five-member Appointments Committee selects qualified student applicants for positions on student, faculty, and administration committees. The Budget Committee, made up of 10 appointed members, a treasurer, and two assistant treasurers, allocates and administers the Student Activity Fund. The Social Affairs Committee (SAC) 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. SAC consists of 10 appointed members and two co-directors who are hired by the Concessions Committee.

Music

The Music Department administers and staffs several performing organizations. *The College Chorus*, directed by John Alston, rehearses three hours per week. *The College Chamber Choir*, a select small chorus drawn from the membership of the chorus, rehearses an additional two hours twice a week. *The College Orchestra*, directed by Daniel A. Wachs, rehearses once a week. *The Chamber Orchestra* gives one concert each semester. Its rehearsals closely precede the concert, and its members are drawn from The College Orchestra. The Orchestra (Chamber Orchestra), Chorus (Chamber Choir), and Jazz Ensemble require auditions for membership. *The Wind Ensemble*, which rehearses one night weekly and gives two major concerts each year, is under the direction of Michael Johns. *The Baroque Ensemble*, directed by Richard Stone, meets each

week and gives two concerts during the year. *Gamelan Semara Santi* performs traditional and modern compositions for Balinese Gamelan (Indonesian percussion orchestra) under the direction of Thomas Whitman. This group rehearses three hours per week and gives one concert each semester. *The Jazz Ensemble*, the department's large jazz group directed by John Alston, rehearses weekly and gives two concerts each year. More information about joining these performing groups can be found on the bulletin boards on the upper level of Lang Music Building.

Instrumentalists and singers can also participate in the chamber music coaching program coordinated by Michael Johns. Several student chamber music concerts (in which all interested students have an opportunity to perform) are given each semester. These concerts also provide an opportunity for student composers to have their works performed.

The Swarthmore College String Quartet, composed of four outstanding student string players who also serve as principal players in the College Orchestra and Chamber Orchestra, performs frequently at the College and elsewhere.

We offer academic credits in conjunction with subsidies to support private instrumental and vocal lessons for qualified students; please refer to p. 87 (Awards and Prizes and Fellowships) and p. 285 (Music Department, MUSI 048).

The Orchestra each year sponsors a *Concerto Competition*, open to all Swarthmore College students. Auditions for the competition are normally held immediately after winter vacation. The winner performs the entire concerto with the orchestra at its spring concert.

Practice and performance facilities in the Lang Music Building include 16 practice rooms (most with at least one piano), a concert and a rehearsal hall (each with its own concert grand), two organs, and one harpsichord. The Daniel Underhill Music Library has excellent collections of scores, books, and records.

The William J. Cooper Foundation presents a distinguished group of concerts each year on the campus. The Department of Music and Dance administers a separate series of public concerts.

Orchestra 2001, an acclaimed professional ensemble devoted to the performance of contemporary music, is in residence at the College. Under the direction of Professor of Music James Freeman, the group gives an annual series of four or five concerts in the Lang Concert Hall, exploring music of the present time and often including recent works by composers at the College. World renowned soloists are featured, and student musicians are often invited to perform with the ensemble.

Dance

The Swarthmore College Dance Program, directed by Stephen Lang Professor of Performing Arts Sharon Friedler, strives to foster a cooperative atmosphere in classes and performance situations.

The Swarthmore College Dancers and the Dance and Drum Ensemble regularly perform public concerts with works choreographed by students, the dance faculty, and other professional choreographers.

Each year, there are a series of formal concerts at the end of each semester as well as informal performances throughout the year, sometimes including a series of exchange concerts with other area colleges. Lecture demonstrations for public schools and for organizations within the surrounding communities are also a regular part of the yearly dance performance schedule.

In conjunction with the William J. Cooper Foundation, the Dance Program brings outstanding professional dance companies to campus for short-term residencies.

These residencies typically last from three days to two weeks and include master classes, lectures, performances, and, sometimes, the creation of a new work by a guest artist for student performers. The residencies funded for 2002-2003 will include Chuck Davis and the African American Dance Ensemble, Kariamu and Company, Traditions, and Rennie Harris Pure Movement.

The student organization, Dance Forum, also sponsors classes, workshops, and performances.

Scholarships for summer study are available to dance students through funds provided by the Friends of Music and Dance. The Halley Jo Stein Award for Dance and the Melvin B. Troy Award for Composition are also awarded annually by the program.

The Physical Education and Athletics Department sponsors a class in folk dance.

Theater

Associate Professor Allen Kuharski is chair of the Theater Department. Interested students should consult the departmental statement for theater.

The Theater Department provides a variety of cocurricular opportunities for interested students. Students interested in acting are encouraged to participate in student-directed projects in the program's directing workshops taught by Allen Kuharski or Ursula Denzer (THEA 035 and 055) and the Senior Company class (THEA 099). The program also hires qualified students every semester for a variety of jobs related to curricular production projects and other functions. The Lang Performing Arts Center Office is another potential source of theater-related student employment. For information, contact Susan Smythe.

Professional internships are strongly recommended to theater majors and minors and are available at theaters throughout the Philadelphia area and around the country. See professors Allen Kuharski or William Marshall for details.

Athletics

Swarthmore's athletic policy is based on the premise that any sports program must be justified by the contributions that it can make to the educational development of the individual student who chooses to participate. In keeping with this fundamental policy, Swarthmore's athletic program is varied, offering every student a chance to take part in a wide range of sports. Within the limits of finance, personnel, and facilities, the College feels that it is desirable to have as many students as possible competing on its intercollegiate or club teams, or in intramural sports. Many faculty members serve as advisers for several of the varsity athletic teams. They work closely with the teams, attending practices and many of the scheduled contests.

Extracurricular Activities

There is a great variety of extracurricular life more fully detailed in the *Guide to Student Life*. The more than 100 student organizations range in scope from Student Council to Amnesty International to WSRN (the student radio station). Social, athletic, political, cultural, and community groups also provide students with a wealth of opportunity and choice. The College encourages students to participate in whatever activities best fit their personal talents and inclinations.

Publications and Media

The Phoenix, the weekly College newspaper; the *Halcyon*, the college yearbook; and WSRN, the campus radio station are completely student-run organizations. In addition, there are more than 14 other student publications, including literary magazines and newsletters. The current list of publications can be found in the *Guide to Student Life*.

OUTREACH PROGRAMS

The Swarthmore College TRIO/ Upward Bound Program

TRIO/Upward Bound develops young leaders and offers academic and cultural enrichment activities to high school students in the surrounding community and primarily the city of Chester. The primary goal of this national program is to prepare urban high school students for postsecondary education.

The TRIO/Upward Bound Program at Swarthmore College began in 1964 and continues with federal support from the U.S. Department of Education. More than 1,200 TRIO programs exist on college campuses throughout the United States. TRIO/Upward Bound is one of the oldest and most active community outreach programs at Swarthmore College.

TRIO/Upward Bound offers both a six-week residential summer school in which Swarthmore students may serve as tutor/counselors and a series of activities during the academic year in which Swarthmore students serve as tutors. For more than 30 years, Swarthmore College students have volunteered time to successfully tutor and mentor hundreds of TRIO/ Upward Bound participants. The program is administered by a full-time project director, C. Kemal Nance.

THE OFFICE OF COMMUNITY SERVICE LEARNING PROGRAMS

One of the College's most tangible examples of its commitment to foster a deep sense of ethical and social concern is its support of student involvement in community service learning, advocacy, and social change. The office of Community Service Learning Programs, located in Parrish Hall Room 294, connects community-articulated needs with students, faculty, and staff interested in making a difference. It also promotes student leadership in development and implementation of community-based initiatives. The office, which is staffed by Director Patricia James, coordinates community-based service and learning initiatives of students, faculty, and staff and is a liaison between the College and community partners.

Community-based learning. The office supports the College's commitment to employ community-based learning in the curriculum. The office maintains a clearinghouse of nearly 500 internship and volunteer opportunities and supports students and faculty to identify internship and service learning opportunities congruent with students' interests, skills, and personal and academic goals. The office also supports faculty to develop and implement curricula that employ community-based learning.

The Chester Road Orientation Program (CROP) is a preorientation program for first-year and transfer students interested in multicultural leadership in service and activism. The goals of the program are to foster an early interest in civic involvement, community service, and activism; introduce participants to Swarthmore's commitment to build a welcoming multicultural College community; and forge relationships between participants and community partners that last beyond the scope of the program. CROP combines small-group experiential exercises with intensive, community-based service. Skilled staff trainers, student facilitators, and community leaders coordinate activities, discussions, and guided reflections. Activities include walking from the College to Chester, meeting with community activists, and exploring service and social action opportunities in Chester and the surrounding area.

Special projects. The office works with the college community to develop and implement service and social change projects, including the Martin Luther King Day of Service, class projects, and initiatives by student organizations.

CIVIC (Cooperative Involvement of Volunteers in Communities). The office works closely with CIVIC, a coalition of student-led organizations engaged in a wide array of service efforts in Chester and the Greater Philadelphia metropolitan area. CIVIC is coordinated by the CIVIC Council, composed of leaders from each organization, and several at-large members.

CIVIC Groups

1. *CCIP/Habitat.* Student volunteers work with Chester Community Improvement Corporation and Habitat for Humanity to build homes for and with families in Delaware County.

2 *Chester Tutorial* works one to one with middle school students in weekly tutoring and homework enrichment sessions.

3. *Chinatown Tutorial* provides academic enrichment program for children in Philadelphia's Chinatown, most of whom are recent immigrants. This is a cooperative program with Bryn Mawr, Haverford, and the University of Pennsylvania.

4. *CHOP Kids* facilitates student volunteerism at the Children's Hospital of Philadelphia.

5. *Learning for Life* pairs trained students with college staff to work on literacy, math, computer, history, and creative writing skills.

6. *Norris Square Alternative Break Project.* Students participate in Alternative Breaks in Norris Square, a multiethnic neighborhood in North Philadelphia, participating in community projects and children's programs.

7. *Positive Alternatives* in Chester works with girls at the YWCA in Chester.

8. *Science for Kids* introduces science to fourth graders at Stetser Elementary School in Chester.

9. *SHIP (Serving the Homeless in Philadelphia)* volunteers provide food, clothing, referrals, and conversation to homeless people in Philadelphia.

10. *Swarthmore-Rutledge School Program* (SRS) pairs students with children once a week to work on schoolwork or play games.

The Swarthmore Foundation

The Swarthmore Foundation provides grants twice a year to support faculty, staff, and students (including graduating seniors) to undertake community service projects. Recipients may use awards to create new projects, to purchase materials for projects in which they participate, and to cover basic living expenses while working with service or activist organizations. The foundation also administers the Landis Community Service Fellowship and The John W. Nason Community Service Fellowship.

The foundation, administered by the office, provides grants of up to $2,500 for students, faculty, and staff to conduct community service and social change projects. Grants support program and living expenses and are offered two times per year. The office supports the work of Lang Scholars and coordinates the Lang Opportunity Open Competition, which provides grants of up to $10,000 to conduct more substantive service and social change projects.

The John W. Nason Community Service Fellowship

The John W. Nason Community Service Fellowship celebrates the contribution of Swarthmore's eighth president by supporting students to conduct off-campus community service projects related to their academic programs. The Nason Fellowship was initiated by members of the Class of 1945 in anticipation of their 50th reunion.

Summer of Service: Let Your Life Speak

George Fox said to his Quaker congregation, "Let your life speak." During the summer of 2000, the College initiated a program called Summer of Service, pairing 25 students with paid community service internships and giving them the opportunity to "let their lives speak." The eventual goal of the program is to enable all students to participate in one Summer of Service before graduation. The purpose of Summer of Service is to provide opportunities to all students to participate in summer community service, regardless of their financial situations and to give them valuable hands-on experience in organizational and community settings that make a difference.

ALUMNI RELATIONS

Alumni Relations 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, an Alumni College, alumni gatherings all over the country, and alumni travel. The Alumni Office hires students as interns and to help at alumni events on campus.

The Alumni Office works closely with Career Services to facilitate networking between students and alumni and among alumni, to take advantage of the invaluable experience represented among the alumni. The Alumni Office also helps officers of the senior class and alumni groups plan special events.

The Alumni Office gives staff support to the Alumni Association, which was founded in 1882, and to the Alumni Council, the governing body of the Alumni Association. The Alumni Office also gives staff support to regional alumni and parent groups, called Connections, in Austin, Texas; Boston; Charlottesville, Va.; Chicago; Los Angeles; Metro DC/Baltimore; Metro NYC; North Carolina; Paris, France; Philadelphia; Pittsburgh; San Francisco; and Seattle.

There are 18,813 alumni: 9,664 men, 9,085 women, and 1,227 married to each other, giving substance to the traditional appellation for the College of the "Quaker Matchbox." The College defines an alumnus/a as anyone who has completed one semester.

COLLEGE PUBLICATIONS

The Publications Office creates a variety of printed communications for the College community. The quarterly *Swarthmore College Bulletin* is a magazine sent free of charge to all alumni, parents, friends, and members of the senior class. Other publications produced by the office include an annual engagement calendar, a report of donations to the College, a parents newsletter, a faculty-staff newsletter, and this catalog. Members of the publications staff and a student intern provide editorial, photographic, graphic design, and print production services to other offices on campus.

NEWS AND INFORMATION

The Office of News and Information works with the faculty, students, and staff to communicate information about Swarthmore to the public, primarily through media relations. The office publicizes campus events, programs, and research and works to position faculty members as expert news sources. The office also responds to information requests from the media, initiates coverage of Swarthmore in the media, and leads the development and maintenance of the College Web site. The News and Information Office prepares two publications. *On Campus*, a monthly schedule of campus activities that are open to the public, is distributed on request to more than 2,000 households in the Philadelphia area. *The Weekly News*, a newsletter of events and announcements, is distributed to faculty, staff, and students. The office lends support for special events and projects and provides public relations counsel for the College.

IV

Educational Program
Faculty Regulations
Degree Requirements
Awards and Prizes
Fellowships

Educational Program

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 resident study are normally required for a bachelor's degree (see p. 85), but variation in this term, particularly as a result of Advanced Placement (AP) credit, is possible (see p. 27).

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 to provide vocational instruction, even though it offers the best foundation for one's future vocation. Its purpose 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 each semester, chosen by the student in consultation with his or her faculty adviser.

All students must fulfill the requirements for the major, and before the end of the senior year, students are required to pass a comprehensive examination or its equivalent, given by the major department.

For honors candidates, courses and seminars taken as preparation for external evaluation occupy approximately one-half of the student's work during the last two 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.

In spring 2000, the faculty voted to make minors available to all students, whether honors or not and to place a limit on the number of majors and minors a student can pursue. Students in the Class of '04 and thereafter will be governed by the rules of the new program of major(s) and minor(s). Students in the Class of '03 may choose to follow the old program or the new program. For details of the old and new programs, see "Majors, Minors, and Concentrations."

The program for engineering students follows a similar basic plan, with certain variations explained on p. 160. Courses outside the technical fields are distributed over all four years.

The freshmen and sophomore course advisers are members of the faculty appointed by the dean. For juniors and seniors, the advisers are the chairs of their major departments or their representatives.

PROGRAM FOR FRESHMEN AND SOPHOMORES

The major goals of the first two 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. The College distribution requirements are designed to aid students in achieving these goals.

To meet the distribution requirements, a student must:

1. Complete at least 20 credits outside the major department before graduation.

2. Take at least 3 credits in each of the three divisions of the College (listed later), the third credit of which can be AP credit or credit awarded for work done elsewhere.

3. Take at least 2 credits of the 3 credits in each division that are in different departmental subjects and are also designated primary distribution courses. This will make a total of six primary distribution courses, each in a different

department or program, and spanning the three divisions equally.

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

Humanities: Art, Classics (literature), English Literature, Modern Languages and Literatures, Music and Dance, Philosophy, Religion.

Natural Sciences and Engineering: Biology, Chemistry, Computer Science, Engineering, Mathematics and Statistics, Physics and Astronomy.

Social Sciences: Classics (ancient history), Economics, Education, History, Linguistics, Political Science, Psychology, Sociology and Anthropology.

A few courses do not satisfy the divisional distribution requirement. These are identified as such in the catalog or the official schedule of courses.

Primary distribution courses place particular emphasis on the mode of inquiry in a particular discipline. In teaching students to be self-conscious about how knowledge is generated, these courses seek to develop an appreciation of both the power and the limits of each discipline within a broader system of knowledge. In recognition of the importance of writing as an integral part of the learning process in disciplines across the curriculum, primary distribution courses also provide considerable practice in expressing analytic and synthetic thought in writing. Primary distribution courses are intended to be appropriate both for those students who continue in a field and for those who do not. To promote discussion, they are restricted to 25 students or have accompanying small laboratories or discussion sections.

Courses that count for primary distribution are designated in the departmental listings. The requirement of six primary distribution courses must be satisfied by courses taken at Swarthmore and, with the exception of literature courses taught in a language other than English, will normally be completed before the student enters the junior year.

Any course credit in a division (with the exception of ENGL 001B and music courses numbered 040-051) may be chosen as the third distribution course in that division, including AP credit or credit awarded for work done elsewhere.

Courses that are cross-listed between two departments in different divisions may (with the permission of the instructors, departments, and divisions involved) fulfill the 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 (i.e., a long paper in one of the departmental disciplines). The distributional status of such courses is normally indicated in the catalog description for each course.

Students who have been granted credit and AP in two departments in the same division for work done prior to matriculation at Swarthmore will be exempted from one primary distribution requirement in that division on the condition that they take an additional course in one of those departments. They will be exempted from both primary distribution requirements in that division on the condition that they take an additional course in each of those departments. Students who enter Swarthmore as transfer students with 8 credits of college work will be exempted from one primary distribution requirement in each division. Students who enter Swarthmore with at most four semesters remaining to complete their degree will be exempted from the primary distribution component of the distribution requirement.

It is most desirable that students include in their programs some work in a foreign language, beyond the basic language requirement (see p. 85). A student who intends to major in one of the natural sciences, mathematics, or engineering should take an appropriate mathematics course in the freshman year. Students intending to major in one of the social sciences should be aware of the increasing importance of mathematical background for these subjects.

In the freshman and sophomore years, all students not excused for medical reasons are required to complete a four-quarter (two semester) program in physical education. The requirements are stated in full on p. 84.

Early in the sophomore year, the student should identify two or three subjects as possible majors, paying particular attention to depart-

mental requirements and recommendations. In the spring of the sophomore year, each student will, with the guidance of his or her adviser, prepare a reasoned plan of study for the last two years. This plan will be submitted to the chair of the student's proposed major as a part of the application for a major. Acceptance will be based on the student's record and an estimate of his or her capacities in the designated major. Students who fail to secure approval of a major may be required to withdraw from the College.

Although faculty advisers assist students in preparing their academic programs, students are individually responsible for planning and adhering to programs and for the completion of graduation requirements. Faculty advisers, department chairs, other faculty members, the deans, and the registrar are available for information and advice.

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, the focus shifts from scope to depth. Students become involved for two years with a discrete field of inquiry and demonstrate their mastery of that field through the completion of courses within the major and courses taken outside the major that serve to expand and deepen the student's perspective on the major.

All students are required to include sufficient work in a single department or program (designated as a "major") to make an equivalent of at least eight courses before graduation.

To complete a departmental major, a student must be accepted as a major and, in addition to the standard eight courses and comprehensive requirement in the major department, must fulfill other specific departmental requirements. The 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. The completion of two majors is allowed, depending upon the permission of both departments of the proposed double major for the student. Triple majoring is not allowed. A student must accumulate 20 course credits outside his or her major, but there is no other limit on the number of courses that a student may take in his or her major.

With departmental permission(s), it is possible for a student to plan an individualized special major that includes closely related work in one or more departments. Some areas, such as biochemistry, film and media studies, and psychobiology, in which 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 integral 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 will not be waived. Students with special majors must complete the major comprehensive requirement, which may consist of a thesis or other written research project(s) 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, which, in such programs, collaborate in advising and in the comprehensive examination. Students are not allowed to pursue more than one individualized special 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.

MAJORS, MINORS, AND CONCENTRATIONS

In May 2000, the faculty voted to make minors outside of the Honors Program available to students and added certain restrictions as to the number of majors and minors that a student could pursue. Most (but not all) departments and programs have developed such minors to offer students.

The timing and implementation of the new program in course minors was left to the Curriculum Committee. The committee has decided that students in the Class of '04 and thereafter will operate under the rules of the new program, which offers majors and minors (including interdisciplinary minors) but which limits the number of majors and minors a student may pursue. Students in the Class of '03 will be able to choose *either* the old program *or* the new program *but not some mixture of the two*. The old and new program rules are outlined briefly below. All majors, minors, and concentrations, whether under the old program or the new, must be approved by the departments or programs.

Old Program: Major(s) and Concentration(s)

1. Students are required to have one major. This is the only requirement. A second major, concentrations, and honors are optional.

2. Students may have up to two majors.

3. Students may have one minor, available through the Honors Program only.

4. Departmental or interdisciplinary minors in course, outside honors, are not available.

5. Students may have as many approved concentrations as they can fit into their schedules, though the practical limit is typically one or two.

New Program: Major(s) and Minor(s)

1. Students are required to have one major. This is the only requirement. A second major, minors, and honors are optional.

2. Students may have up to two majors; a student with two majors may not have a minor.

a. *Exception.* A student who chooses an honors major plus minor may have a second major outside of honors if that second major is the same subject as the honors minor. This is the only circumstance in which a student may major and minor in the same subject.

3. Students may have one or two minors, if they have only one major.

a. A minor may be completed in course or as part of an Honors Program.

b. Most departments and programs offer course minors. Those departments or programs that do not offer course minors under the new program are Comparative Literature, Economics, Political Science, Sociology and Anthropology, and Studio Art. (These departments or programs will continue to offer honors minors.)

c. "Concentrations" under the old program are now considered to be interdisciplinary minors (though the rubric and requirements may have changed).

d. A student who chooses an honors major plus minor may have an additional course minor outside the Honors Program.

4. Minors will include at least 5 credits, 4 of which may not overlap with the student's major or other minor. The overlap rule applies to any two entities taken at one time but not collectively to three entities taken together (it is a pair-wise, not a global overlap rule). This means that a student who has a major in medieval studies, for example, and minors in English and women's studies, must meet the overlap rule in each possible pairing but not in the three taken together. So a course might overlap between medieval studies and English and a different course might overlap between medieval studies and women's studies. The exceptions to the overlap rule are as follows:

Exceptions

The overlap constraint is not applicable to courses that departmental *majors or minors* must *take in other departments. For example, mathematics courses required for an engineering major are not automatically excluded from a minor defined by the Mathematics and Statistics Department.*

For an honors major who is also a double major, the overlap constraint does not apply to the relationship between the honors minor and the second major because these will always be in the same field (see 2a above). Thus, an English honors major who is a history honors minor and also a history course major as part of a double major is not violating the constraint.

HONORS PROGRAM

The Honors Program, initiated in 1922 by President Frank Aydelotte and modified most recently in 1994, is a distinctive part of Swarthmore's educational life.

The Honors Program has as its main ingredients student independence and responsibility in shaping the educational experience; collegial relationships between students and faculty; peer learning; opportunity for reflection on, and integration of, specific preparations; and evaluation by external examiners. Honors work may be carried out in the full range of curricular options, including studio and performing arts, study abroad, and community-based learning.

Students and their professors work in collegial fashion as honors candidates prepare for evaluation by external examiners from other academic institutions and the professional world. Although Swarthmore faculty grade most of the specific preparations, the awarding of honorifics on a student's diploma is solely based 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. Students offering three preparations in a major or four preparations in a special or interdisciplinary major will be exempted from comprehensive exams in those majors. A student who chooses an honors major plus minor may have a second major outside of honors if that second major is the same as the honors minor.

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.

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 exams 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 senior honors study are available in each department office.

Students will normally include their intention to prepare for honors in their "Plan of Study for the Last Two 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 provided for this purpose by 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 *Student Handbook of Policies and Procedures for the Honors Program*, which is available in the Registrar's Office.

At the end of the senior year, the decision of the honors degree to be awarded the candi-

dates is entirely in the hands of the visiting examiners. Upon their recommendation, successful candidates are awarded the bachelor's degree with honors, with high honors, or with highest honors.

EXCEPTIONS TO THE FOUR-YEAR PROGRAM

Although the normal period of uninterrupted work toward the bachelor of arts and bachelor of science degrees is four years, graduation in three years is freely permitted when a student can take advantage of AP 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 three years; and (4) signify this intention when she/he applies for a major by writing a sophomore paper during the spring of the first year.

When circumstances warrant, a student may lengthen the continuous route to graduation to five 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, although not done for academic credit. Such five-year programs are possible in Music and Studio Arts for students who are taking instruction off campus or who wish to pursue studio or instrumental work without full credit but with instruction and critical supervision. However, such programs are possible only on application to, and selection by, the department concerned, which will look for exceptional accomplishment or promise. In all cases where it is proposed to reduce academic credit and lengthen the period before graduation, the College looks particularly to personal circumstances and to careful advising and necessarily charges the regular annual tuition (see the provisions for overloads, p. 29). 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 opportunities for those taking a leave is available through the College Venture Program in Career Services.

NORMAL COURSE LOAD

The academic year at Swarthmore is 32 weeks long, during which time students are expected to complete six to eight 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 courses or the equivalent each semester, though 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 three course credits within the normal eight semester enrollment. Programs of more than 5 credits or fewer than 4 credits require special permission (see p. 29 on tuition and pp. 81 on registration).

The definitions of upper-class levels are as follows: students become sophomores when they have earned 6 to 8 semester course credits toward their degree. Students become juniors when they have earned 14 to 16 credits. Students become seniors when they have earned 22 to 24 credits. Some offices on campus, such as the Housing Office, may have additional requirements in their definitions of the student classes.

FORMATS OF INSTRUCTION

Although classes and seminars are the normal curricular formats at Swarthmore, faculty regulations encourage other modes as well. These include various forms of individual study, student-run courses, and a limited amount of "practical" or off-campus work.

The principal forms of individual work are attachments to courses, directed reading, and tutorials. The faculty regulation on attachments provides that a student may attach to an

existing course, with permission of the instructor, a project of additional reading, research, and writing. If this attachment is taken concurrently with the course, it is normally done for 0.5 credit. If it is taken in a later semester (preferably the semester immediately following), it may be done for either half or full credit. This kind of work can be done on either a small-group or individual basis. It is not possible in all courses, but it is in most, including some introductory courses. For first-year students and sophomores, it is a way of developing capacities for independent work, and for honors candidates, it is an alternative to seminars as a preparation for papers. Students who decide before the middle of the semester to do a half-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.

Directed Reading and Independent Study

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

Student-Run Courses

The faculty regulation on student-run courses permits a group of students to propose a topic to an instructor for 0.5 or 1 credit and to run their own course with a reading list approved by the instructor and a final examination or equivalent administered by him or her, but normally with no further involvement of faculty. In organizing such a course, students obtain provisional approval and agreement to serve as course supervisor from a faculty member by Dec. 1 (for the spring semester) or May 1 (for the fall semester) on the basis of an initial memorandum emphasizing the principal subject matter to be studied, the questions to be asked about it, the methods of investigation, and provision of a preliminary bibliography. The course is then registered by its organizers with the provost, who has administrative supervision of such work and who may waive the foregoing deadlines to recognize problems in the organization of such courses. The course supervisor consults his or her department and, in the case of an interdepartmental course, any other department concerned, whose representatives together with the provost will decide whether to approve the course. The supervisor also reviews the course outline and bibliography and qualifications and general eligibility of students proposing to participate in the course. After a student-run course has been found acceptable by the appropriate department (or departments) and the provost, the course supervisor's final approval is due 10 days before the term begins, following which a revised reading list and class list are given to the librarian, and the course title and class list are filed with the registrar. At the end of the course, the supervisor evaluates and grades the students' work in the usual way or arranges for an outside examiner to do so.

Student-run courses may vary in format and content. In particular, they may be provisionally proposed for half credit to run in the first half of the semester, and at midterm, may be either concluded or, if the participants and course supervisor find the work profitable, continued for the balance of the term for full credit. Alternatively, student-run courses may be started after the beginning of the semester (up to midsemester) for half credit and then be continued, on the same basis, into the following term. Or they may be taken for half credit over a full term. The role of the course supervisor may exceed that in planning and evaluation outlined earlier 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.

Finally, as to applied or practical work, the College may under faculty regulations grant up to 1 course credit for practical work which may be done off campus when it can be shown to lend itself to intellectual analysis and is likely to contribute to a student's progress in regular course work. The work is subject to four conditions: (1) agreement of an instructor to supervise the project; (2) sponsorship by the instructor's department, and in the case of an interdisciplinary project, any other department concerned, whose representatives together with the provost will decide whether to grant permission for the applied or practical work before that work is undertaken; (3) a basis for the project in some prior course work; and (4) normally, the examination of pertinent literature and production of a written report as parts of the project. This option is intended to apply to work in which direct experience of the off-campus world or responsible applications of academic learning or imaginative aspects of the practice of an art are the primary elements. Because such work is likely to bear a loose relation to organized instruction and the regular curriculum, the College limits academic credit for it while recognizing its special importance for some students' programs.

INTERDISCIPLINARY WORK

The requirements of the major typically leave room for significant flexibility in students' programs, both within and outside the major. This may be used to pursue a variety of interests and to emphasize intellectual diversity. It may also be used for the practical integration of individual programs around interests or principles supplementing the major. The College offers interdepartmental majors in Asian studies, medieval studies, and comparative literature, and formal interdisciplinary programs (termed "concentrations" under the old program and "interdisciplinary minors" under the new program) in black studies, cognitive science, environmental studies, film and media studies, Francophone studies, German studies, interpretation theory, Latin American studies (interdisciplinary minor only under the new program), peace and conflict studies, public policy, and women's studies. 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, in engineering and social sciences, and in chemical physics). Students are encouraged to seek the advice of faculty members on such possibilities with respect to their particular interests.

HEALTH SCIENCES ADVISORY PROGRAM

The function of the Health Sciences Advisory Program is twofold: to advise students interested in a career in the health professions, and to prepare letters of recommendation for professional schools to which students apply. The letters are based on faculty evaluations requested by the student, the student's academic record, and nonacademic activities.

Students intending to enter a career in the health professions, especially those applying to medical, dental, or veterinary schools, should plan their academic programs carefully to meet the professional schools' requirements as well as the general College requirements. The following courses fulfill the basic requirements of most medical schools: BIOL 001, 002; CHEM 010, 022, 032, 038; PHYS 003, 004; MATH 005 and one additional math course; and English, two semester courses. Dental and veterinary schools have more variable requirements, in addition to the biology, chemistry, and physics listed earlier. Students interested in these fields should meet with the health sciences adviser to plan their programs. Specific requirements for each medical, dental, and veterinary school, along with much other useful information, are given in the following publications, which are available in the Health Sciences Office: *Medical School Admission Requirements*, *Admission Requirements of U.S. and Canadian 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 freshman year.

The health sciences adviser meets periodically with students interested in health careers and is available to assist students in planning their programs in cooperation with students' own academic advisers. The Health Sciences Office publishes *Guide to Premedical Studies at Swarthmore College* and *Frequently Asked Preveterinary Questions* to help new students plan their academic program and understand what schools look for in applicants. *The Guide for Applying to Medical School for Swarthmore Undergraduates and Alumni/ae* contains detailed information about the application process.

Further information on opportunities, requirements, and procedures can be obtained from the health sciences adviser and from the Health Sciences Office's pages on the Swarthmore College Web site at http://www.swarthmore.edu/Admin/health_sciences/.

CREATIVE ARTS

Work in the creative arts is available both in the curriculum of certain departments and on an extracurricular basis. Interested students should consult the departmental statements in Art, English Literature (including Theater), and Music and Dance.

COOPERATION WITH NEIGHBORING INSTITUTIONS

With the approval of their faculty adviser 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.

STUDENT EXCHANGE PROGRAMS

To provide variety and a broadened outlook for interested students, the College has student exchange arrangements with Harvey Mudd College, Middlebury College, Mills College, Pomona College, Rice University, and Tufts University. Selection is made by a committee of the home institution from among applicants who will be sophomores or juniors at the time of the exchange.

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. Exchange arrangements do not permit transfer of participants to the institution with which the exchange takes place.

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 (see "Faculty Regulations" on pp. 80-84).

STUDY ABROAD

The College emphasizes the importance of study abroad and encourages all students to explore possibilities for doing so as integral parts of their degree programs. The Office for Foreign Study, and the foreign study adviser, will help all interested students at every stage—planning, study abroad, and return—of the process.

To be accepted for credit toward the Swarthmore degree, foreign study must meet Swarthmore academic standards. With proper planning, this condition normally is readily met. Proper planning begins with seeing the foreign study adviser as early as possible in one's college career. Credit for study abroad is awarded according to College regulations for accrediting work at other institutions, and the process must be completed within the semester following return to the College.

The Swarthmore Program in Grenoble, France, inaugurated in the fall of 1972. Students entering this program spend either one or two

semesters at the University of Grenoble, where their course of study is the equivalent of one or two semesters at Swarthmore. This program, under the auspices of the Modern Languages and Literatures Department, is open to students from any department but especially those in the humanities and social sciences. Applications from students at other institutions are accepted places are available. The number of participants is limited to 25.

Students are integrated into the academic life at the University of Grenoble through regular courses, when their language competence allows, or through special courses for foreign students. Individual programs are arranged to suit the needs and competencies of students. Preparation of external examination papers is possible in certain fields. The program is designed primarily for juniors and second-semester sophomores, but seniors can be accommodated in special cases.

A member of the Modern Languages and Literatures Department acts as resident director. The director teaches a course or a seminar, supervises the academic program and the living arrangements of the students, and advises on all educational or personal problems. A coordinator of the program at Swarthmore handles such matters as admissions to the program (in consultation with the deans), financial aid, transfer of academic credit to departments within the College and to institutions whose students participate in the program. Applications for the fall semester must be submitted by March 15 and for the spring semester by Oct. 15.

Academic Year in Madrid, Spain. This program is administered by the Romance Language Department of Hamilton College, in cooperation with faculty members of Williams and Swarthmore colleges. Students may enroll for the full academic year or for either the fall or spring semester. (Credit at Swarthmore must be obtained through the departments concerned.) The program attempts to take full advantage of the best facilities and teaching staff of the Spanish community, while adhering to the code of intellectual performance characteristic of the most demanding American institutions.

A distinguishing aspect of the program is the individual guidance provided students in non-academic areas, especially in (1) the efforts that are made to find homes well suited for student lodging, and (2) the activities that are planned to ensure ample contact with Spanish students.

The program is based in Madrid, where the cultural, educational, and geographic benefits are optimal. Classrooms and office space are located at the International Institute (Miguel Angel 8, Madrid). The institute houses a library eminently suited for study and research, and it sponsors a series of lectures, concerts, and social activities.

The program is under the general guidance of a committee comprising members of the Hamilton College Department of Romance Languages, who, in rotation with professors from Williams and Swarthmore colleges, serve also as directors-in-residence in Madrid.

Applications and further information are available from the Modern Languages and Literatures Department.

In addition to the programs in Grenoble and Madrid, there are a number of excellent foreign study programs throughout the world. The Office for Foreign Study, along with the academic departments and programs of the College, will advise students on this. Information on foreign study programs is available in the Office for Foreign Study.

Financial aid may be applied to study abroad, with the approval of the Office for Foreign Study. For students who are in good academic standing and who plan to attend academically and credit-worthy programs, approval is normally routine.

Study abroad students who wish to receive credit toward the Swarthmore degree for their completed work will pay, for the semester or year abroad, full Swarthmore tuition, room, and board to Swarthmore, and Swarthmore will pay the foreign study programs on their behalf. Complete information on payment procedures for study abroad is available in the Office for Foreign Study.

The Olga Lamkert Memorial Fund. Income from a fund established in 1979 by students of Olga Lamkert, professor of Russian at Swarthmore College from 1949 to 1956, is available to students with demonstrated financial need who wish to attend a Russian summer school program in this country or either the Leningrad or Moscow semester programs. Awards based on

merit and financial need will be made on the recommendation of the Russian section of the Modern Languages and Literatures Department.

The Eugene M. Weber Memorial Fund. Income from a fund established in 1986 to honor the memory of Eugene M. Weber, professor of German at Swarthmore College from 1973 to 1986, is available to students with demonstrated financial need who wish to attend an academic program in a German-speaking country. Awards based on merit and financial need will be made on the recommendation of the German section of the Modern Languages and Literatures Department.

STUDENT RIGHT TO KNOW

Swarthmore College's graduation rate is 92 percent (this is the percentage graduating within six years, based on the most recent cohorts, calculated according to "Student Right to Know" guidelines).

Faculty Regulations

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. Because first-year students must exercise particular care in this respect and because the faculty recognizes its greater responsibility toward them in the matter of class attendance, it is expected that first-year students, especially, will attend all classes.

When illness necessitates absence from classes, the student should report at once to the Health Center.

A student may obtain credit for a course without attending class meetings by reading the material prescribed by a syllabus and taking a final examination, under the following conditions:

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

GRADES

During the year, instructors periodically report to the Dean's and Registrar's offices upon the students' course work. Informal reports during the semester take the form of comments on unsatisfactory work. At the end of each semester, formal grades are given in each course either under the credit/no credit (CR/NC) system, or under the letter system, by which A means excellent work; B, good work; C, satisfactory work; D, passing but below the average required for graduation; and NC (no credit), uncompleted or unsatisfactory work. Letter grades may be qualified by pluses and minuses. W signifies that the student has been permitted to withdraw from the course. X designates a condition that means a student has done unsatisfactory work in the first half of a year 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.

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.

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 five 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 one year from the time the Inc. grade was incurred.

Credit/No Credit

The only grades recorded on students' records for courses taken during their first semester of the freshman 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 two weeks of the term in which the course is taken. Until the end of the ninth week of classes, students may reconsider and opt to receive a formal grade in the course. This course will count as one of the four optional CR/NC courses. Repeated courses normally may not be taken credit/no credit (see later). Courses only offered as credit/no credit do not count in the four optional elections. 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 with at least 16 credits—not counting Advanced Placement (AP) credits—the minimum equivalent letter grade for CR will be straight C. Instructors are asked to provide the student and the faculty adviser with evaluation of the student's CR/NC work. The evaluation for first-semester freshmen 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 grade record. If available, letter-grade equivalents for first-semester freshmen only may be provided to other institutions if requested by the student and absolutely required by the other institution. Students should save their copies of these evaluations for their records.

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 repetition. These courses may not be taken CR/NC;(2) To take a course at another school to serve as a repeat of a course previously taken at Swarthmore, permission must be obtained from the chair of the Swarthmore department in which the original course was taken. The department chair must give permission for work done elsewhere as part of the credit and validation process.

For repeated courses in which the student withdraws with the 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 repetition are the grade and credit that will be applied to the student's Swarthmore degree.

Grade Reports

Grades are available to students on a secure Web site. Paper grade reports are sent to students each June.

They are not routinely sent to parents or guardians, but such information may be released when students request it.

Grade Average

A C (2.0) average 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 work not taken at Swarthmore College are not included in computing this average.

REGISTRATION

All students are required to register and enroll at the time specified in official announcements and to file programs approved by their faculty advisers. Fines are imposed for late or incomplete registration or enrollment.

A regular student is expected to take the prescribed number of courses in each semester. If more than 5 or fewer than 4 credits seem desirable, the faculty adviser should be consulted and a petition filed with the registrar.

Applications to add or drop a course from registration must be delivered to the Registrar's Office within the first two weeks of the semester. Applications to withdraw from a course and receive the permanent grade notation W must be received no later than the end of the ninth week of classes or the fifth week of the course if it meets for only one-half of the

semester. After that time, late withdrawals are recorded on the student's record with the notation NC unless the student withdraws from the College.

Students do not register for audits. Successfully completed audits are recorded (with the notation R) at the end of the semester (except in cases where the student has withdrawn after the first two weeks of the semester, in which cases the appropriate withdrawal notation stands).

A deposit of $100 is required of all returning students prior to their enrollment in both the spring and fall semesters. This deposit is applied to charges for the semester and is not refundable.

EXAMINATIONS

Any student who is absent from an examination that is announced in advance shall be given an examination at another hour only by special arrangement with the instructor in charge of the course.

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 exams in consultation with the instructor.

By College policy, a student who is not in the Honors Program, but who is taking an honors written exam as a course final and has an exam conflict, should take the course final exam and postpone the honors written exam until the student's next free exam period. Conversely, a student in the Honors Program who has a conflict with a course final exam, takes the honors exam and postpones the course exam in consultation with the professor. In no case may a student take an honors exam before the honors written examination period for that exam.

STUDENT LEAVES OF ABSENCE, WITHDRAWAL, AND READMISSION

Leaves of Absence

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

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 withdrawal, in no case will a student's mental or physical condition itself be a basis for a required withdrawal. However, when health problems of a physical or psychological nature result in behavior that substantially interferes with a student's academic performance or the educational endeavors of other students or poses a significant threat to the student's safety or safety of others, the College may require the student to withdraw. The Evaluation Committee, chaired by the associate dean for academic affairs and comprising the associate dean for student life and the assistant dean/director of residential life 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 Psychological Services, or any other appropriate College official when making its decision. Decisions of the Evaluation Committee may be appealed to the dean of the College.

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.

Readmission

A student who has withdrawn from the College for any reason, voluntarily or involun-

tarily, may apply for readmission by writing to Robert Gross, dean of the College. Normally, the College will not accept applications for readmission until a full semester, in addition to the semester in which the student has withdrawn, has passed.

A student applying to the College for readmission after withdrawal is required to provide appropriate documentation of increased ability to function academically and in a residential environment and/or of a decreased hazard to health and safety of self and/or others. In the case of withdrawal for medical reasons, this documentation must include an evaluation from the student's personal health care provider. In addition, the student will generally be required to show evidence of successful social, occupational, and/or academic functioning during the time away from the College. This evidence must include the completion of any outstanding incompletes on record.

After such evidence has been provided, the materials will be forwarded to the Evaluation Committee, chaired by Associate Dean Joy Charlton and including Associate Dean Tedd Goundie and Assistant Dean Myrt Westphal. In the case of health-related withdrawals, the materials will be reviewed by the director of Worth Health Center and/or the director of 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.

Short-Term Health-related Absences

Students who are hospitalized for a period 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 follow-up care can be discussed.

The College Venture Program

The College Venture Program, supported by Swarthmore College, Bates College, Brown University, Franklin & Marshall, the College of Holy Cross, Sarah Lawrence, Syracuse University, Vassar College, and Wesleyan University, provides work experiences for students taking time away from college. Venture jobs are usually full-time, paid positions in a variety of fields including the environment, education, business, social change, government, and the arts. Students do not receive academic credit for these work experiences. The College Venture coordinator is in the Career Services Office.

SUMMER SCHOOL WORK AND OTHER WORK DONE ELSEWHERE

Students who wish to receive Swarthmore College credit for work at another school must obtain preliminary approval and after-the-fact validation by the chair of the Swarthmore department or program concerned. Preliminary approval depends on adequate information about the content and instruction of the work to be undertaken. Preliminary approval is tentative. Final validation of the work for credit depends on evaluation of the materials of the course, including syllabus transcript, written work, exams, indication of class hours, and so forth. Work in other programs, especially summer school programs, may sometimes be given less credit than work at Swarthmore, but this will depend on the nature of the program and the work involved. Validation may include an examination, written or oral, administered at Swarthmore. All decisions are made on a case-by-case basis.

An official transcript from the other school must be received by the Office of the Registrar 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 constitute Swarthmore accreditability.

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.

PHYSICAL EDUCATION

In the freshman and sophomore years, all non-veteran students not excused for medical reasons are required to complete a four-quarter (two-semester) program in physical education. All students must pass a survival swimming test or take up to one-quarter of swimming instruction. (See the departmental statement of the Department of Physical Education and Athletics.)

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.

Degree Requirements

BACHELOR OF ARTS AND BACHELOR OF SCIENCE

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

1. Completed 32 course credits or their equivalent.

2. An average grade of at least C in the Swarthmore courses counted for graduation (see p. 81). 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 the major department (see pp. 69-71).

4. Fulfilled the foreign language requirement, having either: (1) passed three years or the equivalent of a single foreign language while in grades 9 through 12 (work done prior to grade 9 cannot be counted), (2) achieved a score of 600 or better on a standard achievement test of a foreign language, (3) passed either the final term of a college-level, year-long, introductory foreign language course or a semester-long intermediate foreign language course, or (4) 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 two years. (For requirements pertaining to majors, minors, and concentrations under the new and old programs, see the section on "Majors, Minors, and Concentrations.")

6. Passed satisfactorily the comprehensive examinations in his or her major field, or met the standards set by visiting examiners for a degree with honors.

7. Completed four semesters of study at Swarthmore College. Two of these must constitute the senior year (i.e., the last two, full-time semesters of degree work), with the exception that seniors during the first semester of their senior year, with the approval of the chair(s) of their major department(s), may participate in the Swarthmore Semester/Year Abroad Program.

8. Completed the physical education requirement set forth on p. 84 and in statements of the Physical Education and Athletics Department.

9. Paid all outstanding bills and returned all equipment and library books.

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 p. 29).

Awards and Prizes

The Ivy Award is made by the faculty each year to the man of the graduating class who is outstanding in leadership, scholarship, and contributions to the College community.

The Oak Leaf Award is made by the faculty each year to the woman of the graduating class who is outstanding in leadership, scholarship, and contributions to the College community.

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.

The McCabe Engineering Award, founded by Thomas B. McCabe '15, is presented each year to the outstanding engineering student in the senior class. A committee of Engineering Department faculty chooses the recipient.

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 leadership potential and demonstrated a good record of achievement in both academic and extracurricular activities.

The Adams Prize of $200 is awarded each year by the Economics Department for the best paper submitted in quantitative economics.

The Stanley Adamson Prize in Chemistry is endowed in memory of Stanley D. Adamson '65 by his parents, June and George Adamson. It is awarded each spring to a well-rounded junior majoring in chemistry or biochemistry, who, in the opinion of the department, gives most promise of excellence and dedication in the field.

The Jonathan Leigh Altman Summer Grant is given in memory of this member of the Class of 1974 by Shing-mei P. Altman '76. It is awarded by the Art Department to a junior who has strong interest and potential in the studio arts. It provides up to $2,000 to support purposeful work in the studio arts during the summer between the junior and senior years.

American Chemical Society Award is given to the student who the Chemistry Department judges to have the best performance in chemistry and overall academic achievement.

American Institute of Chemists Award is given to the student who the Chemistry Department judges to have the second-best record in chemistry and overall academic performance.

The Solomon Asch Award recognizes the most outstanding independent work in psychology, usually a senior course or honors thesis.

Boyd Barnard Music Awards. Established in 1990, these awards subsidize the entire cost of private instrumental or vocal lessons for a limited number of advanced students. These awards, are given by the music faculty each semester to approximately six to eight students and are determined through competition. Recipients participate as leaders in performance on campus, normally as members of one of the Music and Dance Department's performing organizations, or, in the case of pianists and organists, as accompanists.

The Boyd Barnard Prize. Established by Boyd T. Barnard '17, the Barnard Prize of $1,000 is awarded by the music faculty each year to a student in the junior class in recognition of musical excellence and achievement.

The James H. Batton '72 Award, endowed in his memory by G. Isaac Stanley '73 and Ava Harris Stanley, M.D. '72, is awarded for the personal growth or career development of a minority student with financial need.

The Paul H. Beik Prize in History of $100 is awarded each May for the best thesis or extended paper on an historical subject by a history major during the previous academic year.

The Black Alumni Prize is awarded annually to honor the sophomore or junior minority student who has shown exemplary academic performance and community service.

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 $100 award each year to the student who submits the best essay on any philosophical topic.

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, and it carries a cash stipend.

Awards and Prizes

The Heinrich W. Brinkmann Mathematics Prize honors Heinrich Brinkmann, professor of mathematics from 1933-1969, and was established by his students in 1978 in honor of his 80th birthday. Awards of $100 are presented annually by the Mathematics and Statistics Department to the student or students who submit the best paper on a mathematical subject.

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.

The Anna May Courtney Award. The Anna May Courtney Award, named in honor of the late singer who performed often in Lang Concert Hall, is given each semester by the music faculty to an outstanding voice student. The award subsidizes the entire cost of private lessons for the semester.

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 essay on any topic in Asian studies.

The George P. Cuttino Scholarship was established in 1992 and is awarded by the History Department to a junior for travel and research in Europe during the summer before the senior year.

The Deans' Awards are given by the deans to the graduating seniors who have made significant and sustained contributions to the Swarthmore community.

The Rod Dowdle '82 Achievement Award in tennis is given annually to the male varsity tennis player who best exhibits qualities of perseverance and strong personal effort to achieve a meaningful personal or team goal.

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.

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 field research awards are given annually by the Biology Department to Swarthmore students showing great promise in biological field research.

The Anne and Alexander Faber International Travel Fund, 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.

Fetter String Quartet Awards. The Elizabeth Pollard Fetter String Quartet Awards, endowed by Frank W. Fetter '20, Robert Fetter '53, Thomas Fetter '56, and Ellen Fetter Gille in memory of Elizabeth P. Fetter '25, subsidize the private instrumental lessons of four top-notch student string players at the College. Interested applicants should write to the chair of the Music and Dance Department and should plan to play an audition at the College when coming for an interview. Membership in the quartet is competitive. At the beginning of any semester, other students may challenge and compete for a place in the quartet.

Friends of Music and Dance Summer Awards. Each spring, the Music and Dance Department selects recipients of Friends of Music and Dance Summer Awards on the basis of written proposals. These awards provide stipends for attendance at summer workshops in music and in dance and for other further study in these fields.

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.

Edwin B. Garrigues Music Awards. The Edwin B. Garrigues Foundation named Swarthmore as having one of the top four music programs in the Philadelphia area and established awards to subsidize the entire cost of private instrumental or vocal lessons for a limited number of gifted, often incoming first-year students. These awards, which are given each semester by the music faculty to approximately 10 to 15 students, are determined by competition on campus and by audition (either in person or by tape) for incoming first-year students. Recipients participate as leaders in performance

on campus, normally as members of one of the Music and Dance Department's performing organizations, or, in the case of pianists and organists, as accompanists.

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 of $100 or more 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.

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.

The John Russell Hayes Poetry Prizes are offered for the best original poem or for a translation from any language.

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 award provides support for student summer research in economics and is administered by the Economics Department.

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 two students who submit the best critical essays on any topic in the field of literature.

The Jesse H. Holmes Prize in Religion of $150 wasdonated by Eleanor S. Clarke '18 and named in honor of Jesse Holmes, a professor of history of religion and philosophy at Swarthmore from 1899 to 1934. It is awarded by the Religion Department to the student who submits the best essay on any topic in the field of religion.

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.

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.

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 Department of Physical Education and Athletics to the senior man who best exemplifies the society's five principles: Service, Spirit, Scholarship, Society, and Sportsmanship.

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.

The Landis Community Service Fund was established in 1991 by James Hormel and other friends of Kendall Landis 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.

The Eugene M. Lang Summer Initiative Awards are made each spring to 15 students who are selected by the provost in consultation with the appropriate division heads to support faculty-student research (five awards), independent student research (five awards), and student social service activity specifically related to research objectives and tied to the curriculum, under the supervision of faculty members (five awards).

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 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.

The Linguistics Prizes were established in 1989 by contributions from alumni interested in linguistics. Two awards of $100 each are presented annually, one for linguistic theory and one for applied linguistics, to the two students who, in the opinion of the program in linguistics, submit the best senior papers or theses in these areas.

The 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.

The Monsky Prize was established by a gift from his children in memory of Morris Monsky, who fell in love with mathematics at Boys' High and at Columbia University and maintained the passion all his life. It is awarded to a first-year student who has demonstrated outstanding promise and enthusiasm.

The Ella Frances Bunting Extemporary Speaking Fund and the Owen Moon Fund provide income for a poetry reading contest as well as funds for visiting poets and writers.

The Kathryn L. Morgan Award. The Morgan Award was established in 1991 in honor of Sara Lawrence Lightfoot Professor Emerita 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.

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.

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.

Music 048 Special Awards. Endowed by Boyd T. Barnard '17 and Ruth Cross Barnard '19, grants are given by the music faculty to students at the College who show unusual promise as instrumentalists or vocalists. All grants subsidize two-thirds of the cost of 10 lessons, as part of the Music 048 program. For more information, please refer to Credit for Performance—Individual Instruction (MUSI 048).

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.

The Mark L. Osterweil '94 Memorial Fund was established by his family and friends to assist students conducting historical research. Preference shall be given to independent or joint faculty-student research projects dealing with European history or U.S.-European relations.

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.

The Drew Pearson Prize of $100 is awarded by the dean on the recommendation of the editors of *The Phoenix* at the end of each staff term to a member of *The Phoenix* for excellence in journalism. The prize was established by the directors of The Drew Pearson Foundation in memory of Drew Pearson, Class of 1919.

The David A. Peele '50 Sportsmanship Award is made to a tennis player after submission of a

written essay. It is endowed by Marla Hamilton Peele in memory of her husband's love and advocacy of tennis and carries a cash stipend.

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.

The William Plumer Potter Public Speaking Fund was established in 1927 and provides funds for the collection of recorded literature described on page XX. It also sponsors awards for the best student short stories and is a major source of funds for campus appearances by poets and writers.

The Dinny Rath Award. The 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.

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 for a course, a seminar, or an independent project, including a thesis. The paper is nominated by a faculty member and judged by a committee of the Political Science Department to be of outstanding merit based on originality, power of analysis and written exposition, and depth of understanding of goals as well as technique.

The James H. Scheuer Summer Internship in Environmental and Population Studies Endowment. 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.

The Frank Solomon Jr. Student Art Purchase Fund permits the Art Department to purchase for the College one or two of the most outstanding student works from the year's student art exhibitions.

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.

The Karen Dvonch Steinmetz '76 Prize, endowed in her memory by many friends and family, is awarded annually to a junior who will be applying to medical school and who demonstrates a special compassion for others.

The Peter Gram Swing Prize. The Peter Gram Swing Prize of $1,000 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 '19.

The Pat Tarble Summer Research Fund. Established in 1986 through the generosity of Mrs. Newton E. Tarble, the Tarble Summer Research Fund supports undergraduate research. The fund is administered by the Provost's Office.

The Melvin B. Troy Prize in Music and Dance of $250 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.

The Albert Vollmecke Engineering Service Award. 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 Economics Department administers the fund.

The Eugene Weber Memorial Fund. The Eugene Weber Fund was established in honor of the late Eugene Weber, professor of German. The Weber Fund supports foreign study by students of German language and literature.

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.

Fellowships

The *Leedom*, *Lippincott*, and *Lockwood* fellowships (see later) are awarded annually by the faculty, and the *Mott* and *Tyson* fellowships (see later) are awarded by the Somerville Literary Society, to seniors or graduates of the College for the pursuit of advanced work. These awards are made on recommendation of the Committee on Fellowships and Prizes for a proposed program of study that has the approval of the faculty. Applications must be in the hands of the committee by March 23. The committee considers applicants for all of these fellowships for which they are eligible and makes recommendations that overall do not discriminate on the basis of sex. These fellowships follow:

The Hannah A. Leedom Fellowship founded by the bequest of Hannah A. Leedom.

The Joshua Lippincott Fellowship founded by Howard W. Lippincott, of the Class of 1875, in memory of his father.

The John Lockwood Memorial Fellowship, 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 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 who is to pursue advanced study in an institution approved by the committee.

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 graduate 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.

Other fellowships are awarded under the conditions described subsequently:

Susan P. Cobbs Prize Fellowship, established to honor the memory of Dean Susan P. Cobbs, is awarded at the discretion of the Classics Department to a student majoring in classics for study in Greece or Italy.

The General Electric Foundation Graduate Fellowship is awarded to a graduating senior for the first year of graduate work and is intended to encourage outstanding scholars to pursue an academic career. The recipient, who must be a U.S. citizen or permanent resident, will receive the amount necessary to cover tuition, fees, and subsistence allowance for study directed toward a doctorate in engineering or computer science at another institution in the United States. The precise amount of each fellowship will be based on the costs and policies of the university and department chosen for graduate work.

Phi Beta Kappa Fellowship. The Swarthmore Chapter of Phi Beta Kappa (Epsilon of Pennsylvania) awards a fellowship for graduate study to a senior who has been elected to Phi Beta Kappa and has been admitted to a program of advanced study in some branch of the liberal arts.

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: Chicago, MIT, Northwestern, University of Pennsylvania, or Stanford. The McCabe Fellowship is subject to application for renewal for a second year on the same program. Yvonne and Thomas B. McCabe Jr. lived in Cambridge, Mass. for a time, and Mr. McCabe 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.

Mellon Minority 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 who choose to enroll in doctorate programs and pursue an academic career. 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 very few of the social sciences, and selected physical sciences. A faculty selection committee invites nominations of sophomore students in February and awards the fellowships in consultation with the dean and provost.

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.

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 for as much as $3,500 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.

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.

Teachers for Tomorrow Fellowships are offered to 10 outstanding graduating seniors from member colleges of the Venture Consortium (Swarthmore College, Bates College, Brown University, Connecticut College, Hobart and William Smith colleges, the College of Holy Cross, Vassar College, and Wesleyan University). The program is designed to provide recent graduates from all academic majors with a unique opportunity to work in public education without requiring they be certified to teach. Fellows will work alongside exceptional teachers in alternative East Harlem public schools that are nationally recognized as meeting the challenge of educating children in the inner city.

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.

FACULTY FELLOWSHIPS

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

The 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 1953-1970. 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 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 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 chairmen, 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.

V

Courses of Instruction

The semester course credit is the unit of credit. One semester course credit is normally equivalent to four semester hours elsewhere. Seminars and colloquia are usually given for 2 credits. A few courses are given for 0.5 credit.

Courses are numbered as follows:

001 to 010	Introductory courses
011 to 099	Other courses (Some of these courses are not open to freshmen and sophomores.)
100 to 199	Seminars for upper-class persons and graduate students.

Yearlong courses, the numbers for which are joined by a hyphen (e.g., 001-002) must be continued for the entire year. 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. They represent offerings projected for a two-year period but are subject to change. A better guide to course offerings in any particular semester is the schedule of classes available before enrollment for that semester.

FOOTNOTE KEY

1 Absent on leave, fall 2002.
2 Absent on leave, spring 2003.
3 Absent on leave, 2002-2003.
4 Absent on administrative leave, 2002-2003.
5 Fall 2002
6 Spring 2003.
7 Affiliated faculty.
8 Ex-officio.
9 Campus coordinator, Swarthmore Program in Grenoble, fall 2002.
10 Campus coordinator, Swarthmore Program in Grenoble, spring 2003.
11 Program director, Swarthmore Program in Grenoble, fall 2002.
12 Program director, Swarthmore Program in Grenoble, spring 2003.

Art

MICHAEL W. COTHREN, Professor of Art History[3]
RANDALL L. EXON, Professor of Studio Art
CONSTANCE CAIN HUNGERFORD, Professor of Art History[4]
BRIAN A. MEUNIER, Professor of Studio Art and Chair[3]
SYDNEY L. CARPENTER, Associate Professor of Studio Art, Acting Chair, and Studio Art Coordinator
JANINE MILEAF, Assistant Professor of Art History
PATRICIA L. REILLY, Assistant Professor of Art History and Art History Coordinator
KIM E. BUTLER, Visiting Lecturer in Art History
CELIA B. REISMAN, Assistant Professor of Studio Art
ANDA DUBINSKIS, Visiting Assistant Professor of Studio Art (part time)
MARTIN DREXLER, Visiting Assistant Professor of Studio Art (part time)
JOHANNA INMAN, Visiting Assistant Professor of Studio Art (part time)
JEANNE JAFFE, Visiting Assistant Professor of Studio Art (part time)
KUKULI VELARDE, Visiting Assistant Professor of Studio Art (part time)
KOSTIS KOURELIS, Visiting Lecturer in Art History (part time)
JUNE V. CIANFRANA, Administrative Assistant

3 Absent on leave, 2002-2003.

4 Absent on administrative leave, 2002-2003.

The Art Department offers historical, critical, and practical instruction in the visual arts. Courses in art history consider questions having to do with the forms, traditions, meanings, and historical contexts of works of art and architecture. Studio arts courses explore practical, theoretical processes that arise in the creation of objects in various media.

List Gallery. The List Gallery was established to enhance the art curriculum. Each year, the gallery mounts five or six exhibitions of both emerging and nationally known artists; the months of April and May feature a series of senior thesis exhibitions by art majors, and an Alumni Weekend exhibition takes place in June. Together with the gallery director, the Exhibition Committee selects exhibitions that complement and strengthen the studio arts and art history curriculum. Exhibiting artists come to campus as visiting critics and lecturers, giving students access to a broad range of media and interpretation. A selection of works from Swarthmore's permanent collection can be viewed in the inner room of the List Gallery. Occasionally, the gallery presents historical exhibitions that offer art history students opportunities for direct observation and analysis.

Both contemporary and historical exhibitions demonstrate excellence in the visual arts and engage the college community in an ongoing dialogue. Because artists raise important questions about history, society, and identity, major exhibitions offer opportunities for interdisciplinary study and are often co-sponsored by other departments. Located in the Lang Performing Arts Center, the List Gallery's 1,200-square-foot facility was made possible, in part, through generous gifts by Vera G. List and by Eugene and Theresa Lang. The Phillip Bruno Fine Art Fund supports work with the permanent collection. The Ann Trimble Warren Exhibition Fund and the List Gallery Fund support List Gallery exhibitions.

Donald Jay Gordon Visiting Artist; Heilman Artist. Each year, the Art Department invites distinguished artists to the College as the Marjorie Heilman Visiting Lecturer or the Donald Jay Gordon Visiting Artist. The work of the invited artist is exhibited in the List Gallery, and while on campus, she or he gives a public lecture, critiques work in the studios, and meets with both majors and nonmajors.

Lee Frank Lecture: See p. 18.

Benjamin West Lecture: See p. 20.

Jonathan Leigh Altman Scholarship: See p. 33.

Jonathan Leigh Altman Summer Grant: See p. 87.

Frank Solomon Jr. Student Art Prize: See p. 91.

REQUIREMENTS AND RECOMMENDATIONS

Prerequisites

Most art history courses are offered without prerequisites, though students are strongly encouraged to begin with ARTH 001. STUA 001 is the prerequisite for all studio arts courses, even for seniors. It may be waived only by presenting a portfolio for evaluation. Students are advised that graduate work in art history requires a reading knowledge of at least German and French. The Art Department approves a credit for Advanced Placement, grade 5 in Art History and Studio Arts (with submission of a portfolio).

Study Abroad

The Art Department strongly encourages those with an interest in art to consider incorporating foreign study—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. To aid students in their attempt to gain Swarthmore credit for study abroad, the Art Department has established the following guidelines. (1) No request for transfer credit in art history will be considered unless a student has already taken an art history course at Swarthmore before taking a course abroad. (2) 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 attempt to arrange with a Swarthmore professor, before leaving the campus, to write, if necessary, a supplementary research paper as a part of the course. Such papers will be evaluated by the Art Department as part of the process of determining transfer credit. (3) Students interested in Studio Arts, Design, and Architecture are particularly encouraged to consider the Pitzer College in Parma, Italy, which offers courses at the Istituto dell'Arte Paolo Toschi. A semester of Italian preceding going abroad is well advised.

Course Major in Art History

Art History majors are required to take ARTH 001 or ARTH 002, 1 credit in Asian Art, ARTH 098, 5 other credits in art history, and one course in studio arts. The 5 elective credits must include (1) 1 credit in Western art before 1700, (2) 1 credit in Western art after 1700, and (3) one seminar (2 credits). The comprehensive consists of a special essay, completed in conjunction with ARTH 098 in spring of the senior year.

Course Minor in Art History

The course minor in Art History will consist of 5 credits in Art History, including ARTH 001: Critical Study in the Visual Arts. Four of the 5 credits must be taken at Swarthmore.

Course Major in Art

The course major in art consists of four courses in Art History (including ARTH 001 and ARTH 002) and seven courses in Studio Arts (including courses in drawing, another two-dimensional medium, and a three-dimensional medium). The comprehensive consists of a senior exhibition and written artist statement prepared during the fall and spring of the senior year. Studio Arts facilities are closed during summer and normally during October, winter, and spring holidays.

Course Minor in Art

Not offered.

Majors and Minors in the External Examination Program

Students may formulate Honors programs as either majors or minors, in either art history or art. For details, consult guidelines available in the department office.

ART HISTORY

ARTH 001. Critical Study in the Visual Arts

This introduction to the study of the visual arts will investigate formal analysis, iconography, and methods of historical interpretation, using

examples of art and architecture drawn from a variety of cultures and historical periods. The course will emphasize learning to see vividly and systematically and to write accurately about what is seen. Topics for discussion will include technique and production, visual narrative and didacticism, patronage and biography, and approaches such as psychoanalysis, Marxism, and feminism.

Primary distribution course. 1 credit.

Each semester. Staff.

ARTH 002. Western Art

An introduction to the art of Western Europe and the United States from prehistoric cave painting to the art of the 20th 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 you with a chronology of the major works of this period and to provide you with the vocabulary and methodologies necessary to closely analyze these works of art in light of the material, historical, religious, social, and cultural circumstances in which they were produced. To that end we will consider a full range of issues related to the production and reception of these works, including the use and status of materials; the representation of social relations, gender, religion and politics; the context in which these works were used and/or displayed; and the critical response these works elicited.

No prerequisite.

1 credit.

Spring semesters. Reilly.

ARTH 003. Asian Art

A selective introduction to the forms, functions, and contexts of Asian art, from prehistoric to early modern times. The course introduces a wide geographic range of Asian regional cultures (India, Southeast Asia, China, and Japan) as well as basic art historical strategies for analyzing architecture, sculpture, painting, and the decorative arts. Counts as a foundation course in Asian studies.

No prerequisite.

1 credit.

Not offered 2002-2003.

ARTH 004. Critical Study: Picasso

No prerequisite.

Primary distribution course. 1 credit.

Not offered 2002-2003.

ARTH 005. Modern Art

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

No prerequisite.

1 credit.

Fall 2002. Mileaf.

ARTH 006. What Makes an Artist "Divine"?: Leonardo, Michelangelo, and Raphael

A survey of the works of the "divine" High Renaissance masters and contemporaries Leonardo da Vinci, Michelangelo Buonarroti, and Raphael Santi. The course also entails an introduction to art historical method, grounded in critical analysis of diverse interpretive approaches (i.e., iconographical, psychoanalytical, feminist) in relation to selected works of art.

No prerequisite.

1 credit.

Fall 2002. Butler.

ARTH 008. Understanding Buildings

Buildings are cultural artifacts laden with social, political, and historical meanings that overlap the modest function of providing shelter. Similar to literature, painting, or music, architecture must be read and evaluated through its own language. The course focuses on learning the language of architecture by investigating the functional, structural, and aesthetic aspects of buildings. We will learn to understand buildings by learning how to document them and, in turn, by learning how to read those documents. Our primary evidence will come from local buildings that are available for autopsy, monuments from distant places, lost buildings recovered by archaeology, and imaginary buildings from film and literature. No prerequisites are necessary for this

course short of curiosity about the built environment and a desire to penetrate its skin.

1 credit

Fall 2002. Kourelis.

ARTH 013. The Art and Architecture of Ancient Greece and Rome

This chronological survey will begin with a glance at the art of the Aegean and conclude with a study of the art and architecture of late Imperial Rome. We will consider issues such as mythology in daily ritual; the religious, social, and political functions of sculpture; the use of architecture as propaganda; and the invention of the ideal warrior, athlete, and maiden.

No prerequisite.

1 credit.

Fall 2002. Reilly.

ARTH 014. Medieval Art and Architecture

An 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.

No prerequisite.

1 credit.

Not offered 2002-2003.

ARTH 015. Northern Renaissance Art

A survey of the painting and graphic arts of Northern Europe ca. 1350-1550. In addition to serving as an introduction to major artists such as Jan van Eyck, Albrecht Dürer, Hieronymus Bosch, and Pieter Bruegel the Elder, the course explores a range of contextualzing issues, including the critical problem of disguised symbolism and "realism," the invention of oil painting, the emergence of the print, and of landscape and portraiture as independent genres, patrons and markets, and themes of religion, death, and the occult.

No prerequisite.

1 credit.

Spring 2003. Butler.

ARTH 051. Renaissance Art in Florence and Environs

An introduction to painting, sculpture, drawings, prints, and architecture produced in Florence and environs from the late 14th to the 16th century. We will consider a full range of issues related to the production and reception of these works including the representation of individuals, the state, and religion; the context in which these works were used and/or displayed; art and anatomy; art and gender; the critical responses these works elicited; and the theories of art developed by artists and non-artists alike.

No prerequisite.

1 credit.

Not offered 2002-2003.

ARTH 017. Art and Society in 19th-Century Europe

European art of the 19th century will be considered in its political, theoretical, and social contexts. Topics to be considered include the age of revolution, the salon and the academy, the rise of an independent art market, realisms, modernism and modernity, gender, the invention of photography, urbanism, leisure, visionaries, impressionism, symbolism,and the decorative.

No prerequisite.

1 credit.

Not offered 2002-2003.

ARTH 018. Twentieth-Century Western Art: The Cube, The Drip, and the Can of Soup

This course surveys significant artistic trends in Europe and America from 1905 to the present. We consider such movements and genres as fauvism, expressionism, cubism, futurism, the Russian avant-garde, American modernism, abstract expressionism, pop art, minimalism, conceptual art, performance art, and installation in their historical and theoretical contexts. Themes that will be raised include modern/postmodern, formalism, primitivism, abstraction, representation, art and everyday life, the machine, the city, originality, mass media, appropriation, and authorship.

No prerequisite.

1 credit.

Not offered 2002-2003.

ARTH 019. Contemporary Art

This course takes a focused look at European and American art from 1945 to the present, a period during which most conventional meanings and methods of art were challenged and/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.

Prerequisite: ARTH 001, 002, or 005

1 credit.

Spring 2003. Mileaf.

ARTH 025. Arts of Africa

1 credit.

Not offered 2002-2003.

ARTH 027. African-American Art

1 credit.

Not offered 2002-2003.

ARTH 029. Film: Form and Signification

1 credit.

Not offered 2002-2003.

ARTH 031. Traditional Japan

1 credit.

Not offered 2002-2003.

ARTH 033. Special Topics in Asian Art

1 credit.

Not offered 2002-2003.

ARTH 038. Ritual and Image in the Buddhist Traditions

1 credit.

Not offered 2002-2003.

ARTH 045. Comparative Cultures in the Medieval Mediterranean

Modern history has framed the Middle Ages as the gap between Greco-Roman antiquity and the European Renaissance. This time between has unclear chronological and geographical limits as well as a contested significance in the modern narratives of European history. The history of art has construed this "time between" as the product of three culturally self-sufficient civilizations: Northern Europe, Byzantium, and Islam. All three civilizations shared the Mediterranean Sea as a locus of political control, economic exploitation and cultural interchange. The Mediterranean, as the "place between," thus offers an opportunity to explore an alternative view of medieval artistic production. We will consider evidence from art, architecture, and archaeology in Southern Europe, the Middle East and North Africa between the fourth and the 14th centuries. We will investigate the diversity of historical narratives that their interpretation has produced and assess the applicability of modern intellectual concepts (multiculturalism, imperialism, orientalism, geographic determinism, etc.) in the study of this premodern environment. The unity/fragmentation of the Mediterranean will underlie our inquiries as we challenge its historical construction into an ideologically meaningful entity.

No prerequisite.

1 credit.

Spring 2003. Kourelis.

ARTH 046. Monasticism and the Arts in the Christian Middle Ages

(Cross-listed as RELG 029)

This course will investigate the significance of Christian monastic communities as major artistic centers during the Middle Ages with an emphasis on the way the social context of production and consumption effected the works of art themselves and the way we have traditionally chosen to study them.

No prerequisite.

1 credit.

Not offered 2002-2003.

ARTH 056. Print Culture in Early Modern Europe

This course examines the role of printed images in the visual culture of early modern Europe. We will consider the ways in which prints actively shaped and reflected the larger social, religious, and political cultures of which they were part. Topics will include the technologies of printmaking, the relationship between printed images and texts, the reproductive versus original print, the markets for prints, and prints and the transmission of culture.

No prerequisite.

1 credit.

Not offered 2002-2003.

ARTH 064. Philadelphia and American Architecture

American architecture, especially in Philadelphia, with European parallels: Palladianism, historic revivals and Victorian architecture, the Anglo-American house, the skyscraper, art nouveau, art deco, the international style, Kahn and Venturi, and postmodernism. Lectures and four guided tours; papers.

No prerequisite.

1 credit.

Not offered 2002-2003.

ARTH 074. History of Photography

This course will offer a history of photography in Europe and the United States from 1839 to the present. We will consider the profound effects of the invention of photography on the visual culture of our times by focusing on such topics as pictorialism, amateurism, documentary and straight photography, technological developments, Western expansion, photojournalism, the nature of objectivity, theories of vision and reproduction, advertising, the relationship of science and art, pornography, and anthropological research.

No prerequisite.

1 credit.

Spring 2003. Mileaf.

ARTH 076. The Body in Contemporary Art

This course examines the use of the body as a subject and medium in art of the past few decades. While poking, prodding, fragmenting, and displaying the bodies of themselves and others, recent artists have called into question everything from conventional uses of the nude to the viewer's own physical experience of art. Themes to be considered include the abject, health and sickness, performance, fetishism, masquerade, identity politics, and technology. This course will require careful reading of assigned texts, active participation in regular discussions, and frequent writing assignments.

Prerequisite: ARTH 005 or permission of the instructor.

1 credit.

Not offered 2002-2003.

ARTH 077. Exhibiting the Modern

This course surveys major exhibitions of modern art in Europe and America, along with questions about modernist exhibition strategy and practice. We will consider such watershed exhibitions as the Salon des refusés (Paris), the Armory Show (New York), the First International Dada Fair (Berlin), and the 0.10 Exhibition (Moscow) as well as such venues as the Museum of Modern Art, An American Place, Julian Levy Gallery, Art of this Century, and Leo Castelli Gallery.

Prerequisite: ARTH 001, 002, or 005.

1 credit.

Spring 2004. Mileaf.

ARTH 096. Directed Reading

1 credit.

Staff.

ARTH 098. Senior Workshop: Art History

This capstone colloquium for art history majors will explore various approaches to historical interpretation of the visual arts. Attention will be given to art historiography—both theory and practice—through the critical reading of some important recent texts which propose and/or challenge novel interpretive strategies from a variety of perspectives. As a part of the course, students will write the Senior Essay, which constitutes the comprehensive requirement for the art history major.

(Students who are not art history majors but have taken ARTH 001 or 004 and 3 other credits in art history will be admitted to this course with the permission of the instructor.)

1 credit.

Spring semesters. Butler.

ARTH 180. Thesis

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

2 credits.

Staff.

SEMINARS

Unless otherwise noted, the prerequisite for all seminars is two courses in art history, including ARTH 001.

ARTH 132. Arts of the Buddhist Temple

2 credits.

Not offered 2002-2003.

ARTH 138. Islamic Painting

After a brief general introduction to Islamic art, the seminar will explore the history and evolution of the pictorial narrative tradition within Islamic culture from 691 to 1548.

2 credits.

Offered occasionally. Cothren.

ARTH 145. Gothic Art and Architecture

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; neoplatonism and the new aesthetic; "court style" and political ideology; structural technology and stylistic change; patronage and production; contextualizing liturgy and visualizing dogma.

2 credits.

Spring 2004. Cothren.

ARTH 147. Visual Narrative in Medieval Art

This seminar examines how and why tendentious stories are told in pictures during the European Middle Ages and the various ways art historians have sought to interpret their design and function. After introductory discussions on narratology, the class focuses on an intensive study of a few important and complex works of art that differ in date of production, geographic location, viewing context, artistic tradition, and medium. In past years, these have included the Bayeux Embroidery of ca. 1070, the stained-glass windows of the Parisian Sainte-Chapelle of ca. 1245, and Giotto's frescos in the Arena Chapel in Padua of 1303-1305.

2 credits.

Not offered 2002-2003.

ARTH 151. The Visual Culture of Renaissance Rome

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

2 credits.

Spring semesters. Reilly.

ARTH 164. Modern Art

Current discussions from multiple theoretical perspectives of artists such as Courbet, Manet, Degas, Gauguin, Cezanne, Picasso, and Pollock and the issue of "modernism" in 19th- and 20th-century painting.

2 credits.

Not offered 2002-2003.

ARTH 166. Avant-Gardes in Art

This seminar examines case studies in European and American avant-garde art from the 19th and 20th centuries. Major theoretical texts by Poggioli and Bürger will act as a background for discussions about the July Monarchy, the Paris Commune, the Third Reich, and the Russian Revolution as well as such artistic movements as cubism, futurism, Die Brücke, Devetsil, dada, surrealism, Russian constructivism, the Bauhaus, and abstract expressionism. By developing a working understanding of both historical and conceptual avant-gardes, we will question whether there can be an avant-garde today.

2 credits.

Fall 2003. Mileaf.

ARTH 168. Dada and Surrealism

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

tory that have been conceived to address them.

2 credits.

Fall 2002. Mileaf.

STUDIO ARTS

STUA 001. Foundation

Foundation is designed as a comprehensive introduction to the art of drawing. The course approaches drawing as a unique graphic and expressive medium rather than as a preliminary or planning process. The course begins from the viewpoint that the expressive and interpretative potential of drawing can be achieved at the beginning level when knowledge of drawing media and techniques are fused with personal vision and creativity. The course follows a sequence of studies that introduces students to basic drawing media and compositional elements through observation of natural and manufactured forms. (This course is a prerequisite for all other courses in studio art.)

1 credit.

Each semester. Staff.

STUA 002. Ceramics Sculpture

This class comprises a series of projects using a diverse range of hand building processes and themes. The areas of practice include life-modeling, slab construction and coil-built sculptural forms. Students will also learn traditional and nontraditional solutions to the ceramic surface. Group critiques and in class discussion will combine with demonstrations and slide lectures to build upon this intensive studio experience.

1 credit.

Fall 2002. Velardi.

Spring 2003. Carpenter.

STUA 003. Drawing

Work in various media directed toward a clearer perception of space, light, and form. A course for all levels of ability. Weekly outside drawing problems and a final project.

1 credit.

Spring 2003. Staff.

STUA 004. Sculpting Everyday Things

This class is a nonfigurative exploration of a large range of modern and contemporary sculptural concepts and techniques. Through individual projects, several different mediums will be explored. These will include clay modeling, plaster casting, woodworking, stone carving, and assemblage.

1 credit.

Fall 2002. Jaffe.

Spring 2003. Staff.

STUA 006. Photography

Introduction to the technical processes and visual and theoretical concepts of photography, both as a unique medium and as it relates to other forms of nonphotographic composition.

Prerequisite: STUA 001, even for seniors.

1 credit.

Each semester. Drexler.

STUA 008. Painting

Investigation into 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.

1 credit.

Each semester. Staff.

STUA 010. Life Drawing

Work in various media directed toward a clearer perception of the human form. The class is centered on drawing from the model, and within this context. The elements of gesture, line, structure, and light are isolated for the purpose of study.

1 credit.

Fall 2002. Exon.

STUA 011. Watercolor

A complete exploration of water soluble media with an emphasis on transparent, gum arabic-based watercolor. Other materials and techniques will include ink wash, gouache, silk colors, collage, hand-made papers, matting, and pen-making, using reeds and quills. When in the studio, the class will work from the figure and still life. The central motif, however, will be painting the landscape. Whenever possible, we shall work outdoors. Occasional field trips to locales other than the campus will be offered.

1 credit.

Not offered 2002-2003.

STUA 012. Figure Composition

An advanced course in painting and drawing the human form. Emphasis will be given to the methods, thematic concepts, conventions, and techniques associated with multiple figure design and composition.

Prerequisite: STUA 008 and/or STUA 010.

Not offered 2002-2003.

STUA 014. Landscape Painting

This course explores the vast array of interpretive approaches, and practical methods available to the painter interested in landscape. Each student will be introduced to analytical strategies, methods, and techniques that can be used in the field while painting directly from nature. Topics include atmospheric perspective, linear perspective, viewpoint, compositional structuring through shape and rhythmic manipulation as well as a thorough study of light through changing effects color and tonality. These topics will be introduced using demonstrations during class (both in the field and outside) and analysis of landscapes from art history. Workshops and presentations by visiting artists will also assist us throughout the semester. Weekly excursions into the landscape around the College will be scheduled (this includes the urban, suburban, and rural landscape of southeastern Pennsylvania). Assignments will be given each week outside of class to reinforce the methods introduced during the week. The primary subject for these works will be the environs of the College during the changing autumnal season. Oil paints will be the central medium of the class, and the necessary technical needs will be established. However, design and composition (both pictorial and spatial) will be emphasized throughout the semester.

1 credit

Fall 2002. Exon.

STUA 015. The Potter's Wheel

This class focuses on a series of projects for the wheel that assist in development of ideas and technique. Most projects will involve the functional container, but the option to explore the wheel for nonfunctional form will also be available. Five assigned projects will be followed by the advanced series in which the student will propose and concentrate on a series of related objects for the remainder of the semester. 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 a guest artist. For beginners and advanced students.

1 credit.

Both semesters. Carpenter.

STUA 017. The Hand-Built Container

The subject of this class is the hand-built ceramic container. Slab construction, and West African coil building traditions are just two of the processes that will be used in the development of a series of ceramic containers. Students will work within a range of thematic sources and processes to develop technically as well as aesthetically. Varied surface solutions will be explored including high, low, and pit fired. Group critiques, slide presentations, and a guest artist demonstration will enhance this studio experience.

1 credit.

Not offered 2002-2003.

STUA 019. Works on Paper

This class is an introduction to various printing processes, which can include monoprints, linoprints, wood engraving, etchings, and typesetting. Students will learn technical approaches and investigate visual solutions using a format of serial imagery. Weekly class assignments will integrate drawing and design concepts and explore the range of materials available, using paper as a support. Longer projects will rely on either book format or suites of images that explore thematic ideas developed by the student.

1 credit.

Spring 2003. Staff.

STUA 020. Advanced Studies

020A. Ceramics
020B. Drawing
020C. Painting
020D. Photography
020E. Sculpture
020F. Printmaking

These courses are designed to usher the intermediate and advanced student into a more independent, intensive study in one or more of the fields listed earlier. A discussion of formal

issues generated at previous levels will continue, with greater critical analysis brought to bear on stylistic and thematic direction. Each student is 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 schedule. In addition to class time, the student will meet with the professor for individual conferences and critiques.

Note: Although this course is for full credit, a student may petition the studio faculty for a 0.5-credit semester.

Prerequisite: Foundation and at least one previous course in the chosen medium.

1 credit.

Each semester. Staff.

STUA 025. Advanced Studies II

Continuation of STUA 020 on a more advanced level.

Prerequisite: STUA 020.

1 credit.

Each semester. Staff.

STUA 026. The Digital Darkroom

The digital darkroom is an expressive tool for the black-and-white photographer and printer. When images made on conventional film are converted to digital form via scanning, a whole new world of printing and publishing becomes available. This option is a particular boon to photographers who are adversely affected by darkroom chemicals or who do not have ready access to a darkroom. The controls offered by the digital darkroom emulate and often exceed those available in the conventional darkroom. The purpose of this class is to understand those controls and to apply them to images captured on film. After a basic tour of Photoshop tools and techniques, we explore contrast control, selective tonal control, dodging and burning, monitor calibration, using grayscale and Duotone, Tritone, and Quadtone inks, retouching and enhancement, and various special effects. Parallels are drawn to conventional darkroom techniques throughout.

Prerequisite: STUA 006: Photography or equivalent.

1 credit.

Fall 2002. Inman.

STUA 030. Senior Workshop

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

1 credit.

Fall 2002. Reisman.

STUA 035. Alternative Processes in Photography

This advanced photography course will cover a broad range of silver and nonsilver processing techniques in photography. Techniques will include toning, hand coloring, staining, various photo papers, alternative light sources, photograms, solarization, creative techniques with developer, cyanotypes, Polaroid transfer and emulsion lifts, and wearable art.

Prerequisite: STUA 006: Photography or equivalent.

1 credit.

Not offered 2002-2003.

STUA 040. Senior Exhibition

A course 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 Vera List Gallery of the Performing Arts Center. The artist statement is a discussion of the development of the work to be exhibited. The exhibition represents the comprehensive examination for the studio art major. Gallery exhibitions are reserved for studio art majors who have passed the senior workshop and fulfilled all requirements, including the writing of the senior art major statement.

1 credit.

Spring 2003. Staff.

Asian Studies

Chair: **ALAN BERKOWITZ** (Modern Languages and Literatures, Chinese)

Faculty: **Bruce Grant** (Sociology/Anthropology)[1,7]
Steven Hopkins (Religion)[1]
Haili Kong (Modern Languages and Literatures, Chinese)
Gerald Levinson (Music)
Lillian Li (History)
Jeanne Marecek (Psychology)[7]
Steven Piker (Sociology/Anthropology)[7]
Donald Swearer (Religion)[2]
Larry Westphal (Economics)
Tyrene White (Political Science)[3]
Thomas Whitman (Music)
Sujane Wu (Modern Languages and Literatures, Chinese)
Jenny Gifford (Administrative Assistant)

1 Absent on leave, fall 2002.
2 Absent on leave, spring 2003.
3 Absent on leave, 2002-2003.
7 Affiliated faculty (do not teach courses on Asia but available for independent study projects).

Asian studies is an interdisciplinary program that introduces students to the vast range of historical and contemporary human experience on the Asian continent—from South Asia, to peninsular and insular Southeast Asia and East Asia. Asian courses are offered by the Asian Studies Program and in the Art, Economics, History, Modern Languages and Literatures (Chinese and Japanese), Music and Dance, Political Science, Religion, Sociology and Anthropology, and Theater departments. Asian studies offers majors in course and honors, an honors minor, and a course minor. Majors construct individualized programs of study, with a focus on a comparative theme or on a particular country or region. Some examples of comparative themes include classical traditions in Asian literature and art, Buddhist studies, Asian nationalisms and the emergence of nation-states, or the political economy of Asian development. However, in all cases the core of the major lies in exposure to multiple regions, for cross-cultural comparisons, and multiple disciplines.

Students interested in Asian studies are urged to consult our Web site at http://www.swarthmore.edu/Humanities/asian/ for up-to-date information on courses and campus events. Students should also meet with the chair well in advance of preparing a sophomore paper to discuss how to plan an individualized program with intellectual coherence and rigor. Advance planning is especially critical for students contemplating the Honors Program and those integrating study abroad in the major.

LANGUAGE STUDY AND STUDY ABROAD

Although not required, majors are strongly encouraged to consider studying an Asian language and a period of study in Asia. Swarthmore currently offers Chinese and Japanese, but many other Asian languages may be studied at the University of Pennsylvania during the regular academic year, in summer-language programs, or abroad. Experience has shown that off-campus language courses may create scheduling difficulties. As a result, many students elect the summer or study abroad option. For languages offered at Swarthmore, courses above the first-year level count toward the major. For Asian languages not offered at Swarthmore, courses at the entry level may be approved if at least the equivalent of 1.5 credits are successfully completed in a program approved by the Asian studies faculty.

The Asian studies faculty can recommend academically rigorous programs in several Asian countries, often tailored to a student's particular interest. Study abroad is the ideal arena for intensive language study. Non-language courses taken abroad may also be applied toward the major, if credit has been granted by the College and subject to the approval of the Asian Studies Committee. However, normally *at least half of the credits toward a student's Asian Studies Program (whether major or minor) should be taken at Swarthmore.*

The Alice L. Crossley Prize in Asian Studies: See p. 88.

REQUIREMENTS AND RECOMMENDATIONS

Course Major

An Asian studies major is more demanding than a departmental major because it is each student's responsibility to make the connections between 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 as well as a demonstrated ability to do work at the B- level or above in at least two Asia-related courses in different departments.

The major in Asian studies consists of a minimum of 9 credits, with requirements and distribution as follows:

1. *Geographic breadth.* Course work must be completed concerning more than one of the regions of Asia (South, Southeast, and East Asia). This requirement 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 other than that of the principal focus in an individual student's program.
2. *Disciplinary breadth.* Classes must be taken in at least three different departments.
3. *Foundations.* At least 1 credit must be taken from the following range of courses:

Comparative Studies

ARTH 003 (Asian Art)

MUSI 008 (Music of Asia)

RELG 008 (Patterns of Asian Religions)

RELG 009 (The Buddhist Tradition)

Focus on a Single Country or Region

CHIN 016/LITR 016CH (Substance, Shadow, and Spirit in Chinese Literature and Culture)

CHIN 018/LITR 018CH (Classical Tradition in Chinese Literature)

HIST 009A (Chinese Civilization)

HIST 010 (Traditional Japan)

RELG 012 and 013 (History, Religion, and Culture of India I and II)

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.* Asian-language study is not required but is strongly recommended. Up to 4 credits in language study may be applied toward the major. For languages offered at Swarthmore, courses above the first-year level may count toward the major. Courses above the second-year level will count as intermediate/advanced. For Asian languages not offered at Swarthmore, courses at the entry level may count toward the major if at least the equivalent of 1.5 credits is successfully completed in an approved program. Courses above the first-year level count as intermediate/advanced.
6. *Culminating exercise.* Students in the Asian studies course major have a choice of culminating exercises.
   a. *Thesis option.* A 1- (or 2-) credit thesis, followed by an oral examination. The thesis must be interdisciplinary, in that two members of the Asian studies faculty from different departments participate in the direction of its research and the examination of its results. Students must enroll for the thesis (ASIA 096) no later than fall semester of the senior year. For more information about the thesis, see the department Web site (http://www.swarthmore.edu/Humanities/asian/) or sophomore paper guidelines.
   b. *Honors seminar option.* With the prior approval of the Asian Studies Committee, students may fulfill the requirement for a culminating exercise by taking a 2-credit honors seminar in an Asian studies topic in either their junior or senior year. (*Note:* A two-course combination for external examination or a course-plus-

directed-reading-attachment will not satisfy this requirement.) The 2-credit honors seminar will count as 1 of 9 credits toward the Asian studies course major, but 8 other credits are still necessary.

7. *Grade-point average requirement*. A student must have at least a C average across all courses applied to the course major.

Course Minor

Students will be admitted to the minor after having successfully completed at least two Asia-related courses with grades of B- or better from different departments. Students may apply for the minor as early as the sophomore paper and as late as the first week of the senior year.

The Asian studies interdisciplinary minor in course consists of five courses, distributed as follows:

1. *Geographic breadth*. Course work must be completed concerning more than one of the regions of Asia (the South, the Southeast, and East 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 other than that of the principal focus in an individual student's program.
2. *Disciplinary breadth*. Courses must be taken in at least two departments outside of the disciplinary major. Only one course may overlap the Asian studies minor and a disciplinary major.
3. *Foundations*. Students are encouraged, but not required, to include at least one course from the list of "foundation courses" (see earlier).
4. *Intermediate and advanced work*. At least 2 credits of work must be completed at the intermediate or advanced level. Note that there is no capstone seminar or thesis for the interdisciplinary minor in course.
5. *Asian language study*. Asian language study is not required, but courses in Asian languages may count toward the course minor. For languages offered at Swarthmore, courses above the first-year level may count toward the minor. Courses above the second-year level count as intermediate/advanced. 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 successfully completed in an approved program. Courses above the first-year level count as intermediate/advanced.
6. *Grade-point average requirement*. A student must have at least a C average across the five courses applied to the minor.

Honors Major

To be admitted to the honors major, students should have completed at least two Asia-related courses in different departments at the B+ level or above.

The honors major in Asian studies consists of a minimum of 10 credits (including four honors preparations).

1. *Geographic and disciplinary breadth requirements*. These are the same as those for the course major (see earlier).
2. *Foundations*. Normally, at least one course should come from the list of "foundation courses" (see earlier).
3. *Asian studies as an interdisciplinary major*. All four fields presented for external examination must be Asian studies subjects. The student has the option of omitting a minor field designation. Alternatively, one of the four fields can be designated as a minor, in which case the student must fulfill all the requirements of that department or program for an honors minor.
4. *Honors preparations representing at least two different disciplines*. Careful advance planning is essential to make certain that the prerequisites and requirements established by separate departments and/or programs have been met. Honors preparations in Asian studies may consist of 2-credit seminars, designated pairs of courses, 1-credit attachments to designated 1-credit courses, a 1-credit thesis in conjunction with a 1-credit course, or a 2-credit thesis. We especially encourage students to consider a course plus a 1-credit thesis combination, when the combination would allow for an interdisciplinary perspective on a particular issue or theme. With the advance approval of the Asian Studies Committee, course work or research done in study abroad may be incorporated into the preparation.
5. *Senior honors study (SHS) for majors*. SHS, usually done in the spring semester of the

senior year, will normally follow the criteria established for minors by the department in which the honors preparation is done. SHS for interdisciplinary preparations will be determined in consultation with the relevant professors and the Asian Studies Program chair. No course credit will be given for SHS for majors. A student may choose to have one of the four preparations serve as a minor in a discipline. If so, the SHS for that preparation will be governed by the host department's practice. SHS materials may be examined in regular written and some oral exams.

6. *Grade-point average requirement*. A student must have 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 Asia-related courses in different departments at a level 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. Students should specify which track they intend to pursue when writing sophomore papers.
   a. *Comparative Asian cultures*. The selection of courses and honors preparation should allow a comparative perspective on the traditional or modern cultures of Asia. Individual programs should be worked out in close consultation with the Asian studies chair. (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. Up to 2 credits of language study may be counted.
2. *Disciplinary breadth*. Courses must be taken in at least two departments outside of the disciplinary honors major. Only one course may overlap with the honors minor and the honors major.
3. *Foundations*. Normally at least one of the five courses should come from the list of foundation courses (see earlier).
4. *Asian language study*. Asian language study is not required, but courses in Asian languages may count toward the honors minor. For languages offered at Swarthmore, courses above the second-year level count toward the minor. For Asian languages not offered at Swarthmore, courses at the entry level may be approved if at least the equivalent of 1.5 credits is successfully completed in a program approved by the Asian studies faculty.
5. *Honors preparation*. An honors minor in Asian studies will submit one preparation, normally a 2-credit seminar, for examination. For alternative formats of honors preparations, see section 4 of the Asian studies honors major (earlier).
6. *SHS for minors*. SHS for minors, normally done in the spring semester of the senior year, will follow the norms established by the department in which the honors preparation is done. No course credit will be given for SHS for minors. SHS materials may be examined in regular written and some oral exams.
7. *GPA requirement*. A student must have at least a B+ in all courses applied to the honors minor.

COURSES

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

Art (Art History)

ARTH 003. Asian Art
ARTH 031. Traditional Japan
ARTH 033. Special Topics in Asian Art
ARTH 038. Ritual and Image in the Buddhist Traditions
ARTH 132. Arts of the Buddhist Temple

Asian Studies

ASIA 093. Directed Reading

1 credit.

Each semester. Staff.

ASIA 096. Thesis

1 credit.

Fall 2002 and 2003. Staff.

ASIA 180. Thesis

2 credits.

Fall 2002 and 2003. Staff.

ASIA 199. Senior Honors Study

0.5 credit.

Fall 2002 and 2003. Staff.

Economics

ECON 081. Economic Development*

ECON 083. Asian Economies

ECON 181. Economic Development+

History

HIST 001G. Women, Family, and the State in China

HIST 009A. Chinese Civilization

HIST 009B. Modern China

HIST 010. Traditional Japan

HIST 075. Modern Japan

HIST 077. Orientalism East and West

HIST 078. Beijing and Shanghai: Tale of Two Cities

HIST 144. State and Society in China, 1750-2000

Linguistics

LING 004. Comparative Phonology of the East Asian Languages

LING 005. Structure of the Japanese Language

LING 033. Introduction to Classical Chinese

Literature

LITR 016CH. Substance, Shadow, and Spirit in Chinese Literature and Culture

LITR 017CH. Legacy of Chinese Narrative Literature: The Story in Dynastic China

LITR 018CH. The Classical Tradition in Chinese Literature

LITR 023CH. Modern Chinese Literature

LITR 025CH. Contemporary Chinese Fiction: Mirror of Social Change

LITR 027CH. Women Writers in 20th-Century China

LITR 055CH. Contemporary Chinese Cinema

LITR 066CH. Chinese Poetry

LITR 081CH. Transcending the Mundane: Taoism in Chinese Literature and Culture

Modern Languages and Literatures (Chinese and Japanese)

CHIN 003B. Second-Year Mandarin Chinese (fall 2002)

CHIN 004B. Second-Year Mandarin Chinese (spring 2003)

CHIN 011. Third-Year Chinese

CHIN 011A. Third-Year Chinese Conversation

CHIN 012. Advanced Chinese

CHIN 012A. Advanced Chinese Conversation

CHIN 016. Substance, Shadow, and Spirit in Chinese Literature and Culture

CHIN 017. Legacy of Chinese Narrative Literature: The Story in Dynastic China

CHIN 018. The Classical Tradition in Chinese Literature

CHIN 020. Readings in Modern Chinese

CHIN 021. Topics in Modern Chinese

CHIN 023. Modern Chinese Literature

CHIN 025. Contemporary Chinese Fiction: Mirror of Social Change

CHIN 027. Women Writers in 20th-Century China

CHIN 033. Introduction to Classical Chinese

CHIN 055. Contemporary Chinese Cinema

CHIN 056. History of Chinese Cinema (1905-1995)

CHIN 063. Comparative Perspectives: China in the Ancient World

CHIN 066. Chinese Poetry

CHIN 081. Transcending the Mundane: Taoism in Chinese Literature and Culture

CHIN 091. Special Topics in Chinese Literature and Culture in Translation

CHIN 093. Directed Reading

CHIN 104. Lu Xun and Modern Chinese Literature

CHIN 105. Topics in Traditional Chinese Literature

JPNS 017. Introduction to Japanese Culture: The Cosmology of Japanese Drama

JPNS 018. Topics in Japanese Literary and Visual Culture

Music and Dance

DANC 048. Performance Dance: Kathak

MUSI 005. Patterns of Asian Music and Dance

MUSI 008. The Music of Asia

MUSI 049. Balinese Gamelan

Political Science

POLS 055. China and the World

POLS 056. Patterns of Asian Development

POLS 064. American-East Asian Relations*

POLS 108. Comparative Politics: East Asia

Religion

RELG 008. Patterns of Asian Religions

RELG 009. The Buddhist Traditions of Asia

RELG 012. History, Religion, and Culture of India I

RELG 013. History, Religion, and Culture of India II

RELG 026B. Buddhist Social Ethics

RELG 027B. Asian Religions in America*

RELG 030B. The Power of Images: Icons and Iconoclasts*

RELG 031B. Religion and Literature: From the Song of Songs to the Hindu Saints*

RELG 104. Buddhism and Society in Southeast Asia

RELG 108. Poets, Saints, and Storytellers: Religious Literatures of India

RELG 110. Religious Belief and Moral Action+

RELG 113. From Buddha's Relics to the Body of God: Hindu and Buddhist Devotion

Sociology and Anthropology

SOAN 003B. Nations and Nationalisms*

SOAN 043B. Shamanism*

SOAN 093. Southeast Asia: Culture and History, Independent Study

SOAN 102. History and Myth+

Theater

THEA 015. Directing I/Performance Theory*

* *Cognate course*. Counts toward Asian studies if all papers/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

SCOTT F. GILBERT, Professor
MARK JACOBS, Professor
JOHN B. JENKINS, Professor and Chair
RACHEL A. MERZ, Professor
SARA HIEBERT, Associate Professor
KATHLEEN SIWICKI, Associate Professor
AMY CHENG VOLLMER, Associate Professor[2]
JULIE HAGELIN, Assistant Professor[1]
JOSE-LUIS MACHADO, Assistant Professor
COLIN PURRINGTON, Assistant Professor
ELIZABETH A. VALLEN, Associate Professor[3]
JUSTINE MELO, Visiting Assistant Professor
DARLENE BRAMUCCI, Laboratory Instructor/Academic Coordinator
DEBORAH LEDDY, Laboratory Instructor
JOCELYNE MATTEI-NOVERAL, Laboratory Instructor
THOMAS VALENTE, Laboratory Instructor
RACHEL HEATH WALLACE, Laboratory Instructor
MARIA MUSIKA, Administrative Assistant

1 Absent on leave, fall 2002.
2 Absent on leave, spring 2003.
3 Absent on leave, 2002-2003.

Students are introduced to biology by enrolling in BIOL 001 and 002, which serve as prerequisites for all intermediate and advanced biology courses. Intermediate courses are numbered 010-050. Courses numbered beyond 100 are advanced and may be used to prepare for the Honors Program. Advanced Placement 5 is accepted for placement in some intermediate courses. See individual instructors for permission.

REQUIREMENTS AND RECOMMENDATIONS

Students electing to major in biology must have a grade-point average of C in BIOL 001 and 002 (or in the first two Swarthmore biology courses) and a C average in all Swarthmore College courses in the natural sciences. The biology major must include the following supporting subjects in addition to the minimum of 8 biology credits composing either the honors or the course major: Introductory Chemistry, at least one semester of Organic Chemistry, and two semesters of college mathematics (not STAT 001 or MATH 003) or the completion of Calculus II (MATH 06A and 06B or 06C). One semester of statistics (STAT 002 or 002C) is strongly recommended.

Students majoring in biology must take at least one course or seminar in each of the following three groups: I. Cell and Molecular Biology, II. Organismal Biology, and III. Population Biology. Course majors must take at least one advanced course or seminar in biology and satisfy the general college requirement of a comprehensive experience and examination in biology by participation in BIOL 097: Senior Comprehensive Exam.

Students who wish to minor in biology must take 6 credits, at least 4 of which are to be taken at Swarthmore. The grade requirement to enter the minor is the same as for the biology course major. BIOL 001 and 002 are required. There are no requirements for chemistry, math, or physics and no distribution requirement within the department. Only one course numbered BIOL 003-009 is allowed and only one course in either BIOL 093 or 094.

Special majors in biochemistry, psychobiology, biostatistics, and environmental science are also offered. We offer teacher certification in

biology through a program approved by the state of Pennsylvania. Because of a change in teacher certification regulations that occurred in November 2000, students completing certification through 2003 will need to fulfill somewhat different course requirements from those who complete certification in 2004 and beyond. For further information about the relevant set of requirements, please contact the Educational Studies chair, the Biology Department chair, or the Educational Studies Department Web site: www.swarthmore.edu/SocSci/Education/.

Honors Program

Admission to the Honors Program either as a major or a minor is based on academic record (average of B or better in Swarthmore College courses in the natural sciences) and completion of prerequisites for the courses or seminars used in preparation for honors exams. Qualified students will prepare for two external exams from the following areas: animal physiology, behavioral ecology, biomechanics, cell biology, developmental genetics, human genetics, microbiology, neurobiology, plant physiology, plant defense, and plant ecology. Students in honors also will undertake a substantial research project (BIOL 180) and participate in senior honors study (BIOL 199). These efforts will be evaluated by external examiners, who will determine the level of honorific and grades for BIOL 180 and 199.

Biology course numbers reflect study at different levels of organization—General Studies (001-009), intermediate courses in Cellular and Molecular Biology (010-019), Organismal Biology (020-029), Population Biology (030-039), Seminars in Cellular and Molecular Biology (110-119), Seminars in Organismal Biology (120-129), and Seminars in Population Biology (130-139).

COURSES

General Studies

BIOL 001. Cellular and Molecular Biology

An introduction to the study of living systems illustrated by examples drawn from cell biology, biochemistry, genetics, microbiology, neurobiology, and developmental biology.

One laboratory period per week.

Primary distribution course. 1 credit.

Fall 2002. Staff.

BIOL 002. Organismal and Population Biology

Introduction to the study of organisms emphasizing morphology, physiology, behavior, ecology, and evolution of whole organisms and populations.

One laboratory per week.

Primary distribution course. 1 credit.

Spring 2003. Staff.

BIOL 006. History and Critique of Biology

The topics of this course focus on the history and sociology of genetics, development, and evolution, science and theology, and feminist critiques of biological sciences.

Prerequisites: BIOL 001 and 002.

1 credit.

Not offered 2002-2003.

Group I: Cellular and Molecular Biology (010–019)

BIOL 010. Genetics

An introduction to genetic analysis and molecular genetics. The course explores basic principles of genetics, the chromosome theory of inheritance, classical and molecular strategies for gene mapping, strategies for identifying and isolating genes, the genetics of bacteria and viruses, replication, gene expression, and the regulation of gene activity. Major concepts will be illustrated using human and nonhuman examples.

One laboratory period per week.

Prerequisite: BIOL 001.

1 credit.

Fall 2002. Melo.

BIOL 014. Cell Biology

A study of the ultrastructure, molecular interactions and function of cell components, focusing primarily on eukaryotic cells.

One laboratory period per week.

Prerequisites: BIOL 001 and CHEM 022.

1 credit.

Spring 2003. Melo.

BIOL 016. Microbiology

Biology of microorganisms with an emphasis on 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 017 for credit.

One laboratory period per week.

Prerequisites: BIOL 001 and CHEM 022.

1 credit.

Not offered 2002-2003.

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 agents. Laboratory exercises include techniques for detecting, isolating, cultivating, quantifying, and identifying bacteria. Students may not take both BIOL 016 and 017 for credit.

One laboratory period per week.

Prerequisites: BIOL 001 and 002; CHEM 022.

1 credit.

Not offered 2002-2003.

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. Possible topics include metabolism, thermoregulation, endocrine regulation, digestion, cardiovascular physiology, and muscle physiology.

Prerequisites: BIOL 001 and 002; CHEM 010 recommended.

Primary distribution course.

1 credit.

Fall 2002. Hiebert.

BIOL 022. Neurobiology

A study of the basic principles of neuroscience, with emphasis on the electrical and chemical signaling properties of neurons and their underlying cellular and molecular mechanisms as well as the functional organization of selected neural systems.

One laboratory period per week.

Prerequisites: BIOL 001 and CHEM 010.

1 credit.

Spring 2003. Siwicki.

BIOL 024. Embryology

This analysis of animal development will combine descriptive, experimental, and evolutionary approaches. Laboratories will involve dissection and manipulation of invertebrate and vertebrate embryos.

One laboratory period per week.

Prerequisites: BIOL 001 and 002.

1 credit.

Spring 2003. Gilbert.

BIOL 026. Invertebrate Zoology

Evolution, morphology, ecology, and physiology of invertebrate animals.

One laboratory period per week; some all-day field trips.

Prerequisites: BIOL 001 and 002.

1 credit.

Not offered 2002-2003.

BIOL 028. Plant Physiology

A study of how plants live and their principle physiological processes, including photosynthesis, gas exchange, water and nutrient transport, plant hormone action, and environmental responses.

One laboratory period per week.

Prerequisites: BIOL 001 and 002; CHEM 022 recommended.

1 credit.

Fall 2002. Jacobs.

Group III: Population Biology (030–039)

BIOL 030. Animal Behavior

An introduction to the biological study of animal behavior under natural conditions. Observation of the behavior and natural history of animals, including insects, birds, and primates leads to an understanding of ethology, behavioral ecology, orientation, and migration.

Three to six hours of fieldwork per week.

Prerequisite: BIOL 002.

1 credit.

Not offered 2002-2003.

BIOL 034. Evolution

This course focuses on how the genetic structure of a population changes in response to mutation, natural selection, and genetic drift. Other topics, such as evolutionary rates, speciation, and extinction provide a broader view of evolutionary processes.

One laboratory period or field trip per week.

Prerequisites: BIOL 001 and 002.

Fall 2002. Purrington.

BIOL 036. Ecology

The scientific study of the relationships that determine the distribution and abundance of organisms, with a focus on plants. Topics include population dynamics, species interactions, community ecology, and nutrient cycles.

One laboratory period or field trip per week.

Prerequisites: BIOL 001 and 002 or permission of the instructor.

1 credit.

Fall 2002. Machado.

BIOL 038. Paleobiology

Introduction to the fossil record and the techniques and theories used by paleontologists. Current issues in paleontology will also be examined.

One laboratory period or field trip per week.

Prerequisites: BIOL 001 and 002.

1 credit.

Not offered 2002-2003.

BIOL 039. Marine Biology

Ecology of oceans and estuaries, including discussions of physiological, structural, and behavioral adaptations of marine organisms.

One laboratory per week; several all-day field trips.

Prerequisites: BIOL 001 and 002.

1 credit.

Fall 2002. Merz.

INDEPENDENT STUDIES

BIOL 093. Directed Reading

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

0.5 or 1 credit.

Fall or spring semester. Staff.

BIOL 094. Research Project

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

1 credit.

Fall or spring semester. 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.

Fall or spring semester. Staff.

BIOL 180. Honors Research

Independent research in preparation for an honors research thesis.

Fall or spring semester. Staff.

SENIOR COMPREHENSIVE EXAMINATION

BIOL 095, 097, and 199 are not part of the 8-credit minimum in biology.

BIOL 095. Senior Project

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

BIOL 097. Senior Seminar

A consideration of a topic from the perspectives of several biological subdisciplines. Serves as the senior comprehensive and exam; required of all biology majors in course.

Fall 2002. Staff.

HONORS STUDY

BIOL 199. Senior Honors Study

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

SEMINARS

BIOL 110. Human Genetics

An exploration of the human genome. Among the topics to be discussed will be patterns of human inheritance, classical and molecular strategies for mapping and isolating genes, the metabolic basis of inherited disease, the genetic basis of cancer, developmental genetics, complex-trait analysis, the genetic basis of human behavior, and ethical, legal and social issues in human genetics.

Attendance at medical genetics rounds and seminars at Philadelphia-area medical schools is required.

Prerequisites: BIOL 010 or consent of the instructor.

2 credits.

Not offered 2002-2003.

BIOL 111. Developmental Genetics

This year's topic will be evolutionary developmental genetics. The arrival of the fittest is predicated on inherited changes in development. This means that the expression of developmental regulatory genes is changed. We will be discussing such phenomena as the fin-to-limb transition, the evolution of the eyes and hearts, and the nature of co-option and homology. The laboratory will use molecular techniques to find genes involved in the production of evolutionary novelties such as the turtle shell.

Prerequisites: BIOL 010, 014, 024, or consent of the instructor.

One laboratory per week.

2 credits.

Fall 2002. Gilbert.

BIOL 114. Regulation of Cell Division

A study of events of the cell cycle necessary for cell division and the mechanisms of regulation that function to control these processes. The critical evaluation of original research literature and the examination of current issues in the field will be emphasized.

One laboratory per week.

Prerequisites: BIOL 014, 015, or consent of instructor.

2 credits.

Fall 2003. Vallen.

BIOL 116. Microbial Processes and Biotechnology

A study of microbial mechanisms regulating gene expression in response to natural and experimental stressors; technical and ethical applications of these concepts in biotechnology.

Independent laboratory projects.

Prerequisites: BIOL 016 or 017.

2 credits.

Fall 2002. Vollmer.

BIOL 120. Biological Rhythms

An examination of the properties of biological clocks, including the molecular basis of the clock, neural control, and the evolutionary significance of the rhythms they generate.

One seminar meeting each week and ongoing independent projects.

Prerequisites: BIOL 001, 002, and one of the following courses: BIOL 014, 016, 017, 020, or 022.

2 credits.

Spring 2003 Hiebert.

BIOL 121. Physiological Ecology

Physiological basis for interactions between animals and the environment, including thermoregulation, seasonality, foraging, reproduction, and energetics. Laboratory exercises and independent projects.

Prerequisites: BIOL 001, 002, and 020 or permission of the instructor.

2 credits.

Not offered 2002-2003.

BIOL 122. Developmental Neurobiology

Cellular and molecular mechanisms of nervous system development and plasticity are studied through extensive reading and discussion of research literature.

Independent laboratory projects.

Prerequisites: BIOL 022 or 111.

2 credits.

Fall 2002. Siwicki.

BIOL 123. Learning and Memory

Neural systems and cellular processes involved in different types of learning and memory are studied through reading and discussion of research literature.

Independent laboratory projects.

Prerequisites: BIOL 022 or permission of instructor.

2 credits.

Not offered 2002-2003.

BIOL 126. Biomechanics

Basic principles of solid and fluid mechanics will be explored as they apply to the morphology, ecology, and evolution of plants and animals.

Prerequisites: BIOL 001, 002, and one other Group II or Group III biology course.

2 credits.

Not offered 2002-2003.

BIOL 128. Control of Plant Development

An examination of molecular, cellular, and environmental-control mechanisms operating in plant growth and development. Particular examples will be studied in depth, with an emphasis on critical evaluation of original research literature.

One seminar meeting each week and continuing laboratory projects.

Prerequisites: BIOL 001, 002, and one other biology course.

2 credits.

Spring 2003. Jacobs.

BIOL 130. Behavioral Ecology

The study of the evolution of behavior as an adaption to an environment. Topics include bioeconomics, gender roles, mating systems, cooperation, and communication.

Prerequisites: BIOL 030 or 032, or 034 or 036.

Students with preparation outside biology should seek permission of the instructor.

2 credits.

Not offered 2002-2003.

BIOL 132. Evolutionary Genetics

The genetic basis of evolutionary change. Among the topics to be discussed will be the history and development of modern evolutionary theory; the development of population genetics; the forces that disrupt genetic equilibrium, including selection and drift; the process of speciation; evolution above the species level; and molecular evolution.

One laboratory per week.

Prerequisites: BIOL 010 or BIOL 034 or consent of the instructor.

2 credits.

Spring 2003. Jenkins.

BIOL 134. Plant Defense

This seminar focuses on ecological and evolutionary issues relating to defensive characteristics of plants.

One seminar meeting each week and continuing, independent laboratory projects.

Prerequisites: Any biology course numbered 010 or higher.

2 credits.

Spring 2003. Purrington.

BIOL 136. Plant Competition: Native Versus Exotic Species

Finding evidence to understand the mechanistic nature of competition in plants has been a long-standing and unresolved issue in ecological studies. Today, invasive plant species are successfully removing native species from their natural habitats. If we are to minimize and/or control the effect of invasive species, we need to understand their competitive abilities in comparison with native species. What makes invasive species so successful? We will review the theoretical foundations of plant competition and learn natural history, physiology, morphology, evolution, and ecology of both native and invasive species occurring in the Crum Woods of Swarthmore College. Readings, presentations, discussions, and field-greenhouse research projects will be required for the completion of this class.

Prerequisites: BIOL 002 and 036 or equivalent. Students with preparation outside biology should seek permission of the instructor.

2 credits.

Spring 2003. Machado.

Black Studies

Coordinator: **SARAH WILLIE** (Sociology/Anthropology)
Jenny Gifford (Administrative Assistant)

Kofi Anyidoho, Cornell Visiting Professor

Committee: **Timothy Burke** (History)
Syd Carpenter (Art)
Maurice Eldridge (President's Office)[10]
Charles James (English Literature)
Stephen O'Connell (Economics)
Micheline Rice-Maximin (Modern Languages)
Timothy Sams (Dean's Office)[10]
Peter Schmidt (English Literature)

10 Ex-officio.

The purpose of the Black Studies Program is (1) to introduce students to the history, culture, society, political, and economic conditions of black people in Africa, the Americas, and elsewhere in the world; and (2) to explore new approaches—in perspectives, analyses, and interdisciplinary techniques—appropriate to the study of the black experience.

Black studies has often stood in critical relation to the traditional disciplines. Its scholars have sometimes used a range of nontraditional methodological tools and have pursued knowledge that assumes the peoples and cultures of Africa and the African diaspora are central to understanding the world accurately. The courses in the Black Studies Program at Swarthmore enhance the liberal arts tradition of the College, acknowledging positivist, comparative, progressive, modernist and postmodernist, postcolonial, and Afrocentric approaches.

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 to the coordinator of the program. All programs must be approved by the Committee on Black Studies.

REQUIREMENTS AND RECOMMENDATIONS

All interdisciplinary minors in black studies are required to take BLST 015: Introduction to Black Studies; BLST 091: Special Topics in Black Studies, ordinarily in the last semester of the senior year; and three additional courses listed in the catalog that gain black studies credit. Of these three additional courses, at least one of them must be outside of the departmental major, and at least one of them must be taken at Swarthmore. We strongly advise students to take a course in African or African diasporic history.

BLST 091: Special Topics in Black Studies may take the form of a tutorial (if there are fewer than three students in any given class) or a seminar (if there are four or more students), with all senior minors participating. The tutorial or seminar will normally be conducted in the spring term of the senior year and will culminate in a thesis administered by the Black Studies Committee. It is often possible to combine the black studies thesis with the senior project for the major. Students who apply their thesis credit to both the major and the minor must receive advanced approval from the Black Studies Committee and the major department in the fall of the senior year.

Honors Minor

All students participating in the Honors Program are invited to define a minor in the

Black Studies Program. Honors minors in black studies do a single, 2-credit preparation. This preparation may be based on two units of academic credit selected from the course offerings within the Black Studies Program, or it may be a 2-credit thesis written under program supervision. Honors minors must meet all other requirements of the interdisciplinary minor in course.

For an honors minor in black studies, the 2 credits that the student uses for the minor must come from outside of the student's major department. One of these credits may be BLST 091. The student may also pair black studies courses together. Such course combinations could include HIST 008B and RELG 010 or FREN 077 and ENGL 078 or ECON 082 and POLS 058. With respect to course combinations, it should be noted that all honors work is normally done during the junior or senior years.

The 2-credit honors thesis option must include work done for the interdisciplinary minor and should entail some unifying or integrative principle of coherence. In addition, an honors thesis must also include substantial work (normally 50 percent or more), drawing on a discipline that is outside of the student's major. One unit of the 2-credit preparation by minors will satisfy the BLST 091 requirement. The Black Studies Committee must approve proposals for either the 2-credit honors thesis or the honors course. That is usually done in the fall of the student's senior year. In the case of the thesis, a Black Studies Committee faculty adviser will be appointed to work with the student. In the spring of the senior year, the student's honors thesis will be examined with a written and oral exam by an outside examiner. (An honors thesis may include a videotape or audiotape of a creative performance activity in dance or music or other approved creative work.)

COURSES

Courses in the Black Studies Program are listed later. Courses of independent study, special attachments on subjects relevant to black studies, and courses offered by visiting faculty (those courses not regularly listed in the catalog) may, at the discretion of the Black Studies Committee, be included in the program. Students who wish to pursue these possibilities should consult with the coordinator of the Black Studies Committee.

The following courses may be counted toward a minor in black studies. Descriptions of the courses can be found in each department's course listings in this catalog.

Art

ARTH 025. Arts of Africa

ARTH 027. African-American Art

STUA 021. African Pot

Black Studies

BLST 009. Literature as Performance in Africa

(Cross-listed as THEA 009)

Most of traditional as well as contemporary African and African-heritage literatures are produced in a cultural environment where the dominant mode of communication is oral. In addition, the concept and practice of performance is central to artistic expression in African and African-heritage tradition. This course shall consider, among other theoretical issues, the many ways in which literature as performance may be seen as a four-way encounter between text, context, artist, and audience, each one helping to enhance aesthetic experience and "enjoyment of the intrinsic qualities of the act of expression itself" (Bauman). The course provides an appropriate intellectual framework for critical analysis, interpretation, and appreciation of a wide range of traditional and contemporary verbal/musical/dramatic art forms. Those forms include oral poetry, including epic, dirge, praise, libation, and so forth from Africa; dozens, toast, and so forth from the diaspora; the folk tale and other oral narrative genres; drama, including dance-drama, folk opera, popular theater, such as the Concert Party in Ghana; oratory; and traditions of song: traditional, contemporary, popular, and so forth. Lectures, discussions, and readings are to be complemented with extensive use of audiovisual recordings and presentations by one or two guest artists. Students will be expected to offer individual and/or group performance projects as part of the course.

1 credit.

Fall 2002. Anyidoho.

BLST 015. Introduction to Black Studies

This course introduces students to the breadth and depth of the discipline of black studies, using primary sources. It begins with an examination of current debates that define theory, method, and goals in black studies. It also examines the movement from the more object-centered Africana studies to subject- and agentic-oriented black studies that occurred as a result of the U.S. civil rights and anticolonialist movements in Africa, the Caribbean, and Europe. The course examines the challenges that were levied against traditional academic disciplines with the rise of antiracist scholarship. It briefly examines the conversation between American, Caribbean, and African postcolonialists, and it allows students to delve into some of black studies' most current and exciting scholarship with a focus on the United States.

1 credit.

Fall 2002. Willie.

BLST 079. Beyond Translation: The Challenge of Bilingual Creative Writing in Africa

(Cross-listed as ENGL 079)

This course is a case study in creative writing across linguistic and cultural boundaries. We begin with an examination of the peculiar location of the creative writer in a colonial and postcolonial situation, with particular reference to the question of language as the primary tool and medium of creative intelligence. We shall also look briefly at the extreme case of the silencing of the tongue and reinvention of mother tongues under transatlantic slavery. Against this historical and literary background, the class shall follow a few individual writers, tracing, defining, and demonstrating various strategies and processes involved in their particular attempts at bilingual creative practice. An important dimension of their careers that will be considered is the artist as an English-language writer returning to his or her creative foundations as an African-language writer. In effect, we hope to demonstrate how each of these African writers may have achieved a unique creative voice that is at once firmly rooted in his or her own primary culture/tradition and yet speaks with reasonable resonance to his or her other heritage of a wider world of letters.

1 credit.

Spring 2003. Anyidoho.

BLST 091. Special Topics in Black Studies (Thesis)

1 credit.

Spring 2003. Staff.

Dance

DANC 009. Music and Dance of Africa

DANC 021. Dance: Africa and Asia

DANC 043. African Dance I

DANC 049. Performance Dance: Repertory

Spring 2003: Section 2: African.

DANC 053. African Dance II

Economics

ECON 073. Race, Ethnicity, and Gender in Economics

ECON 082. The Political Economy of Africa

ECON 171. Labor and Social Economics

ECON 181. Economic Development

Education

EDUC 068. Urban Education

English Literature

ENGL 057. The African-American Writer

ENGL 059. The Harlem Renaissance

ENGL 060. Sites of Memory: Contemporary African-American Writing

ENGL 078. The Black African Writer

ENGL 079. Beyond Translation: The Challenge of Bilingual Creative Writing in Africa

ENGL 121. The Harlem Renaissance and the Jazz Age

French

FREN 012L. Introduction à l'analyse littéraire *(depending on topics)*

FREN 028. Francophone Cinema: Configurations of Space in Postcolonial Cinema

FREN 033. Fictions d'enfance dans le monde francophone

FREN 036. Poésies d'écritures françaises

FREN 070F. Caribbean and French Civilization and Cultures

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

FREN 076. Ecritures au féminin

FREN 077. Prose francophone: littérature et société

FREN 078. Théâtre et société

FREN 091. Histoire/s et fiction

FREN 110. Histoires d'îles

FREN 112. Ecritures francophones: fiction et histoire dans le monde francophone

FREN 113. Voyage et littérature

FREN 114. Théâtre d'écritures françaises

FREN 115. Paroles de femmes

History

HIST 001I. First-Year Seminar: African-American Women's History

HIST 007A. History of the African-American People, 1619-1865

HIST 007B. History of the African-American People, 1865-Present

HIST 008A. West Africa in the Era of the Slave Trade, 1500-1850

HIST 008B. Mfecane, Mines, and Mandela: South Africa From 1650 to the Present

HIST 053. Topics in African-American Women's History

HIST 087. Development and Modern Africa: Historical Perspectives

HIST 137. Topics in African-American History

HIST 140. The Colonial Encounter in Africa

Linguistics

LING 027. Pidgins and Creoles of West Africa

LING 052. Historical and Comparative Linguistics

LING 063. Structure of Akan

Literature

LITR 028F. Francophone Cinema: Configurations of Space in Postcolonial Cinema

LITR 070F. Caribbean and French Civilization and Cultures

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

Music

MUSI 003. Jazz History

MUSI 061. Jazz Improvisation

Political Science

POLS 033. Race, Ethnicity, and Public Policy

POLS 034. Race, Ethnicity, Representation, and Redistricting in America

POLS 110. Comparative Politics: Africa

Religion

RELG 010. African-American Religions

RELG 024B. From Vodun to Voodoo: African Religions in the Old and New World

RELG 025B. Black Women and Religion

RELG 109. Afro-Atlantic Religions

Sociology and Anthropology

SOAN 007B. Introduction to Race and Ethnicity in the United States

SOAN 007C. Sociology Through African-American Women's Writing

SOAN 020B. Urban Education

SOAN 037B. Twentieth-Century Black Political Thought

Theater

THEA 009. Literature as Performance in Africa

Chemistry

ROBERT F. PASTERNACK, Professor and Chair
THOMAS A. STEPHENSON, Professor
JUDITH G. VOET, Professor[3]
ROBERT S. PALEY, Associate Professor
PAUL R. RABLEN, Associate Professor[3]
KATHLEEN P. HOWARD, Assistant Professor
ELIZABETH A. OTTINGER, Assistant Professor
KAREN R. HATWELL, Visiting Assistant Professor
JAMES A. REGO, Visiting Assistant Professor
VIRGINIA M. INDIVERO, Lecturer
MARY E. ROTH, Lecturer and Director of Introductory Laboratories
DONNA T. PERRONE, Laboratory Instructor
CAROLINE BURKHARD, Laboratory Instructor
DAVID TRIMBLE, Instrument Coordinator
KATHRYN R. McGINTY, Administrative Assistant

3 Absent on leave, 2002-2003.

The objective of the Chemistry Department is to provide sound training in the fundamental principles and basic techniques of science and to provide interested students with the opportunity for advanced work in the main subdisciplines of modern chemistry.

REQUIREMENTS AND RECOMMENDATIONS

The normal route for entrance to the advanced-level program is to take CHEM 010 followed by 022, 032, and 038. Students with an especially strong precollege background in chemistry are advised to begin with CHEM 010H. Such students will be asked to take a placement examination. Students seeking advanced placement credit may also be required to take this examination. Consult with the department chair.

The minimum requirement for a major in chemistry is 9 credits in the department. These must include CHEM 010, 022, 032, 034, 038, 045A/B, 046, 050, and one single-credit seminar. Students should note the mathematics and physics prerequisites for Inorganic and Physical Chemistry. *Those considering a major in chemistry are strongly urged to complete* MATH 005, 006A, 006B, 018 *and* PHYS 003, 004 *(or* 007, 008*) by the end of the sophomore year.* In addition, all students must complete CHEM 010, 022, and 034 before enrolling in a Chemistry Department seminar. Students should complete these requirements by the fall semester of the junior year.

Those students planning professional work in chemistry should include a fourth semester of mathematics and at least two additional credits in chemistry in their programs. Accreditation by the American Chemical Society (ACS) is useful for those who intend to pursue a career in the chemical industry and requires a year of independent research through CHEM 094, 096, or 180. In addition, proficiency in reading scientific German, Russian, or French is an asset to the practicing chemist.

The College offers teacher certification in chemistry through a program approved by the state of Pennsylvania. Because of a change in teacher certification regulations that occurred in November 2000, students completing certification through 2003 will need to fulfill somewhat different course requirements from those who complete certification in 2004 and beyond. For further information about the relevant set of requirements, please contact the Educational Studies Department chair or the Chemistry Department chair, or visit the Educational Studies

Department Web site: www.swarthmore.edu/-SocSci/Education/.

Research opportunities with individual staff members are available through CHEM 094, 096, and 180. Majors are encouraged to consult the staff about research problems currently under investigation.

Biochemistry Special Major

The departments of chemistry and biology have collaborated to offer a special major in biochemistry (see discussion of special major, p. 71), which allows the student to gain a strong background in chemistry with special emphasis on the application of chemistry to biochemical and molecular biological problems. The requirements include CHEM 022, 032, 034, 038, 045A/C, 046, 050, and 108. Biochemistry majors must also complete either (1) a biochemically related, sophomore-level biology course with a lab and a biochemically related, advanced biology seminar with a lab; or (2) two biochemically related, sophomore-level biology courses (with labs). The term *biochemically related* includes all Biology Group I courses and other courses that are deemed appropriate by consultation among members of the Chemistry and Biology departments. Students should note the mathematics, physics, chemistry, and biology prerequisites for these courses. Those considering a major in biochemistry are strongly urged to complete MATH 005, 006A, 006B, 018 and PHYS 003, 004 (or 007, 008) by the end of the sophomore year. In addition, all students must complete CHEM 010, 022, and 034 before enrolling in a Chemistry Department seminar. Students should complete these requirements by the fall semester of the junior year. Research opportunities are available in both the Biology and Chemistry departments. Interested students should consult the chairs of the two departments.

Chemical Physics Special Major

The Chemistry Department has also collaborated with the Physics and Astronomy Department to offer a special major in chemical physics (see discussion of special major, p. 71), which allows the student to gain a strong background in the study of chemical processes from a microscopic and molecular viewpoint. The special major combines course work in chemistry and physics at the introductory and intermediate levels, along with advanced work in physical chemistry and physics, for a total of 10 to 12 credits. Laboratory work at the advanced level in either chemistry or physics is required. Mathematics courses in linear algebra and multivariable calculus are prerequisites to this work.

In preparation for a major in chemical physics, students must complete: (1) CHEM 010/010H and 022; (2) PHYS 006, 007, 008 (PHYS 003, 004 can substitute, but the 006, 007, 008 sequence is strongly recommended); (3) further work appropriate to the major in either chemistry (CHEM 034, 045A/B and/or 046) or physics (PHYS 014 and 050); and (4) MATH 016 and 018 by the end of their sophomore year. An example of a major in chemical physics is CHEM 022, 034, 045A/B, 046, 050, and 104; and PHYS 007, 008, 014, 050, 111, and 113. CHEM 096 can be used for laboratory work at the advanced level, but if a student should choose to opt out of the thesis requirement associated with CHEM 096, this credit must be replaced by either CHEM 046, CHEM 050, or PHYS 082.

Chemistry Minor in Course

A chemistry minor in the course program is also available. It is a 5-credit minor plus any necessary prerequisites. The chemistry credits must include 010, 022, and 034 plus 2 other credits, one of which must be numbered 040 or higher. CHEM 001, CHEM 050, and research credits (CHEM 094, 096, and 180) may not be used to fulfill this requirement. Four of the 5 credits must be obtained at Swarthmore.

HONORS PROGRAM

Fields Available for Examination

The fields offered by the Chemistry Department for examination as part of the Honors Program are Topics in Modern Organic Chemistry, Topics in Bioinorganic and Organometallic Chemistry, Chemical Dynamics, Theory and Applications of Spectroscopy, Topics in Biochemistry, and Biophysics. The department will offer three of these preparations during each academic year. In addition, a 2-credit research thesis will be offered during each academic year. All honors majors in chemistry will be required to include a research thesis as one of their three fields of study.

Preparation for a research thesis within an Honors Program consists of enrollment in 2 credits of CHEM 180 during the senior year. Preparations for the other five fields consist of completion of the relevant single-credit seminar and associated prerequisites. For each of the preparations, these prerequisites include CHEM 010, 022, and 034; MATH 005, 006A, and 006B; and PHYS 003 and 004. Individual preparations carry additional requirements and prerequisites, as noted below:

Topics in Modern Organic Chemistry: CHEM 032, 102 (seminar). Chemical Dynamics: CHEM 045B, 104 (seminar); MATH 018. Theory and Applications of Spectroscopy: CHEM 045B, 105 (seminar); MATH 018. Topics in Bioinorganic and Organometallic Chemistry: CHEM 032, 046, 106 (seminar). Topics in Biochemistry: CHEM 032, 038, 045 A/B or A/C, 108 (seminar); BIOL 001. Biophysics: CHEM 034, 038, 110 (seminar).

Chemistry Majors

Honors majors in chemistry will be required to complete three preparations in chemistry, one of which must be the research thesis. Regardless of the fields selected for external examination, all chemistry honors majors are required to complete CHEM 010, 022, 032, 034, 038, 045A/B, 046, and 050.

Biochemistry Majors

The Honors Program in biochemistry will consist of four preparations in at least two departments as follows: (1) Topics in Biochemistry (CHEM 108) or Biophysics (CHEM 110); (2) one biochemically oriented preparation from the Biology Department; (3) a 2-credit biochemically oriented research thesis carried out under the supervision of faculty from the Chemistry and/or Biology departments; and (4) one additional preparation chosen from the Chemistry Department or the biochemically related preparations offered by Biology and Psychology departments. In addition to the academic credits that the Honors Program comprises, biochemistry majors are required to complete CHEM 045A/C, 046, and 050. Students should note the chemistry, biology, physics, and mathematics prerequisites to these courses and the seminars that are included in the Honors Program.

Chemistry Minors

All of the fields available to chemistry and biochemistry majors are available for students who wish to minor in the Chemistry Honors Program, with the exception of the research thesis. All honors minors must meet the same prerequisite requirements for seminars established by the department for chemistry and biochemistry majors.

COURSES

CHEM 001. Chemistry in the Human Environment

This course will include the study of the central concepts of chemistry in the context of current problems that have an impact on the human environment. This list includes the greenhouse effect, ozone depletion, acid rain, energy utilization, waste disposal, air and water quality, nutrition, food production, toxic substances, drugs, AIDS, brain chemistry, and medicine. Class discussion about the philosophical and public policy aspects of these problems as well as chemistry will be encouraged. Assigned reading material will be nonmathematical and emphasize organic and biochemistry as well as general chemical principles. Students may not receive credit for CHEM 001 if they have received credit for CHEM 010.

One laboratory period every second week.

Primary distribution course. 1 credit.

Spring 2003. Hatwell.

CHEM 010. General Chemistry

A study of the general concepts and basic principles of chemistry, including atomic and molecular structure, bonding theory, molecular interactions and the role of energy in chemical reactions. Applications will be drawn from current issues in fields such as environmental, transition metal, and biological chemistry.

Two sections will be offered in lecture format and are open to all students. One section will be offered in seminar format and is open to first-year students only.

One laboratory period weekly.

Primary distribution course. 1 credit.

Fall 2002. Hatwell (lecture); Pasternack (seminar).

CHEM 010H. General Chemistry: Honors Course

Topics will be drawn from the traditional general chemistry curriculum but discussed in greater detail and with a higher degree of mathematical rigor. Special emphasis will be placed on the correlation of molecular structure and reactivity, with examples drawn from biological, transition metal, and environmental chemistry. Some familiarity with elementary calculus concepts will be assumed.

Two sections will be offered, each in seminar format. Open to first-year students only.

One laboratory period weekly.

Prerequisites: A score of at least 4 on the Advanced Placement Chemistry Exam, at least 6 on the International Baccalaureate advanced chemistry exam, equivalent performance on the departmental placement exam, or permission of the instructor.

Primary distribution course. 1 credit.

Fall 2002. Ottinger, Howard.

CHEM 022. Organic Chemistry I

An introduction to the chemistry of some of the more important classes of organic compounds; nomenclature, structure, physical and spectroscopic properties, methods of preparation and reactions of aliphatic and aromatic hydrocarbons, halides and monofunctional oxygen compounds, with an emphasis on ionic reaction mechanisms.

One section will be offered in lecture format and is open to all students; one section will be offered in seminar format and is open to first-year students only.

One laboratory period weekly.

Prerequisite: CHEM 010.

1 credit.

Spring 2003. Rego (lecture); Paley (seminar).

CHEM 032. Organic Chemistry II

A continuation of CHEM 022 with emphasis on more advanced aspects of the chemistry of monofunctional and polyfunctional organic compounds, multistep methods of synthesis, and an introduction to bio-organic chemistry.

One laboratory period weekly.

Prerequisite: CHEM 022.

1 credit.

Fall 2002. Paley.

CHEM 034. Principles of Physical Chemistry

A survey of some basic concepts of physical chemistry, including states of matter, the laws of thermodynamics, chemical equilibria, electrochemistry, chemical kinetics and introductions to quantum theory, atomic and molecular structure, and spectroscopy.

One laboratory period weekly.

Prerequisites: CHEM 010; MATH 005, 006A, 006B; and PHYS 003, 004 (or 007, 008).

1 credit.

Fall 2002. Stephenson.

CHEM 038. Biological Chemistry

An introduction to the chemistry of living systems: protein conformation, principles of biochemical preparation techniques, enzyme mechanisms and kinetics, bioenergetics, intermediary metabolism, and molecular genetics.

One laboratory period weekly.

Prerequisite: CHEM 032 (BIOL 001 recommended).

1 credit.

Spring 2003. Ottinger.

CHEM 045A. Intermediate Physical Chemistry I

Continued discussion of the principles introduced in CHEM 034, focusing on thermodynamics, the properties of condensed matter, and nonideal systems.

One laboratory period weekly.

Prerequisites: CHEM 034 and MATH 018.

0.5 credit.

Spring 2003, first half. Howard.

CHEM 045B. Intermediate Physical Chemistry II

Continued discussion of the principles introduced in CHEM 034, focusing on chemical bonding, spectroscopic methods, statistical thermodynamics, and chemical reaction dynamics.

One laboratory period weekly.

Prerequisites: CHEM 034 and MATH 018.

0.5 credit.

Spring 2003, second half. Stephenson.

CHEM 045C. Biophysical Chemistry

Continued discussion of the principles intro-

duced in CHEM 034, focusing on the application of physical chemistry to the study of biological problems such as the determination of macromolecular structure and the measurement of both intramolecular and intermolecular interactions important in stabilizing biological structures.

One laboratory period weekly.

Prerequisites: CHEM 034 and 038.

0.5 credit.

Spring 2003, second half. Howard.

CHEM 046. Inorganic Chemistry

A study of the structure, bonding, and reactivity of inorganic compounds with emphasis on the transition metals. Included in the syllabus are discussions of crystal and ligand field theories, organometallic chemistry, and bioinorganic chemistry. The laboratory component emphasizes the synthesis, spectroscopy, and magnetic properties of transition metal complexes including organometallic substances and ones of biochemical interest.

One laboratory period weekly.

Prerequisite: CHEM 034.

1 credit.

Spring 2003. Pasternack.

CHEM 050. Modern Instrumental Methods in Chemistry and Biochemistry

This laboratory-intensive course centers on modern instrumental methods, including fluorescence, infrared, ultraviolet, and mass spectrometry. Special emphasis is given to Fourier-transform nuclear magnetic resonance.

Approximately five hours of laboratory weekly.

Prerequisites: CHEM 032 and either 038 or 046. Prior or concurrent registration in CHEM 034 is required.

1 credit.

Fall 2002. Howard (organizer), Ottinger, Paley, Pasternack.

SEMINARS

The following single-credit seminars may be taken for credit toward a degree in course or for papers in the External Examination Program. All students should note that CHEM 010, 022, and 034 constitute a minimum set of prerequisites for enrollment in any Chemistry Department seminar. These requirements should be completed by the end of the fall semester of the junior year. Individual seminars carry additional prerequisites, as listed here.

CHEM 102. Topics in Modern Organic Chemistry

This course will address selected advanced topics of current interest in the fields of organic materials chemistry and supermolecular chemistry. Materials will be drawn both from textbooks and the current research literature and may cover such topics as molecular self-assembly at interfaces, in solution, and in the bulk phase; polymeric and molecular liquid crystals; chirality effects in liquid crystals; artificial cell membranes and liposomal drug delivery; advanced organic materials for optical and electronics applications; and modern techniques of nanostructure analysis, including scanning probe microscopies.

Prerequisite: CHEM 032.

1 credit.

Fall 2002. Rego.

CHEM 105. Theory and Applications of Spectroscopy

An examination of topics in molecular spectroscopy, beginning with quantum mechanical principles and extending to applications in gas- and condensed-phase chemistry.

Prerequisites: CHEM 045B and MATH 018.

1 credit.

Spring 2003. Stephenson.

CHEM 108. Topics in Biochemistry

Physical methods used to study high-resolution bio-macromolecular 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, nucleic acids, carbohydrates, and lipid membranes will be included.

Recent developments in the rational design of ligands for biological receptors, based on results from the physical methods described previously, will be used to highlight the importance of diverse approaches to the study of biomolecular recognition.

Prerequisites: CHEM 038 and BIOL 001. Prior or concurrent enrollment in BIOL 010 or 014

or 016 or 017 and/or CHEM 045A/B or A/C is recommended.

1 credit.

Spring 2003. Ottinger.

CHEM 110. The Physical Basis of Biomolecular Structure and Function

This course is an introduction to the interdisciplinary field of biophysics in which biological systems are explored using the quantitative perspective of the physical scientist. Rather than provide a comprehensive overview of an extremely large field, the seminar presents a consistent perspective by focusing on two important examples of biophysical problems that have dominated the literature: (1) How is the three-dimensional conformation of a protein formed and stabilized? (2) What are the physical forces responsible for the unique properties of lipid bilayer membranes? Topics will include electrostatics of solvated biomolecules, statistical thermodynamics of polymers, physical methods for studying macromolecules and biological energy transduction. The seminar will be largely textbook based, with regularly assigned problem sets.

Prerequisites: CHEM 034 and CHEM 038.

1 credit.

Not offered 2002-2003.

STUDENT RESEARCH

All students who enroll in one or more research courses during the academic year are required to attend weekly colloquium meetings and present the results of their work during the spring semester.

CHEM 094. Research Project

This course provides the opportunity for qualified students to participate in research with individual staff members. Students who propose to take this course should consult with the staff during the preceding semester concerning problem areas under study. This course may be elected more than once.

0.5 or 1 credit.

Each semester. Staff.

CHEM 096. Research Thesis

Chemistry and biochemistry majors will be provided with an option of writing a senior research thesis in lieu of taking comprehensive examinations. Students are strongly urged to participate in on-campus research during the summer between their junior and senior years. The student will form an advisory committee to consist of (but not be limited to) two members of the Chemistry Department, one of whom is to act as the student's research mentor. Although the details of the Research Thesis Program will be determined by the committee and the student, certain minimum requirements must be met by all students selecting this option:

1. A minimum of 2 credits of CHEM 096 to be taken during the last three semesters of the student's residence at Swarthmore.
2. A thesis based on the student's research activity must be submitted before the last week of classes of the final semester. Guidelines for the preparation of the thesis will be provided to the student.

1 credit.

Each semester. Staff.

CHEM 180. Research Thesis

An opportunity for students in the External Examination Program to participate in research with individual staff members. The thesis topic must be chosen in consultation with some member of the staff and approved early in the semester preceding the one in which the work is to be done.

1 credit.

Each semester. Staff.

Classics

WILLIAM N. TURPIN, Professor and Chair
ROSARIA V. MUNSON, Professor[3]
GRACE M. LEDBETTER, Associate Professor
DEBORAH BECK, Assistant Professor
PAOLO ASSO, Visiting Assistant Professor
FRANCESCA GIEGENGACK, Administrative Assistant

3 Absent on leave, 2002-2003.

Classics is the study of the ancient Greeks and Romans, who produced some of the world's greatest literature and who shaped Western history and culture. The Department of Classics teaches the Greek and Latin languages and literatures from the beginning level through honors seminars. Any student who wishes to major or minor in Greek or Latin can do so without having studied it before entering college. Those who begin a language at Swarthmore start to read literature by the end of one year. After two years, students are usually prepared for seminars, in which they read and discuss in depth such authors as Homer, Aeschylus, Sophocles, Euripides, Plato, Thucydides, Herodotus, Cicero, Tacitus, Catullus, Horace, and Vergil.

Greek and Latin are studied in courses numbered from 001 to 019 and in seminars. Courses listed as Classics (designated CLAS and numbered 020 and over) have no prerequisites and assume no knowledge of Greek or Latin; instead, English translations are used to introduce students to the history, literature, philosophy, mythology, religion, and archaeology of the ancient world. CLAS courses listed under Ancient History count as prerequisites toward advanced courses in the Department of History and as part of a major in history.

The Department of Classics encourages students to spend a semester, usually during their junior year, at the Intercollegiate Center for Classical Studies in Rome. Here students from many American colleges study Latin, Greek, Italian, art history, and the ancient city. They also take field trips in Rome and Italy. Swarthmore College also helps to support the American Academy in Rome and the American School of Classical Studies in Athens, and its students have privileges at those institutions. Classics students are eligible for the Susan P. Cobbs Scholarship, the Susan P. Cobbs Prize Fellowship, and the Helen F. North Award, for study abroad or for intensive beginning language study in the summer.

The Classics Department participates in the Medieval Studies Program, the Women's Studies Program, the comparative literature major, and a special major in linguistics and languages.

REQUIREMENTS AND RECOMMENDATIONS

Major and Minor

Greek, Latin, or ancient history may be a student's major or minor subject in either the course or the Honors Program.

A major in Greek consists of at least 8 credits in Greek beyond GREK 001-002 and at least three seminars. A major in Latin consists of at least 8 credits in Latin beyond LATN 001-002, and at least three seminars. A major in ancient history consists of four ancient history courses (CLAS 031, 032, 042, 044, or 056); a 1-credit attachment (a substantial, independent project consisting of a thesis or a set of two or three related, shorter papers) to any of those history courses; another attachment to a second course or else any other course in ancient history or classical civilization; and a Latin or Greek seminar, specifically LATN 102, LATN 105, or GREK 113. Admittance to seminars is based on the student's ability to read Greek or Latin with the needed speed and comprehension. Those who intend to major or minor in Greek or Latin, or to major in ancient history, should complete the appropriate language courses numbered 011 and 012 (or their equivalent) as early as possible.

In their last semester, majors who are not in the Honors Program take a comprehensive examination, including written final exams in three fields (usually corresponding to seminars taken) and an oral exam.

A course minor in Greek or Latin will consist of 5 credits of work in either language above the first-year level and must include at least one 2-credit seminar. Minors are strongly encouraged to take more than one seminar. A course minor in ancient history will consist of four courses in ancient history and an attachment to one of them. That attachment will be presented to members of the department for evaluation and oral examination.

Honors Program

For a major in Greek or Latin, preparation for honors exams will normally consist of three seminars (students may take a fourth seminar in the major but not for external examination). A student minoring in Greek or Latin will take one external examination based on one seminar. Minors are, however, strongly encouraged to take more than one seminar, in order to be adequately prepared for the examination.

For a major in ancient history, one of the three preparations for honors, as for the major itself, must be a Greek or Latin seminar; the other two will both normally be course-plus-attachment (this differs from the requirements for the major itself). Students minoring in ancient history will take three courses in ancient history and add an attachment to one of them. That course-plus-attachment will be the preparation for the external exam. No ancient language is required for this minor.

Senior majors and minors in Greek or Latin will select one paper from each seminar to be sent to the external examiner for that seminar. The student is free to submit the paper with minor or major revisions or no revisions at all. The department suggests a word limit of 1,500 to 2,500 words as an appropriate guideline, although there are no absolute limits (except the college senior honor studies [SHS] limit of 4,000 words). Majors will, therefore, submit three such papers, and minors will submit one. SHS is not required for students whose honors preparation is a course with an attachment.

The portfolio sent to examiners will contain the seminar papers, together with syllabi and related materials, if any, from the instructors. A combination of (three-hour) written and oral exams will be the mode of external assessment for seminars. For course-plus-attachment, the exam will be just an oral.

GREEK

GREK 001-002. Intensive First-Year Greek

Students learn the basics of the language, begin reading major classical writers, and are introduced to the culture and thought of the Greeks. The course meets four times a week and carries 1.5 credits each semester. No assumption exists that students have studied Latin.

Students who start in the GREK 001-002 sequence must pass GREK 002 to receive credit for GREK 001.

Primary distribution course, humanities.

1.5 credits.

Year course 2002-2003. Asso.

GREK 010. Greek Prose Composition

Extensive translation of English into Greek. Meets one hour per week.

0.5 credit.

Not offered 2002-2003.

GREK 011. Intermediate Greek

The chief reading is usually a work of Plato. The course emphasizes both language skills and the discussion of literature and philosophy. Other readings may include selections from the Greek historians, orators, or tragedians (e.g., Euripides' Medea).

Primary distribution course, humanities. 1 credit.

Fall 2002. Ledbetter.

GREK 012. Homer

Selections from either the *Iliad* or the *Odyssey* are read in Greek; the remainder of the poem is read in translation.

Primary distribution course, humanities. 1 credit.

Spring 2003. Ledbetter.

GREK 013. Plato and Socrates

The course will focus on one or more dialogues of Plato and will examine Plato's use of the dialogue form both as a literary and a philosophical device. In addition, we will explore the question of the historic Socrates and his rela-

tionship to the culture of fifth-century Athens and the Sophistic movement in particular.

Prerequisite: GREK 011 or equivalent.

1 credit.

Not offered 2002-2003.

GREK 093. Directed Reading

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

1 credit.

LATIN

LATN 001-002. Intensive First-year Latin

Students learn the basics of the language, begin reading major classical writers, and are introduced to the culture and thought of the Romans. The course meets four times a week and carries 1.5 credits each semester.

Students who start in the LATN 001-002 sequence must pass LATN 002 to receive credit for LATN 001.

Primary distribution course, humanities.

1.5 credits.

Year course 2002-2003. Beck.

LATN 009. Latin Prose Composition

Extensive translation of English into Latin. Meets one hour per week.

0.5 credit.

Not offered 2002-2003.

LATN 011. Introduction to Roman Poetry

After a review of grammar, students read and discuss some of the major poets of the Golden Age of Roman literature (e.g., Catullus, Ovid, and Vergil). The course emphasizes both language skills and literary criticism, focusing on the special characteristics and concerns of Roman poetry. Normally taken after LATN 002 or three to four years of high school Latin.

Primary distribution course, humanities. 1 credit.

Fall 2002. Asso.

LATN 012. The Latin Novel

This course will consider the Roman novel and its relation to prose and verse satire. Texts will be studied both as products of Roman imperial society and as part of a broader literary tradition that extends from the ancient Greek novel down to Cervantes, Fielding, and Fellini. Readings in Latin will be drawn from the *Satyricon* of Petronius and Apuleius' *Metamorphoses*.

Prerequisite: LATN 011 or equivalent.

1 credit.

Spring 2003. Turpin.

LATN 013. Literature of the Augustan Age

Selected readings in the elegiac poets Propertius and Ovid. Topics will include tensions between the priorities of Augustus and the concerns of love elegists, the portrayal of the lover-poet and the mistress, and the genre of love elegy.

Prerequisite: LATN 011 or equivalent.

Primary distribution course, humanities. 1 credit.

Fall 2002. Beck.

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 equivalent.

Primary distribution course, humanities. 1 credit.

Not offered 2002-2003.

LATN 015. Latin Elegy

Selected readings in the Latin poetry of love and death. Authors may include Propertius, Tibullus, Sulpicia, and Ovid as well as some of the later elegists.

Prerequisite: LATN 011 or equivalent.

Primary distribution course, humanities. 1 credit.

Not offered 2002-2003.

LATN 016. Republican Prose: Cicero

Cicero stood at the political and cultural center of the late Roman Republic. Readings are chosen from his speeches, philosophical works, or letters. We examine his prose style, especially his use of rhetoric and invective as a means of persuasion. We also study his role in transmitting Greek culture to the Romans and by extension to ourselves.

Prerequisite: LATN 011 or equivalent.

1 credit.

Not offered 2002-2003.

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 equivalent.

Primary distribution course, humanities. 1 credit.

Not offered 2002-2003.

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.

1 credit.

Not offered 2002-2003.

LATN 020. Roman Literary Obsessions: Subversion, Extravagance, and Transgression

Violence, Civil War, and fratricide resonate in the Roman literary imagination. Readings from selected epic and dramatic poetry of the early empire will show that high ideals belong to a distant "Republican" past, while the Imperial present is born of gore, violence, bad sex, and extravagant consumption. Finally, 20th-century cinema will invite students to question what role stereotypes of ancient Rome play in American society nowadays.

Primary distribution course, humanities. 1 credit.

Spring 2003. Asso.

LATN 093. Directed Reading

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

1 credit.

ANCIENT HISTORY

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

CLAS 031. Greece and the Barbarians

This course studies the political and social history of Greece from the Mycenaean Age to the creation of the Athenian Empire of Pericles. Topics will include the Trojan War, the origins of hoplite warfare, the rise of the Greek city-state, and the ideal of personal freedom. Particular attention will be given to the connections between Greeks and non-Greeks and to the Greek perceptions of their "barbarian" neighbors. Readings include Homer, Hesiod, the lyric poets (including Sappho), and Herodotus.

Primary distribution course, social sciences.

1 credit.

Fall 2002. Turpin.

CLAS 032. The Roman Republic

This course studies Rome from its origins to the civil wars and the establishment of the principate of Augustus (753-27 B.C.). 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.

Primary distribution course, social sciences.

1 credit.

Not offered 2002-2003.

CLAS 042. Democratic Athens

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

Primary distribution course, social sciences.

1 credit.

Not offered 2002-2003.

CLAS 044. The Early Roman Empire

A detailed study of the political, economic, social, and cultural history of the Roman world from the fall of the Republic through the

Antonine Age (50 B.C.-A.D. 192). Ancient authors read include Petronius; Apuleius; Suetonius; and, above all, Tacitus.

Primary distribution course, social sciences.

1 credit.

Not offered 2002-2003.

CLAS 056. Pagans and Christians in the Roman Empire

This course considers the rise of Christianity and its encounter with the religions and the political institutions of the Roman Empire. It examines Christianity in the second and third centuries of the Common Era and its relationship with Judaism, Hellenistic philosophies, state cults and mystery religions, and concentrates on the various pagan responses to Christianity, from conversion to persecution. Ancient texts may include Apuleius, Lucian, Marcus Aurelius, Porphyry, Justin, Origen, Lactantius, Tertullian, and the *Acts of the Christian Martyrs*.

No prerequisite exists, though CLAS 044 (Early Roman Empire) and RELG 004 (New Testament and Early Christianity) provide useful background.

Primary distribution course, social sciences.

1 credit.

Spring 2003. Turpin.

CLAS 093. Directed Reading

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

1 credit.

LITERATURE IN TRANSLATION AND CLASSICAL ARCHAEOLOGY

CLAS 020. Plato

(Cross-listed as PHIL 020)

1 credit.

Not offered 2002-2003.

CLAS 033. Homer and Greek Tragedy

The two most popular types of literature among the ancient Greeks were epic and tragedy. This course studies the major works of both genres in detail through English translations. We place them into their cultural and performance contexts and discuss their exploration of such fundamental human issues as the relations between humans and divinity, individual and state, and men and women as well as their differing conceptions of the hero. Readings include the *Iliad* and *Odyssey* and plays by Aeschylus, Sophocles, and Euripides, no prior knowledge of which is assumed.

Primary distribution course, humanities. 1 credit.

Not offered 2002-2003.

CLAS 034. Women in Classical Literature

Helen, Penelope, Clytemnestra, Electra, Antigone, Deianira, Medea, Phaedra, Ariadne, and Dido—these Greek and Roman women, admirable or dangerous, are among the most complex literary creations of any period. This course concentrates on the representations of women in the epic poems and dramas of Greece and Rome, but it also explores the relation between such portrayals and the lives of actual women in those societies.

1 credit.

Not offered 2002-2003.

CLAS 036. Classical Mythology

The myths of the Greeks and Romans are central to the study of the ancient world and have had an enormous influence on subsequent literature and other arts. This course examines selected myths in the works of major authors of Greek and Latin literature, including Homer, Vergil, Ovid, Aeschylus, Sophocles, and Euripides as well as representations of mythological stories and characters in the visual arts. The course will also cover several modern theoretical approaches to the study of myth.

1 credit.

Fall 2002. Beck.

CLAS 052. Introduction to Greek Archaeology

This course traces the development of Greek civilization as documented by archaeology and includes data ranging from monumental art and architecture to coins and potsherds. A special emphasis is on such important sites as Knossos, Mycenae, Delphi, Olympia, and Athens.

Primary distribution course, humanities. 1 credit.

Not offered 2002-2003.

CLAS 060. Dante and the Classical Tradition

This course explores the ways in which Dante

and other 14th-century Italian authors reinterpreted the classical tradition to create revolutionary works of immense influence for later times. The entire *Divine Comedy* and possibly selections from Petrarch and Boccaccio are read in English.

1 credit.

Not offered 2002-2003.

CLAS 093. Directed Reading

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

1 credit.

SEMINARS

LATN 102. The Roman Emperors

This seminar explores Latin authors of the first and second centuries, with particular attention to their responses to the social and political structures of the period. Expressed attitudes toward the emperors range from adulation to spite, but the seminar concentrates on authors who fall somewhere in between, writing skeptically or subversively. Both prose writers (e.g., Tacitus, Suetonius, and Pliny) and poets (e.g., Lucan, Seneca, and Juvenal) may be included.

2 credits.

Not offered 2002-2003.

LATN 103. Latin Epic

This seminar usually focuses on Vergil's *Aeneid*, although it may include other major Latin epics.

2 credits.

Spring 2003. Asso.

LATN 104. Ovid

This seminar is devoted to the *Metamorphoses*, which is read against the background of Ovid's Roman and Greek literary predecessors.

2 credits.

Not offered 2002-2003.

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.). It focuses on the social and political crisis of the period as well as its connections with the artistic and philosophical achievements of the first great period of Latin literature. Authors may include Lucretius, Catullus, Caesar, Cicero, and Sallust.

2 credits.

Fall 2002. Turpin.

LATN 107. Horace

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

2 credits.

Not offered 2002-2003.

GREK 111. Greek Philosophers

This seminar is devoted mainly to the study of Plato, which is supplemented by study of the pre-Socratic philosophers and of Aristotle and the Hellenistic schools. The orientation of the seminar is primarily philosophical, although the literary merits of the Greek philosophers receive consideration.

2 credits.

Fall 2002. Ledbetter.

GREK 112. Greek Epic

This seminar studies either the entirety of Homer's *Odyssey* in Greek or most of the *Iliad*.

2 credits.

Spring 2003. Beck.

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.

2 credits.

Not offered 2002-2003.

GREK 114. Greek Drama

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

2 credits.

Not offered 2002-2003.

Cognitive Science

Coordinator: **FRANK H. DURGIN** (Psychology)

Committee: **David Harrison** (Linguistics)
Hugh M. Lacey (Philosophy)
Lisa Meeden (Computer Science)
Kathy Siwicki (Biology)
Janet C. Talvacchia (Mathematics and Statistics)

The concentration for the Class of '03 or minor for the Class of '03 and beyond in cognitive science has been developed to guide the programs of those who are interested in the interdisciplinary study of the mind, brain, and language, with an emphasis on formal structure and computation. The Cognitive Science Program is designed to emphasize guided breadth across various disciplines that contribute to cognitive science as well as depth within a chosen discipline. The requirements for the concentration are identical to those for the minor, and the word *concentration* (or *concentrate*) may be substituted for minor throughout the following for the Class of '03.

A student may have many reasons for deciding to minor in cognitive science. Perhaps the simplest is to indicate and explore a particular interest in cognitive science. Whatever your major, a minor in cognitive science indicates a kind of specialized interest and developing expertise. It is our hope that this interest will be integrated with your major area of study, and we hope to help you formulate a plan of studies that sensibly achieves the requirements of the minor.

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

REQUIREMENTS AND RECOMMENDATIONS

Minor

Eight credits are required for the minor. One of these is a required introductory course, one is a capstone thesis, and the remaining six are to be distributed across three different disciplines as described subsequently. Because several of these credits may also count toward the student's major field, only 5 credits need be earned outside the major in many cases.

In addition to fulfilling these breadth requirements, students must indicate one cognitive science field in which they have substantial depth of preparation. Such depth can be documented by completion of at least four courses from within a cognitive science discipline (even if some of those courses are not directly related to cognitive science). Alternative curricular and extracurricular ways of fulfilling the depth requirement may be discussed with the coordinator.

All minors must normally take Introduction to Cognitive Science.

Honors Minor

To complete an honors minor in cognitive science, students must complete all requirements listed earlier. 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.

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: What does it mean to think or to have consciousness? Can a computer have a mind? What does it mean to have a concept? What is language? What kinds of explanations are necessary to explain cognition?

1 credit.

Spring 2002. Harrison.

In addition, all minors must normally complete a 1-credit thesis in cognitive science in their senior year. This credit may either overlap with (be embedded within) a thesis in the major department, or it may be independent (COGS 090). In either case, non-honors theses in cognitive science will normally be examined by Cognitive Science Committee members from within at least two different departments to fulfill this requirement.

COGS 090. Senior Thesis

The remaining 6 required credits are to be distributed equally among three different disciplines of cognitive science. That is, 2 credits of listed courses from each of three of the six disciplines must be completed. 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. There are many more courses taught on campus that are closely relevant to cognitive science. This list is subject to periodic re-evaluation.

Computer Science/Computer Engineering

CPSC 022. Structure and Interpretation of Computer Programs

ENGR 027/CPSC 027. Computer Vision

CPSC 063. Artificial Intelligence

ENGR 028/CPSC 081. Robotics

CPSC 128/PSYC 128. Computational Models of Learning

Linguistics

LING 040/108. Semantics

LING 043/106. Morphology and the Lexicon

LING 045/105. Phonetics and Phonology

LING 050/109. Syntax

Mathematics and Statistics

The subareas of mathematics and their eligible seminars and courses are the following:

Algebra: MATH 037, 048, 049, and 102

Analysis: MATH 030, 047, 081, 085, 101, and 103

Discrete Mathematics: MATH 009, 046, 065, and 072

Geometry: MATH 045 and 106

Statistics: STAT 002, 002C, 027, and 053; MATH 105 and STAT 111

Topology: MATH 010

Neuroscience

BIOL 022. Neurobiology

PSYC 030. Physiological Psychology

PSYC 130. Physiological Seminar

BIOL 123. Learning and Memory

Philosophy

PHIL 012. Logic (Eldridge or Lacey)

PHIL 024/113. Theory of Knowledge

PHIL 026/116. Language and Meaning

PHIL 086. Philosophy of Mind and Psychology

PHIL 118. Philosophy of Psychology

Psychology

PSYC 032/132. Perception

PSYC 033/133. Cognitive Psychology

PSYC 034/134. Psychology of Language/Psycholinguistics

PSYC 039. Developmental Psychology

PSYC 043. Evolutionary Psychology

Comparative Literature

Coordinator: **CAROLYN LESJAK** (English Literature)

Committee: **Alan Berkowitz** (Chinese-Modern Languages and Literatures)
Jean-Vincent Blanchard (French-Modern Languages and Literatures)
Elizabeth Bolton (English Literature)
Aurora Camacho de Schmidt (Spanish-Modern Languages and Literatures)
Edmund Campos (English Literature)
Marion Faber (German-Modern Languages and Literatures)
Sibelan Forrester (Russian-Modern Languages and Literatures)
George Moskos (French-Modern Languages and Literatures)[11]
Rosaria Munson (Classics)[3]
Philip Weinstein (English Literature)[3]
Hansjakob Werlen (German-Modern Languages and Literatures)

3 Absent on leave, 2002-2003.

11 Program director, Swarthmore Program in Grenoble, fall 2002.

The comparative literature major is administered by a Comparative Literature Committee made up of the coordinator and faculty representing the Classics, English Literature, and Modern Languages and Literatures 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 are interested in literary critical research. Not for everyone, this major assumes a fair degree of discipline, independence, and self-motivation on the part of the student, especially in the development and writing of the thesis.

In planning a comparative literature major, students should look at course listings in the Classics, English, and Modern Languages and Literatures departments. Of courses in the Classics and Modern Languages and Literatures departments, only courses in the original language numbered 011 or above are counted as constituents of the comparative literature major. Of English courses numbered 005A-X, only one may be counted for the major.

Students applying for the major will submit to the comparative literature coordinator a proposal of integrated study that sets forth the courses and/or seminars to be taken and the principle of coherence on which the program of study is based. The student will also submit a six- to 10-page writing sample from a previously completed course. The committee will review the proposal and the essay and advise the student.

Note: In lieu of a regular course, the Comparative Literature Committee will consider proposals for one or more research papers written as course attachments as well as proposals to substitute an extended research paper for course credit.

REQUIREMENTS AND RECOMMENDATIONS

Major in Course

1. *Ten credits in two or more literatures in the original languages*, including a substantial concentration of work—normally four or five courses—in each of the literatures. The thesis (described later) does not count toward these 10 credits.

   Students working entirely in languages other than English may propose one course in translation as a part of their program, as long as it is deeply relevant to their plan of study. Students working in English and any language other than Chinese must do all of their work in the original languages. Because of the special demands of Chinese language and literature, students working in

Chinese may propose a program based on attachments (in Chinese) to literature courses taught in translation.

2. A *1- or 2-credit thesis* of 50 to 60 pages, covering work in at least two languages, planned in the spring of the junior year and submitted in the spring of the senior year, no later than April 30.

   Before the end of the junior year, the student will submit to the committee an outline for the thesis and propose faculty advisers from appropriate departments. In some cases, the committee may ask that the thesis be written in whole or in part in the language of a literature studied other than English.

3. *An oral comprehensive examination*, 1 to 1.5 hours in length, at the end of the senior year, based on the thesis and on the courses and seminars comprising the major.

Major or Minor in the Honors Program

Major

Four 2-credit preparations in at least two literatures in the original language, one of which is a thesis. One of the preparations may be used as an independent minor (in Russian or German studies, for instance) if the minor's departmental requirements have been met. Minors requiring unrelated preparations such as biology or psychology are not allowed. All four honors preparations are necessary components of the comparative literature honors major.

Minor

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

Prerequisite for Admission into the Honors Program

Successful completion of an advanced course in literature in each of the literatures of the student's program of study. A minimum grade of a B is required.

Mode of Examination

For each preparation, a three-hour written examination prepared by the external examiner and a 30-minute oral based on the contents of the written examination.

Procedures for All Majors

All majors will meet with members of the Comparative Literature Committee before the end of the junior year to review and assess the student's program. At this time, both course and honors majors will submit thesis proposals and propose faculty advisers.

The courses and seminars that compose the comparative literature major's formal field of study will naturally differ with each major. To give some sense of the range of possibilities available, a series of sample programs are offered.

SAMPLE: COMPARATIVE LITERATURE COURSE MAJOR

Focus: The Black Atlantic

Courses

ENGL 005R. Fictions of Identity

FREN 012L. Introduction à l'analyse litteraire

ENGL 054. Faulkner, Morrison, and the Representation of Race

FREN 025. Centers and Peripheries in the Francophone World

ENGL 059. The Harlem Renaissance

FREN 077. Prose Francophone: littérature et société

ENGL 078. Black African Writer

FREN 110. Écritures françaises hors de France (Caribbean)

ENGL 086. Postcolonial Theory and Literature

1-credit thesis.

SAMPLE: COMPARATIVE LITERATURE HONORS MAJORS

Focus: Modernism

Courses

GERM 013. Introduction to German Literature

GERM 052. The Body Machine: Deconstructing the Body Politic in Postwar German Drama

ENGL 045. Modern British Poetry

ENGL 053. American Poetry

Seminars

ENGL 115. Modern Comparative Literature

ENGL 121. The Harlem Renaissance and the Jazz Age

GERM 109. Rise of the Modern German Novel

2-credit thesis.

SAMPLE: COMPARATIVE LITERATURE HONORS MINOR

Background Courses

GERM 013. Introduction to German Literature

GERM 091. Rethinking Representation (plus attachment in German)

SPAN 013. Introduction to Spanish American Literature

SPAN 070. Rebeldía y renovación artística: la generación de 98

2-credit thesis: Kant's influence on Hölderlin and Pio Baroja

Computer Science

CHARLES F. KELEMEN, Professor and Chair
LISA MEEDEN, Associate Professor
TIA NEWHALL, Assistant Professor[3]
RICHARD WICENTOWSKI, Assistant Professor
ALI ERKAN, Visiting Instructor
JEFFREY KNERR, System Administrator
BRIDGET ROTHERA, Administrative Assistant

3 Absent on leave 2002-2003.

Computer science is the study of algorithms and their implementation issues. 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 Program 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 the 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. Three entry points to the computer science curriculum are available at Swarthmore.

CPSC 010: Great Ideas in Computer Science is designed for freshmen with little or no computer science experience. It is an introduction that emphasizes breadth of coverage over depth or skill building. This course is most appropriate for first- or second-year students who lack confidence in their computer science abilities.

CPSC 021: The Imperative Paradigm: UNIX and C falls between CPSC 010 and CPSC 022 in pace. No previous experience with computers is necessary. CPSC 021 will introduce fundamental ideas in computer science while building skill in software development. This course is appropriate for all students who want to write programs and are comfortable with computers. This course is usually the first one 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 022: Structure and Interpretation of Computer Programs is designed for students who plan to take several courses in computer science. This course is a fast-paced introduction to the kind of abstraction used in all areas of computer science. A dialect of LISP will be used. This course is the best first selection for students who intend to be computer science majors or minors *and* are fluent in a language like C *and* feel comfortable about their abilities.

Students or advisers who want more advice on placement in computer science courses should feel free to contact any computer science faculty member by phone or in person.

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 both CPSC 022 and CPSC 035 sometime in their first three semesters at Swarthmore. The minor in computer science is designed for students who desire a coherent introduction to the core topics in the field but cannot afford the number of courses required of a major. Students completing the minor will possess intellectual skills that are useful in many disciplines.

Students electing to do a course major or minor in computer science must have a grade-point average of B or better in CPSC 021 (if exempted from CPSC 021, then replace it with another computer science course other than CPSC 010), CPSC 022, and CPSC 035.

Computer Science

REQUIREMENTS AND RECOMMENDATIONS

Majors

The following are requirements for a major in computer science:

A. Two mathematics courses numbered above 008 (MATH 009 and MATH 016 recommended).

B. Each of CPSC 021, CPSC 022, CPSC 025, CPSC 035, CPSC 046, and CPSC 097.

C. Three of CPSC 024, CPSC 027, CPSC 040, CPSC 041, CPSC 043, CPSC 044, CPSC 045, CPSC 063, CPSC 075, CPSC 081, CPSC 129, and CPSC 140.

Minors

The requirements for a minor in computer science consist of the following:

A. One mathematics course numbered above 008 (MATH 009 recommended).

B. Each of CPSC 021, CPSC 022, CPSC 025, and CPSC 035.

C. Either CPSC 041 or CPSC 046.

D. One of the following (must be different than choice in part C): CPSC 024, CPSC 027, CPSC 040, CPSC 041, CPSC 043, CPSC 044, CPSC 045, CPSC 046, CPSC 063, CPSC 075, CPSC 081, CPSC 129, or CPSC 140.

Joint Special Majors

Students who want to integrate computer science with another discipline in a more formal manner may develop a special major combining the two areas of study. Such special majors require the approval of computer science and the other department. Special majors should be designed in consultation with the chair of the Computer Science Department as early possible in the student's program. Approval of a special major is not guaranteed. It will depend on the availability of resources (both faculty and equipment) and the student's demonstrated ability to work independently.

Honors Program

Honors majors and minors in computer science are available.

Honors Major

An honors major in computer science will consist of two 2-credit preparations, one 2-credit research report or thesis, senior honors study, and a minor preparation.

The following will be submitted to external examiners for evaluation:

1. Two 2-credit preparations to be selected from the combinations of courses listed later. Each of these 2-credit preparations will be examined by a three-hour written exam and an oral exam.

   The two 2-credit preparations must include four distinct courses. In certain circumstances, the Computer Science Department may be willing to consider other groupings of courses, seminars, or courses with attachments. If the required courses and preparations would not satisfy a course major, additional computer science courses must be taken to meet course major requirements. In all cases, the Computer Science Department must approve the student's plan of study.

2. One 2-credit research report or thesis to be read by an external examiner and an oral examination.

   At a minimum, this will involve a review of scholarly papers from the primary literature of computer science and the writing of a scholarly, scientific paper. We hope 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 expected that the paper will be completed by the end of the fall semester.

To be eligible for an honors major in computer science students must:

1. Have a B+ average in all computer science courses completed by the end of junior year. These must include CPSC 021, CPSC 022, CPSC 035, and at least one of CPSC 025 or CPSC 046.

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:

   a. Passed MATH 009 and MATH 016 with

APPROVED PREPARATIONS

The following are the approved preparations for part A. These may not all be available to all students because of the faculty's schedules.

Preparation	Course Combination
Algorithms	CPSC 041. Algorithms MATH 072. Combinatorial Optimization
Algorithms and Theory	CPSC 041. Algorithms CPSC 046. Theory of Computation
Intelligent Systems	CPSC 081. Robotics CPSC 063. Artificial Intelligence
Compiler Design and Theory	CPSC 046. Theory of Computation CPSC 075. Compiler Design and Construction
Computer Architecture	CPSC 024. Fundamental of Digital System CPSC 025. Computer Architecture
Programming Languages	CPSC 043. Programming Languages CPSC 075. Compiler Design and Construction
Perception and Action Systems	CPSC 027. Computer Vision CPSC 081. Robotics
Systems	CPSC 025. Computer Architecture CPSC 045. Operating Systems
Visual Information Systems	CPSC 027. Computer Vision CPSC 040. Computer Graphics
Graphics	CPSC 040. Computer Graphics CPSC 140. Advanced Computer Graphics
Natural Language Models	CPSC 063. Artificial Intelligence CPSC 129. Computational Models of Language

a grade of B+ or better or

b. Passed MATH 016H with a grade of B or better or

c. Completed MATH 047 or MATH 049 with a grade of B- or better.

3. Complete by the end of the senior year both CPSC 025 and CPSC 046 as well as CPSC 180 (Thesis) and CPSC 199 (senior honors study, which will consist of full participation in CPSC 097, senior conference, with course students in the spring semester of the senior year).

Honors Minor

One 2-credit preparation to be selected from combinations of courses listed earlier. An examiner will set both a three-hour written exam and an oral exam for the preparation.

To be eligible for an honors minor in computer science a student must:

1. Have a B+ average in all computer science courses completed by the end of junior year. These must include CPSC 021, CPSC 022, CPSC 035, and at least one of the CPSC 025 or CPSC 046.
2. Have demonstrated some proficiency in mathematical argument and reasoning by the end of the junior year. Ordinarily, this proficiency will be assumed if the student has completed the following:
   a. Passed MATH 009 or MATH 016 with a grade of B or better; or
   b. Passed MATH 016H or MATH 047 or MATH 049 with a grade of B- or better.

STUDY ABROAD

Students planning to major or minor in computer science may opt to study abroad for one semester or a whole year. Because advanced courses in computer science are offered in only

alternate years, some selections will be unavailable to some students. The chair of the Computer Science Department should approve all courses of study abroad. The department will credit appropriate courses based on evidence presented by the student when they return to Swarthmore.

GRADUATE STUDY

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 they take the necessary mathematics and computing courses for graduate work in computer science.

COMPUTER SCIENCE COURSES

CPSC 010. Great Ideas in Computer Science

This course will introduce a number of fundamental ideas in computer science. The course will cover such topics as history, applications, the basic design of a digital computer, the programming process, theory of computability, artificial intelligence, and the social implications of computing. Students will contribute to and modify the emphasis of the course by writing and presenting papers in the last third of the semester. No previous experience with computers or computing will be assumed, and programming will not be emphasized in this course. Much of the course material will be covered in the laboratory, in addition to the lecture/discussion sessions. Lab work is required. The course is designed for freshmen, and they will be given enrollment preference. Prerequisite: None. Not open to students with college-level computer science credit.

Primary distribution course. 1 credit.

Each semester. Staff.

CPSC 021. The Imperative Paradigm: Unix and C

This course introduces students to the fundamental aspects of the computing field and will focus on problem solving, software design concepts, and their realization as imperative programs run on the Unix operating system. An introduction to the Unix operating system and the C programming language for the purpose of gaining mastery of these principles will be provided. Topics to be covered include Von Neumann architecture, operating system overview, Unix, C programming, control structures, arrays, procedural abstraction, pointers, iteration, recursion, sorting, data types and their representation, elementary data structures, Lists, Stacks, Queues, informal analysis of algorithms, elementary Unix tools (such as grep, sort, tr), and introduction to shell scripts.

Lab work required. Prerequisites: None.

Primary distribution course. 1 credit.

Each semester. Staff.

CPSC 022. Structure and Interpretation of Computer Programs

This course is a serious introduction to the study of computer programs and some central ideas in computer science. Students will learn how to generate precise specifications from vaguely formulated and perhaps partially understood descriptions by studying programs that make repeated and deep use of abstraction. This skill is essential in writing computer programs and will be useful in all intellectual endeavors. Topics to be covered include programming idioms and paradigms (functional and object oriented); recursion; abstract data structures (lists, queues, trees, and sets); information retrieval; binding and scope; and interpreters.

Lab work required. Prerequisite: Comfort with your computing abilities.

Primary distribution course. 1 credit.

Each semester. Staff.

CPSC 024. Fundamentals of Digital Systems

(Cross-listed as ENGR 024)

Digital and continuous systems are fundamentally different. This course will introduce students to digital system theory and design techniques, including Boolean logic, digital representations of data, and techniques for the design of combinational and sequential digital circuits. Because moving information between systems is critical to real-world applications, the course will include interfaces between digital systems and between digital and continuous systems. In addition, the course will cover selected topics in numerical analysis and applied mathematics that are relevant to modern engineering and computer science.

Offered in the fall semester every year. Prerequisites are CPSC 021 or

ENGR 011 (co-requisite).

1 credit.

Spring 2003. Maxwell.

CPSC 025. Principles of Computer Architecture

(Cross-listed as ENGR 025)

This course covers the physical and logical design of a computer. Topics include current microprocessors, CPU design, RISC and CISC concepts, pipelining, superscalar processing, cache, paging, segmentation, virtual memory, parallel architectures, bus protocols, and I/O devices. Labs cover analysis of current systems and microprocessor design using CAD tools, including VHDL.

Prerequisites: CPSC 021, or CPSC 024/ENGR 024, or permission of the instructor. A course beyond CPSC 21 is strongly recommended.

1 credit.

Offered every spring semester. Maxwell.

CPSC 027. Computer Vision

(Cross-listed as ENGR 027)

This course studies how computers can analyze and perceive the world using input from imaging devices. Topics include line and region extraction, stereovision, motion analysis, color and reflection models, and object representation and recognition. The course will focus on object recognition and detection, introducing the tools of computer vision in support of building an automatic object recognition, and classification system. Labs will involve implementing both off-line and real-time object recognition and classification systems.

Prerequisites: ENGR 012, CPSC 021, or permission of the instructor. Mathematics background at the level of MATH 016 or MATH 018 is strongly recommended.

1 credit.

Next offered fall 2003. Maxwell.

CPSC 035. Algorithms and Object-Oriented Computing

This course completes the broad introduction to computer science begun in CPSC 021 and CPSC 022. It provides a general background for further study in the field. Topics to be covered include object-oriented programming in Java; advanced data structures (priority queues, trees, hash tables, graphs, etc.); and algorithms, software design, and verification. Students will be expected to complete a number of programming projects illustrating the concepts presented.

Lab work required. Prerequisites: CPSC 021 or permission of the instructor. MATH 009 strongly recommended.

1 credit.

Each semester. Staff.

CPSC 040. Computer Graphics

(Cross-listed as ENGR 026)

Computer graphics deals with the manipulation and creation of digital imagery. We will cover drawing algorithms for two-dimensional (2-D) graphics primitives, 2-D and three-dimensional (3-D) matrix transformations, projective geometry, 2-D and 3-D model representations, clipping, hidden surface removal, rendering, hierarchical modeling, shading and lighting models, shadow generation, special effects, fractals and chaotic systems, and animation techniques. Labs will focus on the implementation of a 3-D hierarchical modeling system that incorporates realistic lighting models and fast hidden surface removal.

Lab work required. Prerequisites: ENGR 012, CPSC 021, or permission of the instructor. Mathematics background at the level of MATH 005/006 and MATH 016 is strongly recommended.

1 credit.

Fall 2002. Maxwell.

Computer Science

CPSC 041. Algorithms

The study of algorithms is useful in many diverse areas. Time and space resources are required, and considerable attention is devoted to accuracy. Topics to be 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.

Lab work required. Prerequisites: CPSC 022 and CPSC 035.

1 credit.

Fall 2002. Kelemen.

CPSC 043. Foundations of Programming Language Design

A study of the organization and structure of modern programming languages with an emphasis on semantic issues. Topics include specifying syntax and semantics, conventional and abstract data types, control structures, procedural languages, functional languages, object-oriented languages, other classes of languages, program correctness, concurrency and synchronization, language design and evaluation, and implementation issues.

Lab work required. Prerequisites: CPSC 022 and CPSC 035.

1 credit.

Fall 2002. Wicentowski.

CPSC 044. Relational 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.

Lab work required. Prerequisite: CPSC 035.

1 credit.

Next offered fall 2003. Newhall.

CPSC 045. Operating Systems Concepts

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.

Lab work required. Prerequisite: CPSC 035. CPSC 025 recommended.

1 credit.

Fall 2003. Newhall.

CPSC 046. Theory of Computation

The study of various models of computation leading to a characterization of the kinds of problems that can and cannot be solved by a computer. Solvable problems will be classified with respect to their degree of difficulty. Topics to be covered include formal languages and finite state devices, Turing machines and other models of computation, computability, and complexity.

Prerequisite: CPSC 035.

1 credit.

Spring 2003. Kelemen.

CPSC 063. Artificial Intelligence

The concept of an intelligent agent is the unifying theme of this course. Based on this perspective, the problem of artificial intelligence is seen as describing and building agents that receive perceptions from an environment and then performing the appropriate actions. This course will examine many different methods for implementing this mapping, from perceptions to actions including production systems, reactive planners, logical planners, and neural networks. We will use robots to explore these methods.

Lab work required. Prerequisites: CPSC 022 and CPSC 035.

1 credit.

Fall 2002. Meeden.

CPSC 075. Principles of Compiler Design and Construction

This course presents an introduction to the de-

sign and construction of language translators for imperative, procedure-oriented programming languages. Topics covered include formal grammars, lexical analysis and finite automata, syntax analysis and pushdown automata, LL and LR parsing, semantic analysis and table handling, error detection and recovery, code generation and optimization, compiler writing tools.

Lab work required. Prerequisite: CPSC 035.

1 credit.

Spring 2004. Staff.

CPSC 081. Robotics

This course addresses the problem of controlling robots that will operate in dynamic, unpredictable environments. 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 a laboratory session. In lecture/discussion sessions, students will examine the major paradigms of robot control through readings with an emphasis on adaptive approaches.

Lab work required. Prerequisite: CPSC 035 or permission of the instructor.

1 credit.

Spring 2003. Meeden.

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 only offered when staff interests and availability make it practicable to do so.

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. Recent topics have been networking (2001 and 2002); evolutionary computation (1998 and 1999); complexity, encryption, and compression (1996); and parallel processing (1995). CPSC 097 is the usual method used to satisfy the comprehensive requirement for a computer science major and the senior honors study requirement for a computer science honors major.

Spring semester. Staff.

CPSC 129. Computational Models of Language

Language is among the most complex and robust of all human cognitive capacities. One way to better understand this capacity is by using computers to model it. In this course, we'll examine various attempts to model language using connectionist (neural network) architectures as well as efforts to build computer systems that can understand the natural language produced by users. This course includes a laboratory component in which hands-on experiments with various architectures will be conducted.

Prerequisite: CPSC 035, PSYC 028, or permission of the instructor.

1 credit.

Offered when staffing permits. Meeden, Kako.

CPSC 140. Advanced Computer Graphics

(Cross-listed as ENGR 126)

This course takes an in-depth look at a series of current topics in computer graphics, determined, in part, by student interests. Topics can include shading models, radiosity, ray tracing, image-based rendering, modeling, texture, animation, physically based modeling, hybrid computer vision and graphics techniques, non–photo-realistic rendering, and special effects. The course is taught as a seminar, and meetings revolve around computer graphics papers from technical proceedings, such as ACM SIGGRAPH, and other computer graphics journals. Students will be responsible for reading and preparing presentations of papers. In addition, there will be several significant projects where students implement computer graphics programs based on the papers and topics covered in the course.

Prerequisite: CPSC 040/ENGR 026.

1 credit.

Offered when staffing permits. Maxwell.

CPSC 180. Thesis

CPSC 199. Senior Honors Study

Economics

JOHN P. CASKEY, Professor
STEPHEN S. GOLUB, Professor[3]
ROBINSON G. HOLLISTER JR., Professor
MARK KUPERBERG, Professor and Chair
ELLEN B. MAGENHEIM, Professor
STEPHEN A. O'CONNELL, Professor[3]
BERNARD SAFFRAN, Professor
LARRY E. WESTPHAL, Professor
AMANDA BAYER, Associate Professor
PHILIP N. JEFFERSON, Associate Professor
THOMAS S. DEE, Assistant Professor[3]
CHARLES F. STONE III, Visiting Professor (part time)
PEGGY dePROPHETIS, Visiting Associate Professor (part time)
NANCY CARROLL, Administrative Assistant

3 Absent on leave, 2002-2003.

Economics is the study of how scarce resources are allocated and the implications of such allocations. Because scarcity is a fundamental fact of social life, an understanding of economics is relevant for private and public decision making. Most courses in the department address the questions of how resources are actually allocated in real economies and how they should be ideally allocated. "Should" is a complex word and encompasses considerations of economic efficiency and distributional equity. Economics does not provide definitive answers to these questions, but it does give the student the tools needed to formulate and evaluate such answers.

ECON 001 *or its equivalent is a prerequisite for all other work in the department.* In addition, all majors in economics must take the three core courses: ECON 011 (Intermediate Microeconomics), ECON 021 (Intermediate Macroeconomics), and ECON 031 (Statistics for Economists). Students may substitute STAT 053 for Econ 031 (STAT 001 or STAT 002 do not meet the requirement). The statistics course in the Economics Department focuses more on the application of statistical tools to economic problems. The statistics courses in the Mathematics and Statistics Department focus more on the derivation of the mathematical and statistical properties of various estimators.

A knowledge of elementary calculus is extremely useful to read economics literature critically. The department strongly recommends that students take MATH 005 and either MATH 006A and 006C (basic calculus) or the series of MATH 006A, 006B, and MATH 018. MATH 016 (Linear Algebra) and MATH 018 (Several Variable Calculus) are valuable for those who intend to focus on the more technical aspects of economics. Students who plan to attend graduate school in economics should give serious thought to taking additional mathematics courses such as MATH 030 (Differential Equations) and MATH 047 (Introduction to Real Analysis).

To graduate as majors, students must have at least 8 credits in economics; have taken the three core courses; and, in their senior year, pass the comprehensive examination given early in the spring semester (course students) or the honors examinations given at the end of the spring semester (honors students). To be prepared for the comprehensive examination, course students are very strongly advised to complete ECON 011, ECON 021, and ECON 031 (or its equivalent) before the second semester of their senior year.

Students who are contemplating a major in economics should consult *Economics at Swarthmore: Department Handbook* (available in the department office) for additional infor-

mation regarding the details of the program.

Economics majors can complete the requirements for teacher certification through a program approved by the state of Pennsylvania. Because of a change in teacher certification regulations that occurred in November 2000, students completing certification through 2003 will fulfill the requirements for social studies certification, and those who complete certification in 2004 and beyond will complete the requirements for citizenship education. For further information about the relevant set of requirements, please contact the Educational Studies Department chair, the Economics Department chair, or the Educational Studies Department Web site: www.swarthmore.edu/SocSci/Education.

The Economics Department does not offer a minor in economics except in the Honors Program.

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.

Primary distribution course. 1 credit.

Fall 2002 and spring 2003. Staff.

ECON 003. The World According to Economics

This course explores the economic content of subjects addressed by other disciplines throughout the College from an economic perspective. Topics include pollution, the use of nonrenewable resources and economic growth, international trade and underdeveloped countries, and markets and social and moral development.

1 credit.

Not offered 2002-2003.

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. This course may be counted toward a concentration in public policy.

Prerequisites: ECON 001 and any statistics course (or the consent of the instructor); EDUC 014 is strongly recommended.

1 credit.

Fall 2002. Kuperberg.

ECON 010. Current Issues in Economic Policy

Examines current microeconomic and macroeconomic policy issues. Topics vary year to year, depending on developments in the economy. Recent topics have included flagging economy-wide performance, health care, tax reform, and personal finance. The class is formatted like a seminar. Reading material includes the economic and financial pages of current periodicals, reports of think tanks, and other current literature.

1 credit.

Fall 2002. Saffran.

ECON 011. Intermediate Microeconomics

Provides a thorough grounding in intermediate-level 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 to facilitate the learning of theory and see practical applications.

1 credit.

Fall 2002. Westphal.

Economics

ECON 012. Games and Strategies

How should you bargain for a used car or mediate a contentious dispute? This course is an introduction to the study of strategic behavior and the field of game theory. We analyze situations of interactive decision making in which the participants attempt to predict and to influence the actions of others. We use examples from economics, business, biology, politics, sports, and everyday life. This course may be counted toward a concentration in peace and conflict studies.

1 credit.

Fall 2002. Bayer.

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.

1 credit.

Spring 2003. Kuperberg.

ECON 022. Banking and Financial Markets

This course examines the economics of financial institutions and markets. Among the topics considered are (1) economic explanations for the existence and operations of banks; (2) the regulation of financial institutions and markets; and (3) theories of stock, bond, futures, and option prices.

1 credit.

Fall 2002. Caskey.

ECON 031. Statistics for Economists

The focus of this course is on understanding how simple and multiple regression can be used to estimate economic relationships (e.g., price or interest elasticities, returns to assets, or education) and test their statistical significance. Problems and estimation with real data sets will be stressed. Majors may satisfy the department's statistics requirement by taking STAT 053 instead.

1 credit.

Fall 2002 and spring 2003. Hollister.

ECON 032. Operations Research

(Cross-listed as ENGR 057)

This course highlights the principles of operations research as applied in defining optimal solutions to engineering and economic problems to assist decision making. The working principles of engineering economics are introduced in conjunction with operations research topics. Normally for junior and senior students.

Prerequisites: Elementary linear algebra and high school algebra.

Primary distribution course, natural sciences only and only if enrolled for ENGR 057.

1 credit.

Fall 2002. McGarity.

ECON 033. Accounting

This course surveys financial and managerial accounting. The concepts and methods of financial accounting following generally accepted accounting principles and the effects of alternative principles on the measurement of periodic income and financial status are covered. Recent changes in accounting methods such as those stimulated by manufacturing advances are examined, as are concerns about ethical standards. (This course cannot be used to satisfy the College's distribution requirements.)

1 credit.

Spring 2003. deProphetis.

ECON 035. Econometrics

Quantitative methods used in estimating economic models and testing economic theories are studied. Students learn to use statistical packages to apply these methods to problems in business, economics, and public policy.

Prerequisite: ECON 031 or STAT 053.

1 credit.

Fall 2002. Jefferson.

ECON 041. Public Finance

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. This course may be counted toward a concentration in public policy.

Recommended: ECON 011.

1 credit.

Spring 2003. Saffran.

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. This course may be counted toward a concentration in public policy.

Recommended: ECON 011.

1 credit.

Not offered 2002-2003.

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.

1 credit.

Spring 2003. Caskey.

ECON 051. The International Economy

This course surveys the theory of trade (microeconomics) and of the balance of payments and exchange rates (macroeconomics). The theories are used to analyze topics such as trade patterns, trade barriers, flows of labor and capital, exchange-rate fluctuations, the international monetary system, and macroeconomic interdependence. This course may be counted toward a concentration in public policy.

Prerequisite: ECON 011 or ECON 021; both recommended.

1 credit.

Fall 2002. Stone.

ECON 053. International Political Economy

(Cross-listed as POLS 068)

This course uses political and economic perspectives to analyze the international economy. Topics include the rise and decline of hegemonic powers, the controversy over "free" versus "fair" trade under the World Trade Organization, foreign debt and default, the role of the state in economic development, international financial markets, and the history of the international monetary system.

Prerequisite: POLS 004 and ECON 001.

1 credit.

Not offered 2002-2003.

ECON 061. Industrial Organization

This course examines why firms and markets are organized as they are and how their organization affects the way they operate. Topics include the relationship between market structure and firm behavior; particular aspects of firm behavior—pricing, advertising, and collusion; and the effects of regulation. This course may be counted toward a concentration in public policy.

Prerequisite: ECON 011.

1 credit.

Not offered 2002-2003.

ECON 073. Race, Ethnicity, and Gender in Economics

This course focuses on the roles of gender, ethnicity, and race in economic systems. Topics include the economic status of women and of various racial and ethnic groups; sources of inequality, including wage and job discrimination; public policy issues (e.g., comparable worth, affirmative action, child care, and welfare reform); and bias in economic theory and policy. This course may be counted toward concentrations in public policy, women's studies, and black studies.

1 credit.

Spring 2003. Bayer.

ECON 075. Health Economics

Topics addressed in this course include the economics of health care demand and supply, the changing organization of health care delivery, demographic change and demands on the health care system, problems of access to health care services, economic analysis of standard and new medical treatments, supply and demand for doctors and nurses, government financing and regulation, health insurance, and comparative analysis of health care systems in different countries. This course may be counted toward a concentration in public policy.

1 credit.

Spring 2003. Magenheim.

ECON 076. Environmental Economics

Introduction to basic concepts and methods used in evaluating environmental benefits and costs and in assessing mechanisms for allocating environmental resources among present and future uses, with due attention to seemingly noneconomic concerns. Specific topics include pollution and environmental degradation; use of exhaustible and renewable resources; management of air, water, and energy resources; sustainable economic growth; and international resource management. This course may be counted toward concentrations in environmental studies and public policy.

Recommended: ECON 011.

1 credit.

Spring 2003. Westphal.

ECON 081. Economic Development

A survey covering the principal theories of economic development and the dominant issues of public policy. Within a perspective that emphasizes choice and transfer of technology as well as technological development, emphasis is given to agricultural and industrial development, to interactions among sectors, and to international trade and capital flows (including foreign aid). This course may be counted toward a concentration in public policy or peace and conflict studies as well as programs in black studies and Asian studies.

1 credit.

Not offered 2002-2003.

ECON 082. Political Economy of Africa

A survey of the economic development experience in Sub-Saharan Africa, focusing on the postindependence period. We study policy choices in their political and institutional context, using case study evidence and the analytical tools of positive political economy. Topics of current interest include the economic role of the state, risk management by firms and households, devaluation in the CFA zone, and international financial flows. This course may be counted toward concentrations in peace and conflict studies, black studies, or public policy.

1 credit.

Not offered 2002-2003.

ECON 083. Asian Economies

Examines economic development and current economic structure, along with major policy issues (domestic, plus vis-à-vis the United States), in some of the principal economies of Asia, focusing on those in East Asia but including at least one South Asian country as well. This course may be counted toward a concentration in public policy as well as a program in Asian studies.

1 credit.

Not offered 2002-2003.

ECON 099. Directed Reading

With consent of a supervising instructor, individual, or group study in fields of interest not covered by regular course offerings.

Fall or spring semester. Staff.

SEMINARS

ECON 101. Advanced Microeconomics

Subjects covered include consumer and producer theory, optimization and duality, general equilibrium, risk and uncertainty, asymmetric information, and game theory.

Prerequisites: ECON 011 and at least one of the following: MATH 016, MATH 018, or MATH 030.

2 credits.

Spring 2003. Bayer.

ECON 102. Advanced Macroeconomics

Subjects covered include microfoundations of macroeconomics, growth theory, rational expectations, and New Classical and New Keynesian macroeconomics. Extensive problem solving, with an emphasis on the qualitative analysis of dynamic systems.

Prerequisites: ECON 021 and at least one of the following: MATH 016, MATH 018, or MATH 030.

2 credits.

Not offered 2002-2003.

ECON 122. Financial Economics

The seminar examines modern developments in the theory of asset prices and the economics of financial institutions. Topics include (1) economic explanations for the existence and operations of banks; (2) the regulation of financial institutions and markets; and (3) theories of stock, bond, futures, and option prices.

Prerequisites: ECON 011, MATH 06A and

06C, and ECON 031.

2 credits.

Fall 2002. Caskey.

ECON 135. Advanced Econometrics

Quantitative methods used in estimating economic models and testing economic theories are studied. Students learn to use statistical packages to apply these methods to problems in business, economics, and public policy. Students will also evaluate studies applying econometric methods to major economic issues. An individual empirical research project is required.

Prerequisite: ECON 035, MATH 016, and either ECON 031 or STAT 053.

1 credit.

Not offered 2002-2003.

ECON 141. Public Finance

This seminar focuses on the analysis of government expenditure, tax, and debt policy. This seminar may be counted toward a concentration in public policy.

Prerequisite: ECON 011. Recommended: ECON 021.

2 credits.

Not offered 2002-2003.

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, macroeconomic interdependence, and case studies of selected industrialized, developing, and Eastern Bloc countries. This seminar may be counted toward a concentration in public policy.

Prerequisite: ECON 011 and ECON 021.

2 credits.

Not offered 2002-2003.

ECON 161. Industrial Organization and Public Policy

The seminar examines the organization of firms and markets and the relationship between organization and outcomes with respect to pricing, advertising, product differentiation, and other aspects of behavior. Other topics include the effects of antitrust policy, economic regulation and deregulation. This seminar may be counted toward a concentration in public policy.

Prerequisite: ECON 011.

2 credits.

Fall 2002. Magenheim.

ECON 171. Labor and Social Economics

Students discuss such topics as the organization of work within firms, labor market operations, unions and labor relations, unemployment and macroconditions, economic analysis education, health care, housing, and discrimination, determinants of income inequality, and government policies with respect to health, education, and welfare. This seminar may be counted toward a concentration in public policy (1 credit) and black studies.

Recommended: ECON 011.

2 credits.

Spring 2003. Hollister.

ECON 181. Economic Development

A survey of theories of growth, stabilization, income distribution, trade policy, and household behavior in developing countries. Issues of current interest include the Asian "miracle," technological change, and the political economy of government policy. Students write several short papers examining the literature and a longer paper analyzing a particular country's experience. This seminar may be counted toward a concentration in public policy or black studies or in the Asian studies program.

Prerequisite: ECON 011 or ECON 021.

2 credits.

Spring 2003. Westphal.

ECON 198. Thesis

With consent of a supervising instructor, honors majors may undertake a senior thesis for double credit.

Fall 2002 and spring 2003. Staff.

ECON 199. Senior Honors Study

Senior honors study for majors consists of a 1-credit seminar taken in the second semester of senior year with a faculty member in attendance. In this seminar, majors rewrite and present one seminar paper from each of their three preparations. These rewritten seminar papers will be sent to the examiner who is reviewing that preparation.

Senior honors study for minors consists of a 0.5-credit seminar in which the student rewrites and presents one seminar paper from one preparation. This rewritten paper will be sent to the examiner who is reviewing that preparation. Participation for minors is optional. If a minor does not participate in senior honors study, a seminar paper will still be submitted to the examiner.

Educational Studies

K. ANN RENNINGER, Professor
LISA SMULYAN, Professor and Chair
EVA F. TRAVERS, Professor[3]
DIANE ANDERSON, Assistant Professor
ROBERT GROSS, Dean of Students
ELAINE METHERALL BRENNEMAN, Visiting Assistant Professor (part time)[6]
MARGIE LINN, Visiting Assistant Professor (part time)[6]
TRACY KAY, Visiting Instructor (part time)[5]
ROBERT TEMPLETON, Visiting Instructor (part time)[6]
MARY ANN BLACK, Supervisor of Student Teachers
NANCY DONALDSON, Supervisor of Student Teachers
NANCY GABEL, Supervisor of Student Teachers
CAROLYN SHERMAN, Supervisor of Student Teachers
KAE KALWAIC, Administrative Assistant

3 Absent on leave, 2002-2003.
5 Fall 2002.
6 Spring 2003.

The Department of Educational Studies has three purposes: to expose students to issues in education from a variety of disciplinary perspectives; to provide a range of field experiences for students who wish to explore their aptitude and interest in teaching, counseling, or research in an educational setting; and to prepare students to be certified for entry into public school teaching, in accordance with the requirements of Pennsylvania Chapters 354, 49, and 4.

Courses in the Department of Educational Studies are intended to be integral to the College's academic offerings and, with the exception of Practice Teaching and the Curriculum and Methods Seminar, all education courses include many students who do not intend to become teachers. Introduction to Education, for instance, is taken by approximately one-third of each graduating class. The program's most important goal is to help students learn to think critically and creatively about the process of education and the place of education in society. To this end, both its introductory and upper-level courses draw on the distinctive approaches of psychology, sociology, anthropology, political science, economics, and history. Because students major in a variety of disciplines, courses in education offer both an opportunity to apply the particular skills of one's chosen field to a new domain and interaction with other students whose disciplinary approaches may differ significantly from one's own. There is a limit of four field-based education credits (currently EDUC 016 and 091A) that can be counted toward graduation. EDUC 014: Introduction to Education is generally considered a prerequisite for further work in the program.

SPECIAL MAJORS

There is no major in Educational Studies, but special majors with history, linguistics, political science, psychology, sociology and anthropology, and English literature are regularly approved, and special majors with other fields such as art, computer science, math, music, and biology also have been designed. Special majors involving education usually include 10 to 12 credits, at least 4 of which must be in education, though typically there are 5 to 6 credits in each of the two departments that make up the major. A thesis or a comprehensive examination integrating work in the two fields is required. Both departments collaborate in advising students pursuing special majors.

Educational Studies

HONORS PROGRAM

Students may pursue the Honors Program in Educational Studies either as a part of a special major or as a minor. *Special major Honors programs* will consist of 2.5 preparations in education and 1.5 preparations in the other discipline (or vice versa) where an integrative, 2-credit thesis receives 1 credit from both departments. *All education special majors* in the Honors Program will complete a 2-credit thesis and write a short intellectual autobiography that will be submitted to the honors examiner. *Education minors* in the Honors Program will take a 2-credit seminar, a course and an attachment, or write a 2-credit thesis to prepare for the external examination. They will also write an intellectual autobiography.

COURSE MINORS

Educational Studies will support two kinds of minors: (1) a teaching and field-based minor and (2) an Educational Studies minor.

Teaching and field-based minor. Students will complete at least 5 education credits that focus on educational practice and the integration of theory and practice in school placements. This minor will normally be done in conjunction with teacher certification. The credits that this minor comprises are Educational Psychology, Curriculum and Methods seminar, Practice Teaching (2 credits), and one of the following: Educating the Young Learner, Adolescence, or Child Psychology and Practice.

Educational Studies minor. Students will take at least 5 credits in discipline-based education courses. For this minor, students will identify a focus and describe how two or more of the courses or seminars they are proposing for the minor are related to this focus. Possible foci include, but are not limited to, educational policy, educational psychology, school and society, urban education, environmental education, literacy, gender and education, and special education. EDUC 016 and 017 will not count toward an Educational Studies minor.

FOREIGN STUDY

Students may apply for education credit for work done abroad (either in a formal course or in a field placement in an educational setting), provided that they have taken EDUC 014: Introduction to Education at Swarthmore. The Swarthmore course may be taken prior to study abroad or subsequent to it. Credit will be granted once Introduction to Education has been completed.

TEACHER CERTIFICATION

Swarthmore offers a competency-based teacher preparation program for students who seek secondary certification from the Commonwealth of Pennsylvania. Competency is judged by an interdisciplinary committee of the faculty whose members include education faculty and faculty from the majors in which we certify students. The Teacher Education Committee has established criteria for certification in biology, chemistry, English, French, German, mathematics, physics, Spanish, and social studies that meet both the "general standards" and "Specific Program Guidelines for State Approval of Professional Education Programs." As of fall 2004, social studies certification will no longer be granted in Pennsylvania. Instead, certification in citizenship education and social science education will be available. Individual student programs are designed in conjunction with departmental representatives and members of the education staff. All students seeking certification must meet Swarthmore College's distribution requirements in the humanities, natural sciences, and social sciences and the requirements for a major or special major. Students are formally admitted to the Teacher Certification Program in the spring semester of their sophomore year. All students seeking teacher certification must meet grade-point averages for entry and exit from the program as specified in PA 354 as well as complete college-level math and English courses or meet the requirements for waivers before being admitted to the program. They must also pass the specific PRAXIS exams required by Pennsylvania for their certification area, either before or after they complete the teacher education course requirements at the College. A full description

of the Swarthmore teacher education requirements (in education and in specific content fields/majors) is available on the educational studies Web site: http://www.swarthmore.edu/-SocSci/Education/.

Ninth-semester option. Students who have completed all the requirements for certification in their discipline and in education, except for Student Teaching (EDUC 016) and Curriculum and Methods Seminar (EDUC 017) may apply to return following graduation to complete the Teacher Certification Program during a ninth semester. During this semester, they take EDUC 016 (2 credits) and EDUC 017, and they pay for a total of one course of tuition and student fees. They are not eligible for campus housing. Further information on the ninth-semester option is available in the Education Office.

REQUIREMENTS FOR SECONDARY TEACHER CERTIFICATION

Students who plan to seek secondary certification should take EDUC 014: Introduction to Education by the end of their sophomore year and enroll for EDUC 016: Practice Teaching (a double-credit course) and EDUC 017: Curriculum and Methods Seminar in their senior year or during a ninth semester. In addition, they must complete the following sequence of courses:

EDUC 021. Educational Psychology

EDUC 023. Adolescence

An additional elective course from the following:

1. EDUC 025. Counseling: Principles and Practices
2. EDUC 026. Special Education Issues and Practice
3. EDUC 042. Educating the Young Learner
4. EDUC 045. Literacies and Social Identities
5. EDUC 061. Gender and Education
6. EDUC 063. School and Society
7. EDUC 065. Environmental Education
8. EDUC 068. Urban Education

An honors seminar in education may be substituted for the elective course.

Students will be admitted to the certification program after submitting their sophomore paper and taking EDUC 014: Introduction to Education. To student teach, students must be recommended by their major department, by their cooperating teacher in Introduction to Education, and by members of the education faculty who have taught the student. Placement of students for practice teaching is contingent on successful interviews with the chair of the Educational Studies Department Program and with appropriate secondary school personnel.

Elementary Certification Option

Swarthmore College does not offer certification in elementary education. However, if students complete the Swarthmore courses listed later, and enroll for two courses at Eastern College (Communication Arts for Children and Teaching of Reading), they can receive elementary certification through Eastern College. The required Swarthmore courses for elementary certification are Introduction to Education; Educational Psychology; Developmental Psychology; Teaching the Young Learner; Practice Teaching; Curriculum and Methods Seminar; and a series of workshops in math, social studies, and science methods.

TITLE II TEACHER EDUCATION REPORT

As required by Title II of the Higher Education Act, Swarthmore College has submitted data to the Pennsylvania Department of Education regarding the cohorts of students who completed the Teacher Certification Program between September 1999 and August 2001. Swarthmore College's Secondary Certification program completers had a 100 percent pass rate on all of the required PRAXIS tests: Reading, Writing, Math, Listening, and the Principles of Learning and Teaching 7-12. There was also a 100 percent pass rate on all subject specialty tests, but these could not be officially reported because there were fewer than 10 people taking the tests in any of the subject areas. Swarthmore students in these two cohorts passed the PRAXIS subject area tests in biology, English, math, and social studies. All of the Swarthmore College elementary certification candidates, who participated in the joint program with Eastern College also passed all of the required PRAXIS tests. All of the Swarthmore

College graduates who were certified and desired employment as a teacher held teaching positions in the academic year following certification. Most chose to teach in the Philadelphia metropolitan area, though in a typical year, many Swarthmore teacher education graduates teach throughout the country. For further information included in the Title II report, please see the Educational Studies Web site: http://www.swarthmore.edu/SocSci/Education/.

COURSES

EDUC 001C. The Writing Process

(See ENGL 001C.)

Fall semester. Staff.

EDUC 014. Introduction to Education

A survey of issues in education within an interdisciplinary framework. In addition to considering the theories of individuals such as Dewey, Skinner, and Bruner, the course explores some major economic, historical, and sociological questions in American education and discusses alternative policies and programs. The course gives students an opportunity to determine their own interest in preparing to teach and furnishes them with firsthand experience in current elementary and secondary school practice. Fieldwork is required. This course is normally a prerequisite for further course work in education.

Primary distribution course. 1 credit.

Each semester. Staff.

EDUC 016. Practice Teaching

Supervised teaching in either secondary or elementary schools. Students pursuing certification must take EDUC 017 concurrently. (Single-credit practice teaching may be arranged for individuals not seeking secondary certification.)

2 credits.

Each semester. Staff.

EDUC 017. Curriculum and Methods Seminar

This seminar is taken concurrently with EDUC 016. Readings and discussion focus on the applications of educational research and theory to classroom practice. Course content covers: lesson planning; classroom management; inquiry-oriented teaching strategies; questioning and discussion methods; literacy; the integration of technology and media; classroom-based and standardized assessments; instruction of special-needs populations; topics in multicultural, nonracist, and nonsexist education; and legislation regarding the rights of students and teachers. As part of the seminar, students take a series of special methods workshops in their content area.

1 credit.

Each semester. 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 and theoretical work on student learning and development provide the core readings for the course. In addition, students tutor in local schools and participate in a laboratory section that provides an introduction to the process of research.

1 credit.

Fall 2002. Renninger.

EDUC 023. Adolescence

(Cross-listed as PSYC 023)

This course uses a developmental perspective to examine salient characteristics of adolescence. The goal is to obtain a theoretical understanding of adolescence and an overview of major research. During the first part of the term, students explore various aspects of individual development (e.g., cognitive, affective, physiological, etc.). The second part of the semester focuses on the adolescent's adaptation in major social contexts (e.g., family, peer group, school, etc.).

1 credit.

Spring 2003. Smulyan.

EDUC 025. Counseling: Principles and Practice

An introductory course that critically examines counseling theories and techniques used within the context of school and community-based counseling agencies. Students will develop and practice counseling skills through case studies, role plays, and other modeling exercises.

1 credit.

Not offered 2002-2003.

EDUC 026. Special Education: Issues and Practice

This course explores current definitions, issues, and approaches in the field of special education, focusing mainly on students with learning, behavioral, and emotional disabilities. Class work includes readings from both education and psychology. Field placement is required.

1 credit.

Spring 2003. Linn.

EDUC 042. Educating the Young Learner

This course explores the ways in which children construct meaning within their personal, community, and school lives. Areas to be explored include conditions of learning, constructivist theory, problem solving, reading, schema theory, the intersection of school, home, and community contexts, ways in which we can learn from the learner, and the similarities and differences in learning in various disciplines. Field placement is required. Required for elementary teaching certification.

1 credit.

Not offered 2002-2003.

EDUC 045. Literacies and Social Identities

This course explores the intersections and meanings of literacies and sociocultural worlds and identities. Topics will include orality and literacy; race, gender, class, religious, sexual orientation, and political identities; literacy programs and policies; academic literacy; situated, participatory, and daily literacy practices; and practice and sacred views of literacies. This course will draw readings from anthropology, sociology, sociolinguistics, literary and reader response theory, and education. Fieldwork is required.

1 credit.

Spring 2003. Anderson.

EDUC 051. Language, Culture, and Difference: Current Issues in Teaching English as a Second or Other Language (TESOL)

This course examines current questions and debates in the field of language education. Topics will include models for English Language Learner (ELL) instruction, including English as a Second Language (ESL), bilingual education, content-based instruction, and immersion programs; the role of culture in TESOL; assessment of the ELL learner; focus on *form* or *fluency* first as methods of instruction in the classroom; identities of the language learner; literacy and language; and issues of status and placement of the ESL professional within the public school structure. Fieldwork is required.

1 credit.

Spring 2003. Gladstein.

EDUC 054. Oral and Written Language

(See LING 054.)

Prerequisite: LING 001, 040, 045, or 050.

1 credit.

Not offered 2002-2003.

EDUC 061. Gender and Education

This course uses historical, psychological, and social frameworks to explore the role of gender in the education process. It examines how gender influences the experiences of teaching and learning and how schools both contribute to and challenge social constructions of gender.

1 credit.

Not offered 2002-2003.

EDUC 063. School and Society

(Cross-listed as SOAN 069)

This course examines various aspects and perspectives of K-12 education in the United States. We look at the multiple and contradictory purposes and functions of schools, focusing on the ways in which schools claim to be meritocratic while reproducing the class, racial, gender, and sexual orders of the U.S. society. In the second half of the course, we turn to experiences of teachers and students and ask what role schools can play in challenging different forms of social oppression.

1 credit.

Fall 2002. Smulyan.

EDUC 065. Environmental Education

This course will explore the developments in environmental education, earth education, and watershed programs from practical, curricular, and philosophical perspectives. We will

assess the possibility of making environmental education a central part of the curriculum. Students will survey current programs, curricula, and research and consider the role of formal education in generating environmental awareness in light of global ecological crises. Fieldwork is required.

1 credit.

Fall 2002. Kay.

EDUC 068. Urban Education

(Cross-listed as SOAN 020B)

This course examines issues of practice and policy, including financing, integration, compensatory education, curricular innovation, parent involvement, bilingual education, high-stakes testing, comprehensive school reform, governance, and multiculturalism. The special challenges faced by urban schools in meeting the needs of individuals and groups in a pluralistic society will be examined using the approaches of education, psychology, sociology, anthropology, political science, and economics. Current issues will also be viewed in historical perspective. Fieldwork is required.

1 credit.

Not offered 2002-2003.

EDUC 069. Savage Inaccuracies: The Facts and Economics of Education in America

(See ECON 005.)

Prerequisites: ECON 001 and any statistics course (or the consent of the instructor). EDUC 014 is strongly recommended.

1 credit.

Fall 2002. Kuperberg.

EDUC 071. Special Projects (Issues in Music and Dance Education)

(Cross-listed as DANC 091 and MUSI 091)

An introduction to the fields of music and dance education. This course will involve frequent visits to schools, studios, and other educational institutions in the Philadelphia area. We will observe a variety of teaching methods and discuss the guiding principles of music and dance education. We will also address such questions as the place of music and dance in higher education in general and at Swarthmore in particular. In some cases, coursework may include practice teaching, depending on student experience and inclination. Open to any student who has taken at least one course in music, dance, or education.

0.5 credits (CR/NCR).

Not offered 2002-2003.

EDUC 091A. Special Topics

With the permission of the instructor, qualified students may choose to pursue a topic of special interest in education through a field project involving classroom or school practice.

Available as a credit/no credit course only.

0.5 or 1 credit.

Each semester. Staff.

EDUC 091B. Special Topics

With the permission of the instructor, students may choose to pursue a topic of special interest by designing an independent reading or project that usually requires a comprehensive literature review, laboratory work, and/or field-based research.

0.5 or 1 credit.

Each semester. Staff.

EDUC 096-097. Thesis

1 or 2 credits, normally in conjunction with a special major.

Each semester. Staff.

SEMINARS

EDUC 121. Child Psychology and Practice

This seminar focuses on (1) general developmental principles revealed in and applicable to contexts of practice as well as (2) practical applications of research and theory in developmental psychology. Members of the seminar work together to consider topics in education (e.g., motivation, professional learning, and instructional practice), topics in cognitive science (e.g., strategy use, metacognition, and individual variation) and topics in social policy (e.g., evaluation, community initiatives, and educational reform) through field work, directed readings, and a literature review on a question of their choice. The fieldwork for the seminar focuses on the evaluation of an issue or problem identified by the local community.

Prerequisites: EDUC 014 and 021.

2 credits.

Spring 2003. Renninger.

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. Topics to be considered include definition and role of literacy in schools, school-community-home relationships, culturally relevant education and multiculturalism, and the social construction of gender in the schools.

Prerequisites: EDUC 014 and an additional course in the 060s.

2 credits.

Fall 2002. Smulyan.

EDUC 141. Educational Policy

This seminar will explore issues in the design, implementation, and evaluation of educational policy at the federal, state, and local levels, in light of the ongoing historical and cultural debates over educational policy. The course will examine a range of current policy topics, including school finance, issues of adequacy and equity, the standards movement, systemic reform, testing and accountability, , varieties of school choice, early childhood education, immigrant and bilingual education, and special education from the perspectives of several social science disciplines and political perspectives. Fieldwork in a policy-related educational organization is required.

Prerequisites: EDUC 014 and an additional course in the 060s; EDUC 068 is strongly recommended.

2 credits.

Fall 2002. Travers.

EDUC 180. Honors Thesis

A 2-credit thesis is required for students completing special honors majors including education. The thesis may be counted for 2 credits in education or for 1 credit in education and 1 credit in the other discipline in the student's Honors Program.

2 credits.

Each semester. Staff.

Engineering

ERIK CHEEVER, Professor[3]
NELSON A. MACKEN, Professor
ARTHUR E. McGARITY, Professor
LYNNE A. MOLTER, Professor
FREDERICK L. ORTHLIEB, Professor[2]
FARUQ M.A. SIDDIQUI, Professor and Chair
ERICH CARR EVERBACH, Associate Professor
MICHAEL J. PIOVOSO, Visiting Associate Professor (part time)
BRUCE A. MAXWELL, Assistant Professor
HOLLY CASTLEMAN, Administrative Assistant

2 Absent on leave, spring 2003.

3 Absent on leave, 2002-2003.

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.

REQUIREMENTS AND RECOMMENDATIONS

Mission

As stated in the introduction of this catalog, Swarthmore seeks to help its students realize their fullest 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, responsible, able to adapt to new technical challenges, able to communicate effectively, and able to collaborate well with others.

Objectives

Graduates with the bachelor of science degree in engineering will have the following:

1. Proficiency in the analysis of engineering systems
2. Proficiency in engineering design
3. Broad background in the liberal arts
4. Effective oral and written communications skills
5. Ability to adapt to changing situations and new technical challenges

Our departmental major program is accredited by the Engineering Accreditation Commission of the Accreditation Board for Engineering and Technology.

The structure of the department's curriculum permits engineering majors to devote as much as three-eighths of their course work to the humanities and social sciences. Within their four-year course of study, about half of our majors pursue either a minor or a double major, leading to two degrees: the bachelor of science in engineering and a bachelor of arts in a second academic discipline.

The department's physical facilities include laboratories for general instruction and individual student projects in electronics, electromagnetism, optics, systems dynamics and control, communications, engineering materials, solid and structural mechanics, fluid mechan-

ics, fossil and solar energy conversion, acoustics, nonlinear dynamics, and environmental water and air pollution control. The laboratories contain a wide variety of modern measurement equipment configured for computer-assisted data acquisition and process control. The department's facilities also include a workstation laboratory with high performance color graphics and industry-standard engineering design, analysis, and graphics software. Electronics, metal, and woodworking shops that support our courses and laboratories are also available for student use.

Courses Readily Available to Students Not Majoring or Minoring in Engineering

High-Performance Composites (001), Exploring Acoustics (002), Problems in Technology (003), and Art and Science of Structures (007) are designed for students contemplating only an introduction to engineering. Mechanics (006) is primarily for prospective majors, but other interested students, particularly those preparing for careers in architecture or biomechanics, are encouraged to enroll. Introduction to Environmental Protection (004A), Operations Research (057), Solar Energy Systems (035), Water Quality and Pollution Control (063), Swarthmore and the Biosphere (004B), Environmental Systems (066), and Environmental Policy and Politics (004C) appeal to many students majoring in other departments, particularly those pursuing an environmental studies minor. Students interested in computers, including computer science majors or minors, may wish to consider Fundamentals of Digital Systems (015), Principles of Computer Architecture (025), Computer Graphics (026), Computer Vision (027), and Robotics (028). Students majoring in the physical sciences or mathematics may enroll routinely in advanced engineering courses. Department faculty members also support minors in computer science and environmental studies and a special major with the Linguistics Program.

Note that Engineering Methodology, High-Performance Composites, Exploring Acoustics, Problems in Technology, Art and Science of Structures, Introduction to Environmental Protection, Swarthmore and the Biosphere, and Environmental Policy and Politics are not admissible as technical electives within an engineering major or minor but may be taken as free electives subject to the 20-Course Rule.

Course Major

The requirements for the course major described subsequently apply to students whose class enters in the fall of 2002 or 2003.

The department recommends that students complete requirements from two categories: (1) 12 engineering credits and (2) 8 credits in science and mathematics. Within the second category, students must receive 2 credits in physics, 1 in chemistry, and 4 in math. The 2 physics credits must include either PHYS 003 and 004 or 007 and 008 or the equivalent. Students must also receive credit for CHEM 010 or the equivalent. A minimum of 4 credits in mathematics, including MATH 030 and normally including MATH 005, 006, and 018 or the equivalent are required. The unspecified course in the second category should complement the student's overall program of study and will normally be from one of the following Swarthmore departments: Biology, Chemistry, Computer Science, or Physics and Astronomy. The unspecified course must also be acceptable for credit toward a minimal major in the offering department to count toward an engineering major. No courses intended to satisfy these departmental requirements, except those taken fall semester in the first year, may be taken credit/no credit.

Students majoring in engineering are required to take at least six core courses within the first category. Every major must take the following four courses: Mechanics (ENGR 006), Electric Circuit Analysis (ENGR 011), Thermofluid Mechanics (ENGR 041), and Engineering Design (ENGR 090), usually in that order. Each student must also take two or three of the following courses: Linear Physical Systems Analysis (ENGR 012), Experimentation for Engineering Design (ENGR 014), or Fundamentals of Digital Systems (ENGR 015). Engineering Design is the culminating experience for engineering majors and must be taken in the spring of the senior year. Submission and oral presentation of the final project report in Engineering Design constitutes the comprehensive examination for engineering majors.

Elective Program for Course Majors

Each student devises a program of advanced work in the department in consultation with his or her adviser. These programs normally include five or six courses depending on the

number of core courses taken. They are 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 not conform to some traditional or conventional area of engineering specialization (e.g., computer, electrical, mechanical, or civil). Therefore, the department requires each plan of advanced work to have a coherent, well-justified program that meets the student's stated educational objectives.

Typical elective program plans include the following:

1. *Electrical engineering group.* Electronic Circuit Applications, Physical Electronics, Electromagnetism, Communication Systems, Digital Signal Processing, VLSI Design, and Control Theory and Design. Students having an interest in digital systems might replace one or more of these courses with Principles of Computer Architecture, or Computer Graphics.
2. *Computer engineering group.* Principles of Computer Architecture, Computer Graphics, Computer Vision, and Robotics. Students with an interest in computer hardware may include Electronic Circuit Applications, Physical Electronics, Digital Signal Processing, VLSI Design, or Control Theory and Design.
3. *Mechanical engineering group.* Mechanics of Solids, Engineering Materials, Fluid Mechanics, Heat Transfer, Thermal Energy Conversion, Solar Energy Systems, or Control Theory and Design.
4. *Civil and environmental engineering group.* Basic preparation includes Mechanics of Solids, Structural Theory and Design I, Soil and Rock Mechanics, and Water Quality and Pollution Control. Additional courses include Operations Research and Environmental Systems for those interested in the environment or urban planning, or Structural Theory and Design II for those interested in architecture or construction. Other recommended courses include Solar Energy Systems, Fluid Mechanics, and Engineering Materials.

Course Minor

Academic advising. Students interested in pursuing a minor must find a faculty member within the Engineering Department to advise them. If possible, this faculty member should have interests that overlap the area of the minor. Students who encounter difficulties in identifying an adviser should seek the assistance of the chair of the Engineering Department. Students who plan to minor in engineering should regularly consult their engineering advisers. The sophomore papers of engineering minors should indicate the plan to minor and the courses chosen to fulfill the minor.

Requirements. A minimum of 5 credits in engineering is required, of which at least 2 but not more than 3 must be core courses (ENGR 006, 011, 012, 014, 015, or 041 but not ENGR 090). The remainder will be selected from elective course offerings within the department. Only those electives that count toward an engineering major can be counted toward a minor.

- Supporting work in mathematics, physics, chemistry, and computer science is only necessary when designated as a prerequisite to an individual engineering course.
- No directed readings may be used as one of the 5 credits for the minor.
- A maximum of 1 transfer credit that is preapproved by the Engineering Department will be accepted as partial fulfillment of the minor requirements. Transfer credits will not count for one of the two courses used to fulfill the core course requirement of the minor. Students should be aware that most lecture courses at other institutions carry only 0.75 Swarthmore credits, unless they include a full lab sequence. Students who want to use foreign study or domestic exchange work in partial fulfillment of the requirements for the minor should consult their academic advisers and the chair of the Engineering Department as early as possible to ensure that all requirements are met.
- No culminating experience will be required. Only students pursuing the major in engineering may enroll in ENGR 090.

Areas of study. Although packaged selections of courses will be suggested as options for those interested in an engineering minor, students may tailor their programs to meet individual needs and interests in consultation with their adviser(s).

Honors Major or Minor

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 Major

Honors majors must complete the same requirements as course majors in engineering. In addition:

- The honors major in engineering is a four-examination program that includes three preparations in engineering (the major) and one minor preparation. Each area comprises 2 credits of work. None of the core courses (except ENGR 090) may be used in the preparations.
- 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. All engineering graduates will receive an ABET-accredited bachelor of science degree.
- 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 from across the College. The two additional major preparations must each comprise two related, upper-level engineering electives. A précis of not more than 12 pages (including tables and figures) of each candidate's ENGR 090 project must be submitted by the end of the 10th week of the spring semester for mailing to the relevant honors examiner. The final ENGR 090 report will not be mailed to any examiner but may be brought to the oral examinations.
- Senior honors study by engineering majors is not required.

Honors Minor

- Senior honors study is required for all engineering honors minors, except those who are also engineering course majors. For those not majoring in engineering, the senior honors study is the culminating experience. Course majors will not take senior honors study because ENGR 090 serves as the culminating experience.
- Every engineering honors minor preparation must include two related upper-level engineering electives for which all prerequisites must be satisfied. If the student is not also an engineering course major, then senior honors study is also required. Credits from official attachments or special topics courses in engineering may substitute for not more than one of the two upper-level courses within an engineering minor preparation.
- Prerequisites to upper-level engineering electives may be waived by the department, depending on the student's documentation of equivalent work in another department at the time of application.
- Formats of examination will follow those appropriate for the engineering major.

Prospective engineering majors and minors receive more specific information about course and honors programs from the department each December. Additional information is also available on the engineering Web site at http://www.engin.swarthmore.edu.

Poland Foreign Study Program

A program of study is available at the Technical University of Krakow Poland for students who desire an engineering foreign study experience in a non–English-speaking country. Normally occurring in the spring of the junior year, students take courses taught in English consisting of two engineering electives and the survey course Environmental Science and Technology in Poland plus an intensive orientation course on Polish language and culture provided by the Jagiellonian University. Coordinator: McGarity.

Engineering

COURSES

ENGR 001. High-Performance Composites

Introduction to the structure, properties, and performance of composite materials in sports, automotive, energy and aeronautic applications. Simple models of material behavior are developed and used to examine products like ski poles, tennis racquets, radial tires, human-powered aircraft and superconductor wire. Weekly labs include making, examining and/or testing polymer and ceramic and metal matrix composites, with a project of the student's choice. Primarily for students not contemplating an engineering major.

Prerequisite: high school physics.

Primary distribution course. 1 credit.

Fall 2002. Orthlieb.

ENGR 002. Exploring Acoustics

(Cross-listed as LING 002)

A course to provide students with exposure to basic scientific and engineering principles through an exploration of the acoustics of musical instruments, the human voice, structures, and the environment. Emphasis on hands-on analysis with a minimum use of mathematics. For students not majoring in engineering. Includes laboratory.

1 credit.

Spring 2003. Everbach.

ENGR 003. Problems in Technology

For students not majoring in science or engineering. The course has most recently concentrated on the automobile and its impact on society. Technical, political, and socioeconomic aspects are discussed. Class members also work on teams with engineering students in designing, building, and testing a hybrid electric car. Enrollment limited.

Primary distribution course. 1 credit.

Not offered 2002-2003.

004: ENVIRONMENTAL COURSES FOR NONMAJORS

Courses numbered ENGR 004A-004Z serve all students interested in environmental science, technology, and policy. Indicated courses may be used to satisfy the non–primary distribution course (PDC) requirement in the Division of Natural Sciences and Engineering. Some may also meet requirements for minors in environmental studies or public policy and special majors in environmental science or environmental policy and technology. They may not be used to satisfy requirements for the major or minor in engineering.

ENGR 004A. Introduction to Environmental Protection

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. Scientific concepts necessary to understand local and global pollution problems. Pollution control and renewable energy technologies. Public policy developments related to regulation of pollutants. Methods of computer-based systems analysis for developing economically effective environmental protection policies. Counts toward distribution credit (non-PDC) in the Division of Natural Sciences and Engineering and satisfies the environmental science/technology component of the environmental studies minor. Offered in the spring semester.

1 credit.

Not offered 2002-2003.

ENGR 004B. Swarthmore and the Biosphere

An interdisciplinary seminar-style investigation of the role of Swarthmore College and its community within the biosphere, including an intensive field-based analysis of one major aspect of Swarthmore's interaction with its environment such as food procurement, waste disposal, or energy use. Student project groups explore the selected topic from various perspectives, and the class proposes and attempts to implement solutions. Faculty from various departments provide background lectures, lead discussions of approaches outlined in the literature, and coordinate project groups. Cross-listed in the instructors' departments. Does not count toward distribution requirements.

1 credit.

Offered when demand and staffing permit.

ENGR 004C. Environmental Policy and Politics

(Cross-listed as POLS 043)

Topics in environmental analysis, policy formulation, and pollution regulation. Offered in the fall semester.

1 credit.

Not offered 2002-2003.

ENGR 004E. Introduction to Sustainable Systems Analysis

Definitions of sustainability and sustainable development. Quantitative indicators for evaluating sustainable policy, projects, technology, products, and education. Interactions between ecology, society, and economy. Alternatives to economic valuation, including energy and energy analysis. Dematerialization and recycling, life-cycle analysis, sustainable industrial production, waste minimization, clean technologies, sustainable habitation and communities, sustainable international, national, and local policies. Includes laboratory, computer-based simulation exercises, field trips, and international Internet discussion groups. Counts toward distribution credit (non-PDC) in the Division of Natural Sciences and Engineering and satisfies the environmental science/technology component of the environmental studies minor.

1 credit.

Offered when demand and staffing permit.

ENGR 005. Engineering Methodology

A fall 0.5-credit course for those interested in engineering, presenting techniques, and tools that engineers use to define, analyze, solve, and report on technical problems and an introduction to department facilities. Designed for students who are potential majors as well as those interested in an introduction to engineering only. Although ENGR 005 is not required of prospective engineering majors, it is strongly recommended. This course is not to be used to fulfill the requirements for the engineering major or minor. Offered in the fall semester.

0.5 credit.

Fall 2002. Everbach.

ENGR 006. Mechanics

Fundamental areas of statics and dynamics. Elementary concepts of deformable bodies including stress-strain relations, flexure, torsion, and internal pressure. Laboratory work includes a MATLAB workshop, experiments on deformable bodies, and a truss-bridge team design competition. Offered in the spring semester.

Prerequisite: PHYS 003 or equivalent.

Primary distribution course. 1 credit.

Spring 2003. Siddiqui/Everbach.

ENGR 007. Art and Science of Structures

An introduction to the basic principles of structural analysis and design, including an emphasis on the historical development of modern structural engineering. Suitable for students planning to study architecture, architectural history, or with an interest in structures. Includes laboratory. For students not majoring in engineering. Offered in the fall semester.

1 credit.

Offered when demand and staffing permit.

ENGR 011. Electrical Circuit Analysis

An introduction to the analysis of electrical circuits that includes resistors, capacitors, inductors, op-amps, and diodes. The student will learn to develop equations describing electrical networks. Techniques for the solution of differential equations resulting from linear circuits are taught. Solutions will be formulated both in the time domain and in the frequency domain. There is a brief introduction to digital circuits. Includes laboratory. Offered in the fall semester.

Prerequisites: MATH 006B and PHYS 004 (or equivalents) or permission of the instructor.

1 credit.

Fall 2002. Molter/Piovoso.

ENGR 012. Linear Physical Systems Analysis

Involves the study of engineering phenomena that may be represented by linear, lumped-parameter models. It builds on the mathematical techniques learned in ENGR 011 and applies them to a broad range of linear systems including those in the mechanical, thermal, fluid, and electromechanical domains. Techniques used include Laplace Transforms, Fourier analysis, and Eigenvalue/Eigenvector methods. Both transfer function and state-space representations of systems are studied. The course includes a brief introduction to dis-

crete time systems. Includes laboratory. Offered in the spring semester.

Prerequisites: ENGR 011 (or equivalent) or permission of the instructor.

1 credit.

Spring 2003. Molter/Staff.

ENGR 014. Experimentation for Engineering Design

Introduction 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, single and multivariable linear and nonlinear regression. Includes laboratory. Offered in the spring semester.

Prerequisites: ENGR 011.

1 credit.

Spring 2003. McGarity/Macken.

ENGR 015. Fundamentals of Digital Systems

(Cross-listed as CPSC 024)

Digital systems are fundamentally different from continuous systems. This course will introduce students to digital system theory and design techniques, including Boolean logic, digital representations of data, and techniques for the design of combinational and sequential digital circuits. Because moving information between systems is critical to real-world applications, the course will include interfaces between digital systems and between digital and continuous systems. In addition, the course will cover selected topics in numerical analysis and applied mathematics that are relevant to modern engineering and computer science. Offered in the fall semester.

Prerequisites: CPSC 021 or ENGR 011 (corequisite).

1 credit.

Fall 2002. Maxwell.

ENGR 025. Principles of Computer Architecture

(Cross-listed as CPSC 025)

This course covers the physical and logical design of a computer. Topics include current microprocessors, CPU design, RISC and CISC concepts, pipelining, superscalar processing, cache, paging, segmentation, virtual memory, parallel architectures, bus protocols, and input/output devices. Labs cover analysis of current systems and microprocessor design using CAD tools, including VHDL. Offered in the spring semester.

Prerequisites: CPSC 021, ENGR 024, or permission of the instructor. A course beyond CPSC 021 is strongly recommended.

1 credit.

Spring 2003. Staff.

ENGR 026. Computer Graphics

(Cross-listed as CPSC 040)

Computer graphics deals with the manipulation and creation of digital imagery. We cover drawing algorithms for two-dimensional (2-D) graphics primitives, 2-D and three dimensional (3-D) matrix transformations, projective geometry, 2-D and 3-D model representations, clipping, hidden surface removal, rendering, hierarchical modeling, shading and lighting models, shadow generation, special effects, fractals and chaotic systems, and animation techniques. Labs will focus on the implementation of a 3-D hierarchical modeling system that incorporates realistic lighting models and fast hidden surface removal. Offered fall semester, alternate years.

Prerequisites: CPSC 021 or permission of the instructor. Linear algebra and some calculus are strongly recommended.

1 credit.

Fall 2002. Maxwell.

ENGR 027. Computer Vision

(Cross-listed as CPSC 027)

Computer vision studies how computers can analyze and perceive the world using input from imaging devices. Topics include line and region extraction, stereo vision, motion analysis, color and reflection models, and object representation and recognition. The course will focus on object recognition and detection, introducing the tools of computer vision in support of building an automatic object recognition and classification system. Labs will involve implementing both off-line and real-time object recognition and classification systems. Offered in the fall semester, twice every four years.

Prerequisites: ENGR 012, CPSC 021, or permission of the instructor. Math background at the level of MATH 016 or MATH 018 is

strongly recommended.

1 credit.

Not offered 2002-2003.

ENGR 028. Robotics

(Cross-listed as CPSC 081)

This course addresses the problems of controlling and motivating robots to act intelligently in dynamic, unpredictable environments. Major topics will include robot perception using vision and sonar, kinematics and inverse kinematics, navigation and control, optimization and learning, and robot simulation environments. 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, explore, and interact with their environment.

Prerequisites: ENGR 027/CPSC 027, CPSC 063, CPSC 128, or permission of the instructor.

1 credit.

Offered when demand and staffing permit.

ENGR 035. Solar Energy Systems

Fundamental physical concepts and system design techniques of solar energy systems. 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. Includes laboratory. Offered in the fall semester, alternate years.

Prerequisites: PHYS 004, MATH 006, or equivalent or consent of the instructor.

1 credit.

Not offered 2002-2003.

ENGR 041. Thermofluid Mechanics

Introduction to macroscopic thermodynamics: first and second laws, properties of pure substances, applications using system and control volume formulation. Introduction to fluid mechanics: development of conservation theorems, hydrostatics, dynamics of one-dimensional fluid motion with and without friction. Includes laboratory. Offered in the fall semester.

Prerequisites: ENGR 006 and ENGR 011 or equivalent.

1 credit.

Fall 2002. Macken/Everbach.

ENGR 057. Operations Research

(Cross-listed as ECON 032)

Introduces students to computer-based modeling and optimization for the solution of complex, multivariable problems such as those relating to efficient manufacturing, environmental pollution control, urban planning, water and food resources, and arms control. Includes case study project. Offered in the fall semester, alternate years.

Primary distribution course (natural sciences only and only if enrolled for ENGR 057).

1 credit.

Fall 2002. McGarity.

ENGR 058. Control Theory and Design

Introduction to the control of engineering systems. Analysis and design of linear control systems using root locus, frequency response, and state space techniques. Also provides an introduction to digital control techniques, including analysis of A/D and D/A converters, digital controllers, and numerical control algorithms. Includes laboratory. Offered in the spring semester.

Prerequisite: ENGR 012 or equivalent.

1 credit.

Spring 2003. Piovoso.

ENGR 059. Mechanics of Solids

Internal stresses and changes of form that occur when forces act on solid bodies or when internal temperature varies. State of stress and strain, strength theories, stability, deflections, and photoelasticity. Elastic and plastic theories. Includes laboratory. Offered in the fall semester.

Prerequisite: ENGR 006 or equivalent.

1 credit.

Fall 2002. Orthlieb.

ENGR 060. Structural Theory and Design I

Fundamental principles of structural mechanics. Statically determinate analysis of frames and trusses. Approximate analysis of indeterminate structures. Virtual work principles. Elements of design of steel and concrete structural members. Includes laboratory. Offered in the spring semester.

Prerequisite: ENGR 059 or permission of the instructor.

1 credit.

Spring 2003. Siddiqui.

ENGR 061. Geotechnical Engineering: Theory and Design

Soil and rock mechanics, including soil and rock formation, soil mineralogy, soil types, compaction, soil hydraulics, consolidation, stresses in soil masses, slope stability, and bearing capacity. Application to engineering design problems. Includes laboratory. Offered in the fall semester, alternate years.

Prerequisite: ENGR 006 or permission of the instructor. May be taken concurrently with ENGR 059.

1 credit.

Fall 2002. Siddiqui.

ENGR 062. Structural Theory and Design II

Advanced structural analysis. Classical and matrix methods of analysis. Digital computer applications. Design of steel and concrete structures. Includes laboratory. Offered in the fall semester.

Prerequisite: ENGR 060.

1 credit.

Not offered 2002-2003.

ENGR 063. Water Quality and Pollution Control

Elements of water quality management and treatment of wastewaters. 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 on natural waters. Environmental impact assessment. Laboratory and field studies included. Offered in the fall semester, alternate years.

Prerequisite: CHEM 010, MATH 006, or equivalent or consent of instructor.

1 credit.

Fall 2002. McGarity.

ENGR 066. Environmental Systems

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 included. Laboratory included. Offered in the spring semester, alternate years.

Prerequisite: ENGR 057 or equivalent.

1 credit.

Spring 2003. McGarity.

ENGR 071. Digital Signal Processing

Introduction to difference equations and discrete-time transform theory; the Z-transform and Fourier representation of sequences; fast Fourier transform algorithms. Discrete-time transfer functions and filter design techniques are introduced. Provides an introduction to architecture and programming of digital signal processors. Laboratory included.

Prerequisite: ENGR 012.

1 credit.

Not offered 2002-2003.

ENGR 072. Electronic Circuit Applications

This course is of interest to a broad range of students in the sciences. The student will learn the fundamentals of electronic circuit design starting with a brief survey of semiconductor devices including diodes and bipolar and field effect transistors. The course continues with op-amp applications, including instrumentation and filter design. The use of digital logic is also explored. Throughout the course, practical considerations of circuit design and construction are covered. Includes laboratory. Offered in the fall semester.

Prerequisite: ENGR 011 or PHYS 008.

1 credit.

Fall 2002. Staff.

ENGR 072A. Electronic Circuit Applications

ENGR 072A is a 0.5-credit course comprising only the laboratory section of ENGR 072. It is intended for physics or other nonengineering majors only. This course is taken in place of ENGR 072, not in addition to it. The student will learn the fundamentals of electronic circuit design starting with a brief survey of semiconductor devices including diodes, and bipolar and field effect transistors. The course continues with op-amp applications, including instrumentation and filter design. The use of digital logic is also explored. Throughout the course, practical considerations of circuit design and construction are covered. Includes laboratory. Offered in the fall semester.

Prerequisite: ENGR 011 or PHYS 008.

0.5 credit.

Fall 2002. Staff.

ENGR 073. Physical Electronics

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. Includes laboratory. Offered in the spring semester, alternate years.

Prerequisites: ENGR 011 or PHYS 008.

1 credit.

Not offered 2002-2003.

ENGR 075, 076. Electromagnetic Theory I and II

Static and dynamic treatment of engineering applications of Maxwell's equations. 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. Polarization, reflection, refraction, diffraction, and interference. ENGR 076 will include advanced topics in optics and microwaves, such as laser operation, resonators, Gaussian beams, interferometry, anisotropy, nonlinear optics, modulation and detection. Laboratories for both courses will be oriented toward optical applications using lasers, fiber and integrated optical devices, modulators, nonlinear materials, and solid-state detectors. ENGR 075 is offered in the fall semester of alternate years. ENGR 076 is offered in the spring semester when student interest and staffing permit.

Prerequisite: ENGR 012 or equivalent. ENGR 075 or Physics equivalent is a prerequisite for ENGR 076.

1 credit.

ENGR 075: Fall 2002. Molter.

ENGR 076: Offered when demand and staffing permit.

ENGR 077. VLSI Design

This course is an introduction to the design, analysis, and modeling of integrated circuits, both analog and digital. The course will focus on CMOS technology. The course will introduce sophisticated models of MOS transistors and discuss how they can be used to develop analog and digital circuitry. There will be a heavy emphasis on computer modeling of devices and circuits. Includes laboratory. Offered in the fall semester, alternate years.

Prerequisite: ENGR 011 or PHYS 008. ENGR 015 may be taken concurrently.

1 credit.

Not offered 2002-2003.

ENGR 078. Communication Systems

Theory and design principles of analog and digital communication systems. 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. Includes laboratory. Offered in the spring semester, alternate years.

Prerequisite: ENGR 012 or equivalent.

1 credit.

Spring 2003. Staff.

ENGR 081. Thermal Energy Conversion

Development and application of the principles of thermal energy analysis to energy conversion systems, including cycles and solar energy systems. The concepts of availability, ideal and real mixtures, and chemical and nuclear reactions. Includes laboratory. Offered in the spring semester, alternate years.

Prerequisite: ENGR 041.

1 credit.

Not offered 2002-2003.

ENGR 082. Engineering Materials

Introduction to material structure, properties, and processing. Analysis of microstructures, physical properties, thermal and mechanical transformation of metals, polymers, concrete, wood, and a variety of composites. Material selection in design, laboratory testing for quality assurance, and performance evaluation in service are included through labs and a semester project. Offered in the fall semester, alternate years.

Prerequisite: ENGR 059 or permission of the instructor.

1 credit.

Not offered 2002-2003.

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. Applications to the study of inviscid and viscous, incompressible, and compressible fluids. Includes laboratory. Offered in the spring semester, alternate years.

Prerequisite: ENGR 041.

1 credit.

Spring 2003. Macken.

ENGR 084. Heat Transfer

Introduction 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. Includes laboratory. Offered in the fall semester, alternate years.

Prerequisite: ENGR 041.

1 credit.

Fall 2002. Macken.

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. Offered in the spring semester.

1 credit.

Spring 2003. Staff.

ENGR 091. Special Topics

Subject matter dependent on a group need or individual interest. Normally restricted to seniors.

1 credit.

Offered when demand and staffing permit.

ENGR 093. Directed Reading or Project

Qualified students may do special work with theoretical, experimental, or design emphasis in an area not covered by regular courses with the permission of the department and a willing faculty supervisor.

1 credit.

Offered with department approval and faculty supervision only.

ENGR 096. Honors Thesis

In addition to ENGR 090, an honors major may undertakean honors thesis in the fall semester of the senior year with approval of the department and a faculty adviser. A prospectus of the thesis problem must be submitted and approved not later than the end of junior year.

1 credit.

Offered only with department approval and faculty supervision.

ENGR 126. Advanced Computer Graphics

This course takes an in-depth look at a series of current topics in computer graphics, partially determined by student interests. Topics may include shading models, radiosity, ray tracing, image-based rendering, modeling, texture, animation, physically based modeling, hybrid computer vision and graphics techniques, nonphotorealistic rendering, and special effects. The course is taught as a seminar, and meetings revolve around computer graphics papers from technical proceedings, such as ACM SIGGRAPH and other computer graphics journals. Students will be responsible for reading and preparing presentation of papers. In addition, there will be several significant projects where students implement computer graphics programs based on the topics covered in the course.

Prerequisite: ENGR 026 and permission of instructor.

1 credit.

Offered when demand and staffing permit.

ENGR 199. Senior Honors Study

Senior honors study is only available 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 only be taken in the spring of the senior year.

0.5 or 1 credit.

Spring 2003. Staff.

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

Electromagnetic Theory
Electromagnetic Theory I and II

Electronics
Electronic Circuit Applications
Physical Electronics

Environmental Systems
Operations Research
Environmental Systems

Heat Transfer and Fluid Mechanics
Heat Transfer
Fluid Mechanics

Materials Engineering
Mechanics of Solids
Engineering Materials

Robotics and Machine Vision
Computer Vision
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 Theory and Design I and II
Structures and Soils

Structural Theory and Design I
Geotechnical Engineering: Theory and Design

Thermal Energy Conversion and Heat Transfer
Thermal Energy Conversion
Heat Transfer

Visual Information Systems
Computer Graphics
Computer Vision

Water Quality and Fluid Mechanics
Water Quality and Pollution Control
Fluid Mechanics

Water Quality and Supply Systems
Water Quality and Pollution Control
Environmental Systems

English Literature

NATHALIE ANDERSON, Professor[3]
CHARLES L. JAMES, Professor and Chair
PETER J. SCHMIDT, Professor
PHILIP M. WEINSTEIN, Professor[3]
CRAIG WILLIAMSON, Professor
ELIZABETH BOLTON, Associate Professor
NORA JOHNSON, Associate Professor[1]
BARBARA RIEBLING, Visiting Associate Professor (part time)[5]
PATRICIA WHITE, Associate Professor[1]
EDMUND CAMPOS, Assistant Professor
LEO CHARNEY, Visiting Assistant Professor (part time)
RAIMA EVAN, Visiting Assistant Professor (part time)
JILL GLADSTEIN, Assistant Professor and Director of Writing Associates Program
KENDALL JOHNSON, Assistant Professor
CAROLYN LESJAK, Assistant Professor
BAKIRATHI MANI, Assistant Professor
WENDY DOWKINGS, Visiting Lecturer (part time)[5]
CAROLYN ANDERSON, Administrative Coordinator
NANCY BECH, Administrative Assistant (part time)

1 Absent on leave, fall 2002.
3 Absent on leave, 2002-2003.
5 Fall 2002.

This department offers courses in English literature, American literature, Native American literature, African and Caribbean literatures, Asian and Asian American literatures, gay and lesbian literatures, drama, film, some foreign literatures in translation, creative writing, critical theory, and journalism. The departmental curriculum includes the intensive study of works of major writers, major periods of literary history, and the development of literary types; it also provides experience in several critical approaches to literature and dramatic art and explores certain theoretical considerations implicit in literary study, such as the problematics of canon formation and the impact of gender on the creation and reception of literary works.

REQUIREMENTS AND RECOMMENDATIONS

Any introductory course—ENGL 005A through 005Z and 006A through 006Z—is the prerequisite for all other courses in literature. (Exempted from this prerequisite are juniors and seniors). Introductory courses attempt in a variety of ways to reflect the diversity of interests—with respect to subject matter, theoretical approach, literary genre, historical period, and race and gender—characteristic of the departmental offerings as a whole. Introductory courses are characterized by syllabi with less reading than in advanced courses, by frequent short papers with some emphasis on rewriting, by self-conscious examination of methodology, and by considerable attention to class discussion; they are viewed by the department as particularly appropriate for freshmen and are primary distribution courses. Enrollments are limited to 25 students per course; priority is given to freshmen and sophomores. Students will not normally take a second introductory course. Only one such course may be counted towards the major. The minimum requirement for admission as a major or as a minor in English is two semester-courses in the department—normally an introductory course and an advanced literature course.

(Students with Advance Placement [AP] scores of 4-5 in English literature and/or English language receive credit toward graduation. Only the credit for English literature may count toward the major requirements. AP credit does not satisfy the prerequisite for upper-level courses. Scores of 6 or 7 on the International Baccalaureate are treated in the same way.)

Students considering a major in English are strongly urged to take one or two additional English courses during the sophomore year. Majors and prospective majors should consult a member of the English Department for information about courses in other departments complementary to their work in English; work in foreign languages is especially recommended.

Students who plan to do graduate work, to follow a course of professional training, or to seek teacher certification in English, should see a member of the department for early help in planning their programs, as should students who plan to include work in English literature in a special or cross-disciplinary major or in a program with a concentration. We offer English certification through a program approved by the state of Pennsylvania. Because of a change in teacher certification regulations that occurred in November 2000, students completing certification during 2002 to 2003 will need to fulfill somewhat different course requirements from those who complete certification in 2004 and beyond. For further information about the relevant set of requirements, please contact the Department of Educational Studies chair, the English Department chair, or the Department of Educational Studies Web site: www.swarthmore.edu/SocSci/Education/.

Students wishing to study abroad 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 abroad will meet department criteria for requirements or to receive credit toward a major or minor, the department will rely both on its experience in evaluating the work of students returning from these programs and on careful examination of course descriptions, syllabi, and schedules. Students may undertake preparations for papers in the Honors Program while studying abroad but should consult carefully in advance with the appropriate department faculty. For further details concerning department policies for study abroad, consult the department statement filed with the Office of Foreign Studies.

Course Major

The work of a major in course consists of a minimum of eight units of credit in the department, including at least three units in literature written before 1830 (such courses are marked with a *) and three in literature written after 1830. Students should also read some critical theory, but such theory is now an important element in most of our courses. Courses marked with a *** may be counted as pre-1830 or post-1830 but not both. Introductory courses may not be counted as part of the pre-1830 or post-1830 requirement. Students must also write a senior essay. Details about the essay are available in the English Literature Department Office.

Course Minor

The work of a minor in course consists of a minimum of five units of credit in the department, including at least one unit in literature written before 1830 (such courses are marked with a *) and one in literature written after 1830.

Honors Major

Majors in English who seek a degree with honors will in the spring of their sophomore year propose for external examination a program consisting of four fields: three in English and one in a minor. The three preparations in the major (constituting six units of credit) will be constituted as follows: All three preparations will normally be done through seminars (if approved by the department, one preparation may be a thesis or creative writing project); the program must include at least one Group I and one Group II seminar.

Honors majors, as part of their overall work in the department, must meet the general major requirement of three units of credit in literature written before 1830 and three units of credit in literature written after 1830. The departmental requirements for honors, including instructions about senior honors study, are spelled out in detail in a departmental handout.

Students who wish either to write a thesis or pursue a creative writing project under faculty supervision as part of their Honors Program

must submit proposals to the department; the number of these ventures the department can sponsor each year is limited. Students who propose creative writing projects will normally be expected to have completed at least one writing workshop as part of, or as a prelude to, the project; the field presented for examination will thus normally consist of a 1-credit workshop plus a 1-credit Directed Creative Writing Project. For further information, including deadlines for Directed Creative Writing proposals, see rubric under ENGL 070K.

Honors Minor

Minors must do a single, 2-credit preparation in the department by means of a seminar (or, under special circumstances, a creative writing project). Minors are required to do a total of at least five units of work in English (including their honors preparation).

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.

Creative Writing Emphasis

Students who want to major in English with an emphasis in creative writing—whether course or honors majors—must complete three units of creative writing in addition to the usual departmental requirements of pre-1830 and post-1830 units. The creative writing credits will normally consist of two workshops (ENGL 070A-E or G) and ENGL 070K: Directed Creative Writing Projects. Students may count toward the program no more than one workshop offered by departments other than English Literature. Admission into the program will depend on 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.

CURRICULUM

The English Department courses are grouped together by historical period, genre, or course level as follows:

001A, B, C:	Special Courses that do not count toward the major
005A, B, C, and 006A, B, C, etc.:	Introductory Courses: all primary distribution courses (PDCs)
010-096:	Advanced courses
010,011:	Survey Courses in British Literature
014-019:	Medieval
020-029:	Renaissance and 17th Century
030-039:	Restoration, 18th Century, and Romantic
040-049:	Victorian to Modern
050-069:	American (including African American, Asian American, and Native American)
070A, B, C, etc.:	Creative Writing and Journalism Workshops
071A, B, C, etc.:	Genre Studies
072-079:	Comparative Literature/ Literature in Translation
080-096:	Critical Theory, Film, and Media Studies
097-099:	Independent Study and Culminating Exercises
Over 100:	Honors Seminars, Theses, etc. (open to juniors and seniors with approval of the department chair only)

001: SPECIAL COURSES

These courses are special writing-intensive courses that count toward graduation credit but not toward the English major. They may not be substituted for the English introductory course requirement, and they are not PDCs.

ENGL 001A. Insights into Academic Writing

This course offers students an opportunity to develop their skills as college writers. Through frequent practice, class discussion, and in-class activities, students will become familiar with all aspects of the writing process and will develop their ability to write for an academic audience. A variety of writing assignments,

given throughout the course, will offer students an opportunity to work with different purposes and for different audiences. Readings have been selected to serve as an impetus for critical reading, writing, and thinking. Students will also participate in conferences with the instructor to discuss writing related to the course as well as other academic assignments.

Meets the distribution requirements but does not count toward the major.

1 credit.

Each semester. Staff.

ENGL 001B. English for Foreign Students

Individual and group work on an advanced level for students with non-English backgrounds.

Does not meet distribution requirements or count toward the major.

1 credit.

Each semester. Evans.

ENGL 001C. The Writing Process

(Cross-listed as EDUC 001C)

This course combines study of theories of composition and the teaching of writing with supervised experience applying the skills derived from that study in paper comments and conferences. Enrollment limited to students selected as writing associates. Admission is granted at the discretion of the instructor.

Meets distribution requirements but does not count toward the major.

1 credit.

Fall 2002. Gladstein.

005 and 006: INTRODUCTORY COURSES

These courses are all introductory courses and PDCs. Freshmen and sophomores must take one of these courses before taking an advanced course. Normally, a student is allowed to take only one introductory course.

ENGL 005C. Cultural Practices and Social Texts

What constitutes "culture"? Who is entitled to it? What are the effects of not having it? This course will look at how different conceptualizations of culture—in theory and in practice—have at stake questions of identity (individual and collective), political practice and agency, structures of power, and possibilities for social transformation. Authors will include Shakespeare, Arnold, Kipling, Raymond Williams, Brecht, and Zora Neale Hurston.

Primary distribution course. 1 credit.

Fall 2002. Lesjak.

ENGL 005E. The Subject in Question

How do we become who we are? What social discourses and practices enable the shaping of identity? How does reading affect this process? This course will explore the ways in which subjectivity and ideology interpenetrate within a range of texts and our commentary upon them. Writers will include Shakespeare, Flaubert, Kafka, Faulkner, Rich, Morrison, and DiLillo. Theoretical essays may also be assigned.

Primary distribution course. 1 credit.

Not offered 2002-2003.

ENGL 005F. Fairy Tales and Magic Fictions

This course will explore the encounter with the fantastic. How does fantasy comment upon our fears and desires? How does it challenge our habits of perception? What does it teach us about the nature of knowing? How do magic fictions critique the social problems of the real world? We will read fairy tales and contemporary reworkings of them, children's literature, science fiction, and magic realism. Selected authors: Grimm, Carroll, Shakespeare, Butler, Kafka, Rowling, Pullman.

Primary distribution course. 1 credit.

Each semester. Evan.

ENGL 005G. Rites of Passage

The course will focus on various rites of passage, symbolic actions that chart crucial changes in the human psyche, as they are consciously depicted or unconsciously reflected in different literary modes and will examine the shared literary experience itself as ritual process. Authors will include Shakespeare, Blake, Conrad, Lawrence, and Walker.

Primary distribution course. 1 credit.

Not offered-2002-2003.

ENGL 005H. Portraits of the Artist

We will study a variety of works portraying artists in different cultures and contexts and media. In some cases (as with Homer's *Odyssey*), we will focus on qualities of artful-

ness (in bards, in Odysseus and Penelope, etc.) particularly valued by the culture that produced the work. Works studied include portions of Homer's *Odyssey* as translated by Robert Fagles, selected "Arabian Nights" tales, Oscar Wilde's novel *Dorian Gray*, Virginia Woolf's novel *To the Lighthouse*, and various other works of literature and film.

Primary distribution course. 1 credit.

Fall 2002. Schmidt.

ENGL 005J. The Ironic Spirit

This course is interested in the risky business of irony as discursive practice or strategy—why and how ironies are used and understood and the consequences of attributing interpretations. "Ironists" include Shakespeare (*Othello*) Toni Morrison (*Sula*), Emily Dickinson (poetry), Mark Twain (*Pudd'nhead Wilson*), Ralph Ellison (*Invisible Man*), Stephen Crane (stories), and Audre Lorde (poetry). Required viewing: *Apocalypse Now*.

Primary distribution course. 1 credit.

Not offered 2002-2003.

ENGL 005K. Literature and the Grotesque

Exploring ways the grotesque may be used to redefine the human or dramatize the limits of human understanding, this course tracks the comic, uncanny, and generative elements of the grotesque through works by García-Márquez, Shakespeare, Baudelaire, Browning, Kafka, Wright, and O'Connor.

Primary distribution course. 1 credit.

Fall 2002. Bolton.

ENGL 005L. Reading Nature

This course explores the broad and often paradoxical field of nature writing, ranging from Shakespeare's "green world" through English and American Romanticism (Wordsworth, Thoreau, etc.) to the environmental legislation these writers helped produce and including the work of contemporary writers such as Terry Tempest Williams. We'll explore the aims and strategies informing attempts to translate the natural world into marks on a page, and students will be asked to produce some nature writing of their own over the course of the semester.

Primary distribution course. 1 credit.

Not offered 2002-2003.

ENGL 005N. Illicit Desires in Literature

This course will examine literary expressions of a range of sexual desires from the 17th century to the present day. Among other questions, we will ask what differences race and gender have made, noting, for instance, that works by canonical writers can depict and even celebrate forms of sexuality that are much more problematic for those who speak from positions of less privilege.

Primary distribution course. 1 credit.

Not offered 2002-2003.

ENGL 005Q. Subverting Verses

Once history, biography, fiction, philosophy, and even science could be written in verse without seeming peculiar or affected, but today the line between poetry and prose is sharply drawn. Or is it? This course will examine unconventional forms and uses of poetry—from Chaucer's *Tales* to Cocteau's *Orpheus*, from Barrett Browning's *Aurora Leigh* to Dove's *Darker Face of the Earth*, from Darwin's *Loves of the Plants* to Seth's *Golden Gate*—to explore our assumptions about the nature of genre.

Primary distribution course. 1 credit.

Not offered 2002-2003.

ENGL 005R. Fictions of Identity

What are the assumptions behind and limits to the modern Western understanding of the individual? How can we reconcile psychoanalytic and postmodern conceptions of the fragmented subject with the urgency of identity politics for people of color, women, lesbians, and gay men? We will examine how identity and difference are constructed, communicated, and contested through language and literature and through structures of seeing and being seen in film and video. Texts by Shakespeare, Mary Shelly, Freud, Woolf, Baldwin, Orson Welles, and others.

Primary distribution course. 1 credit.

Not offered 2002-2003.

ENGL 006A-006Z

Reserved for subsequent introductory courses.

ENGL 006A. Legal Fictions: Law and Literature in the United States

In 1776, Thomas Jefferson declared independence by asserting the "self-evident" truth that "all men are created equal." This course con-

siders writers who found their very personhood denied by imperial or federal law. We will examine how authors responded, using words to challenge the truth and to fight for legal, social, and economic recognition. Authors include Franklin, Jefferson, Poe, Douglass, Jacobs, Sone, Petry, Williams, and Wilson.

Primary distribution course. 1 credit.

Each semester. K. Johnson.

ENGL 006B. Utopias

This course explores utopia on uncharted islands, in dark futures and in the virtual nowhere of cyberspace. What is the place of desire, technology, and the individual in utopian fictions? The textual range embraces philosophical treatises, political satires, travel narratives, and science fiction. Authors may include Plato, Thomas More, Daniel Defoe, Jules Verne, Aldous Huxley, George Orwell, Margaret Atwood, Samuel Delany, Toni Morrison, and William Gibson.

Primary distribution course. 1 credit.

Each semester. Campos.

ENGL 006D. Nation and Migration

Drawing on novels, short stories, and poetry produced by immigrant writers from South Asia, Africa, and the Caribbean, this course explores nationalism and migration as two primary modalities through which identities and communities are formed in the modern world. How does the migrant/diasporic writer rewrite the English language to reflect questions of race and power, nationhood and citizenship, and histories of the past and present? Authors may include Achebe, Kincaid, Kureishi, Mootoo, Ondaatje, and Rushdie.

Primary distribution course. 1 credit.

Each semester. Mani.

ENGL 006E. The Poetics of Power

This course explores ideas about the problems power raises in texts ranging from ancient Greece to the modern era and from the context of those who are traditionally empowered and those who learn power "from the bottom up." Through voices of those who feel power's effects and inequities most acutely, we will consider such questions as: What is power? Where does it originate? How does it differ from "authority," "right," and "sovereignty"? What are its effects on race, gender, and class? On love and sex? As we tackle such questions, we will be seeking both perennial and carefully historicized answers to the problems power raises, looking for "universals" while differentiating between our contemporary experiences and lives far removed from our own in circumstance, distance, and time. Among others, writers include Sophocles, Shakespeare, Frederick Douglass, and Virginia Woolf as well as selected poetry.

Primary distribution course. 1 credit.

Fall 2002. Riebling.

010-096: ADVANCED COURSES

These courses are open to freshmen and sophomores who have successfully completed an introductory course and to juniors and seniors without the introductory prerequisite.

010-011. SURVEY COURSES IN BRITISH LITERATURE

ENGL 010. Survey I: *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.

1 credit.

Fall 2002. Williamson.

ENGL 011. Survey II: Neo-Classical to Post-Colonial

A historical and critical survey of poetry, prose, and drama from Pope to Rushdie, focusing on progress, modernity, and the subject as central concepts which British literature of this period confronts whether in form or content.

1 credit.

Not offered 2002-2003.

014-019: MEDIEVAL

ENGL 014. Old English/History of the Language*

(Cross-listed as LING 014)

A study of the origins and development of English—sound, syntax, and meaning—with an initial emphasis on learning Old English. Topics may include writing and speech, a history of morphology, the changing phonology

from Old to Middle English, Shakespeare's puns and wordplay, a history of sounds and spellings, modern coinages, and creoles. We range from *Beowulf* to Cummings, from Chaucer to Chomsky.

This course may be taken without the usual prerequisite course in English; however, it may not serve in the place of a prerequisite for other advanced courses.

Counts as humanities distribution credit under this listing.

1 credit.

Not offered 2002-2003.

ENGL 016. Chaucer*

Readings in Middle English of most of Chaucer's poetry with emphasis on *The Canterbury Tales* and *Troilus and Criseyde*. We place the poems in a variety of critical and cultural contexts—both medieval and modern—which help to illuminate Chaucer's art. In the manner of Chaucer's Oxford Clerk, we hope "to gladly lerne and gladly teche."

1 credit.

Not offered 2002-2003.

020-029: RENAISSANCE AND 17TH CENTURY

ENGL 020. Shakespeare*

We'll cover many topics in this survey of Shakespeare's plays, including kingship, comedy and tragedy, father-daughter relationships, sexuality, race, performance, the roles of women, language, and the rewriting of history. We will frequently return to the question of theater's place in 16th- and 17th-century England as represented on stage and in other writings of the period. We will also examine Shakespeare's place in the cultures we inhabit.

1 credit.

Fall 2002. Campos.

ENGL 021. Race in Early Modern England*

Renaissance conceptions of race were very different from our own. In fact, the term "race" used to denote phenotypic, ethnic, or cultural specificity did not even exist in the age of Shakespeare. Nevertheless, international war, colonization, and the increase in global trade and exploration brought Elizabethans and Jacobeans into contact with a host of cultural others such as Jews, Turks, Moors, Amerindians, and Spaniards. This course will explore the ways in which the Renaissance stage explored the categories of religion, nationality, and skin color in order to continually redefine English identity over and against constructed fantasies of cultural others. Works include *Othello*, *The Merchant of Venice*, *Henry V* (Shakespeare), *Tamburlaine*, *The Jew of Malta* (Marlowe), *The Fair Maid of the West* (Heywood), and *The Renegado* (Massinger).

1 credit.

Spring 2003. Campos.

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.

1 credit.

Not offered 2002-2003.

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.

1 credit.

Spring 2003. N. Johnson.

ENGL 026. English Drama Before 1642*

English drama began as a communal religious event, but the theaters were shut down in 1642 because of their reputation for impiety and social disorder. This course will trace the drama from its medieval forms up through its commercial success in the Renaissance and its ultimate dissolution in the Civil War.

1 credit.

Not offered 2002-2003.

ENGL 027. Tudor-Stuart Drama*

A survey of plays and masques written by Christopher Marlowe, Ben Jonson, Thomas Middleton, Thomas Dekker, John Webster, Elizabeth Cary, John Ford, and others. The course will consider historical, sociopolitical, and literary contexts; just as important, we will look at how the plays have been and continue to be performed.

1 credit.

Spring 2003. N. Johnson.

ENGL 028. Milton*

Study of Milton's poetry and prose with particular emphasis on *Paradise Lost*.

1 credit.

Not offered 2002-2003.

ENGL 029. Renaissance Travel and Discovery*

High seas adventure, first contact, conquest, colonization, and imperial expansion. This course examines transatlantic literature in the Age of Discovery by charting the influence of the newly discovered Americas over the literary production of Renaissance England. Readings explore the interplay between travel narratives (Columbus, Raleigh, and Drake) and a wide range of literary forms, including drama (Shakespeare, Marlowe, and Heywood); romance (Spenser and Lodge); and poetry (Donne).

1 credit.

Not offered 2002-2003.

030-039: RESTORATION, 18TH CENTURY, AND ROMANTIC

ENGL 031. Topics in the "New" 18th Century*

The 18th century has been seen as the age of reason *and* the age of exaggerated emotion; an era of imperialism *and* expanding political participation; a time of progress *and* melancholy, technical advances, and spiritual necrophilia. We'll examine the 18th century's schizophrenic "spirit of the age" and its implications for our own time.

1 credit.

Not offered 2002-2003.

ENGL 033. The Romantic Sublime*

"The essential claim of the sublime is that man [sic] can, in speech and feeling, transcend the human" (Weiskel). What does this transcendence look like? How is it achieved? What resources does it offer us, and at what cost? Authors: Burke, Blake, the Wordsworths, Coleridge, Byron, the Shelleys, and Keats.

1 credit.

Spring 2003. Bolton.

ENGL 034. Restaging Romanticism*

During the Romantic period, the number of women writing in all genres increased dramatically: Many of these women writers were connected with the stage as actresses, dramatists, or critical spectators. This course explores some of the connections between theatre and politics, between genre and gender in the work of both male and female writers of the period.

1 credit.

Not offered 2002-2003.

ENGL 035. Rise of the Novel*

This course will look at classic 18th-century novels considered to constitute the origins of the novel in relation to less canonical texts—mainly by women—in order to examine the debate over the cultural legitimacy of the novel and questions regarding high/low art (and concomitant distinctions of gender) raised by it. Novelists include Behn, Burney, Defoe, Richardson, Fielding, Haywood, and Austen.

1 credit.

Not offered 2002-2003.

ENGL 036. The Age of Austen*

First we'll read Austen's novels and other relevant texts in order to sketch the general contours of "The Age of Austen." Then we'll turn to recent film and television remakes of Austen novels to explore what's gained and lost in the translation to film—and the reasons behind Austen's resurgent appeal to late 20th-century audiences.

1 credit.

Not offered 2002-2003.

040-049: VICTORIAN TO MODERN

ENGL 040. Victorian Studies

An interdisciplinary study of British cultural formation during the Victorian period. This semester will focus on how and why certain

cultural boundaries were drawn between civilized and savage, man and machine, normal and deviant, paying particular attention to some of the more unsuspecting forms (gothic horror, "sensational" mysteries, the detective story, and children's literature)—in and through which ideas of gender, sexuality, domination, and violence are approached.

1 credit.

Not offered 2002-2003.

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, this course examines the responses of the Victorian poets to the stresses peculiar to their era.

1 credit.

Not offered 2002-2003.

ENGL 044. Modern Bodies in the Making: The 19th-Century Novel

Covering a wide range of Victorian novels, this course will examine how these narratives understand and represent class and gender formation, national and racial definition, productive and reproductive labors and sexualities, and issues of representation as they are redefined through these narratives. Authors will include Austen, the Brontës, Dickens, Eliot, Hardy, Wilkie Collins, William Morris, and Wilde.

1 credit.

Spring 2003. Lesjak.

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 20th-century life.

1 credit.

Not offered 2002-2003.

ENGL 048. Contemporary Women's Poetry

"Merely the private lives of one-half of humanity": thus Carolyn Kizer defines the 20th-century revolution through which women poets give voice to the previously unspeakable and explore the political implications of the supposedly personal. This course considers a variety of poetic styles and stances employed by women writing in English today—feminist or womanist, intellectual or experiential, lesbian or straight, and mindful of ethnic heritage or embracing the new through artistic experimentation.

1 credit.

Not offered 2002-2003.

ENGL 049. Contemporary Irish Poetry

Ireland's complicated historical divisions have provided fertile ground for extraordinary poetry, both in the Republic and in the North. This course will consider poetry by Heaney, Boland, Carson, McGuckian, Muldoon, and ni Dhomnaill (among others) within the sociopolitical contexts of contemporary Ireland.

1 credit.

Not offered 2002-2003.

050-069: AMERICAN (INCLUDING AFRICAN AMERICAN, ASIAN AMERICAN, AND NATIVE AMERICAN)

ENGL 050. Borders Within*

Through historical analysis of literary form (autobiography, novels, poetry, storytelling, images, film, as well as the law), we will examine the competing definitions of writing, selfhood, and nation with which "Indians" and "pioneers" tried to shape their world. We will read both white writers who sympathized with or vilified "Indians" as well as Native authors who resisted or reinforced the assumptions emboldening European conquest and American manifest destiny. Authors may include John Smith, Bradford, Rowlandson, Freneau, Jefferson, Irving, Apess, Cooper, Black Hawk, Winnemucca, Ortiz, Tapahonso, Silko, and Alexie.

1 credit.

Spring 2003. K. Johnson.

ENGL 052A. Studies in American Prose

A study of 19th- and 20th-century American narratives exploring the consequences of forbidden border crossings—cultural, racial, and sexual. Nineteenth-century texts: a feminist look at the Puritans and Indians (*Hobomok*),

Douglass' *The Heroic Slave*, Hawthorne's *Scarlet Letter*, Melville's "Benito Cereno," and James' *Portrait of a Lady*. More modern works: Cather's *The Professor's House*, Hemingway's *The Garden of Eden*, Charles Johnson's tribute to Douglass and Melville (*Middle Passage*), and Leslie Marmon Silko's *Gardens in the Dunes*.

1 credit.

Not offered 2002-2003.

ENGL 052B. American Fiction: Melville and Pynchon

The big books course, from M-D to M&D. A study of two writers with many shared ambitions, interests, and compulsions, with emphasis on their epics *Moby-Dick*, *Gravity's Rainbow*, and *Mason & Dixon*, along with selected secondary sources, concordances, and reader's guides.

1 credit.

Not offered 2002-2003.

ENGL 052C. American Women's Fiction

A look at romance and realism and race in women's fiction over two centuries. Tentative syllabus: Lydia Maria Child's *A Romance of the Republic* (1867); the "local color" short stories of Mary Wilkins Freeman; Edith Wharton, *The Age of Innocence* (1920); Zora Neale Hurston, *Their Eyes Were Watching God* (1937); plus selected contemporary work by Toni Morrison, Dorothy Allison, Rebecca Wells, and others.

1 credit.

Not offered 2002-2003.

ENGL 053. American Poetry

A study of the poetry and prose of selected U.S. writers, including Whitman, Dickinson, and a few other 19th-century poets to be determined, plus 20th-century poets such as Williams, Stevens, H.D., and Hayden.

1 credit.

Not offered 2002-2003.

ENGL 054. Faulkner, Morrison, and the Representation of Race

This course has two aims: to explore in some depth the fiction of two major American novelists and to work toward aesthetic criteria attentive to both racial dynamics and formal achievement.

1 credit.

Not offered 2002-2003.

ENGL 055. Captive Audiences*

The origin and history of national identity in the United States has been deeply impressed by captivity narratives in which an individual is removed from his or her home and struggles to return. We will define and trace the ideas of home, captivity, and restoration in literature from the 17th century to the years immediately after the American Civil War. We will consider how authors in various historical contexts reworked these ideas to promote or confound the romance of American self-realization. Authors may include Rowlandson, Behn, *The Declaration of Independence*, Crèvecoeur, Franklin, Rowson, Child, Cooper, Douglass, Jacobs, Melville, and James.

1 credit.

Fall 2002. K. Johnson.

ENGL 056. The Power of Sympathy in America*

Characters in 18th- and 19th-century literature often find themselves on the edge of emotional precipices, weeping in misery, blushing with guilt, and wracked with fear of impending doom. What is all the fuss? This course explores the role of sentiment in formulating national American identity from the colonial period to the mid-19th century. With an emphasis on the social contexts of the American Revolution, Civil War, and manifest destiny, we will consider the dynamic logic of sympathy in various political and literary texts. Authors include Winthrop, Bradstreet, Adam Smith, Crèvecoeur, Franklin, Paine, C.B. Brown, Barlow, Rowson, Emerson, Bryant, Stowe, and Whitman.

1 credit.

Spring 2003. K. Johnson.

ENGL 057. The African American Writer

This century-long overview considers the way African American writers frame their double-faced culture, foreground their history and heritage, and portray their community's way of knowing itself. Writers range from Chesnutt to Morrison and may include J.W. Johnson, W.E.B. DuBois, Jean Toomer, Richard Wright, Langston Hughes, or Alice Walker.

1 credit.

Fall 2002. James.

ENGL 059. The Harlem Renaissance

Through the lens of the Harlem Renaissance era, this course considers African American modernism and cultural nationality in the decade following World War I. We will focus largely on writings, but lectures on art and music are included, and views concerning the meaning of Harlem as locale are pertinent. A day trip to Harlem will be arranged.

1 credit.

Spring 2003. James.

ENGL 060. Sites of Memory: Contemporary African American Writing

Imaginative texts that remap the terrain of African American cultural and social history since the 1970s are central to this study of contemporary writing that focuses on "memories" of slavery as a way of understanding the present. Writers may include, among others, Ernest Gaines, Paule Marshall, Charles Johnson, Toni Morrison, Alice Walker, David Bradley, Ishmael Reed, or Octavia Butler.

1 credit.

Not offered 2002-2003.

ENGL 065. Introduction to Asian American Literature

How does "Asian American" operate as a highly contested category of ethnic and national identify? This course examines literature and critical essays by writers such as Theresa Hak Kyung Cha, Frank Chin, Maxine Hong Kingston, Jhumpa Lahiri, and Lisa Lowe, as well as films by Helen Lee, in order to explore topics such as Asian American racial formation, gendered narratives of immigration, and the changing face (and space) of Asian America.

1 credit.

Fall 2002. Mani.

ENGL 069. Blues, Jazz, and American Culture

Can words help us understand musicians and the power of music? Is Wynton Marsalis right—jazz is the musical form that best teaches democratic values? This course will study how blues and jazz have shaped key modes and ideas in American culture, including American literature. The syllabus may include Ralph Ellison, James Baldwin, George Lipsitz, and Tricia Rose; an anthology of poetry and prose celebrating jazz; excerpts from Ken Burns' documentary *Jazz*; novels about musicians by Albert Murray, Paule Marshall, and Rafi Zabor; and cultural histories such as Angela Davis' *Blues Legacies* and *Black Feminism*, Daniel Belgrade's *The Culture of Spontaneity*, Jon Panish's *The Color of Jazz: Race and Representation in Postwar American Culture*, and Nathaniel Mackey's *Discrepant Engagement: Dissonance, Cross-Culturalism, and Experimental Writing*.

1 credit.

Spring 2003. Schmidt.

070: CREATIVE WRITING AND JOURNALISM WORKSHOPS

Regular creative writing workshops are limited to 12 and require the submission of writing samples in order for students to apply for them. 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, do not require the submission of manuscripts, and have as their prerequisite (for freshmen and sophomores but not for juniors or seniors) an English introductory course. Students may normally take only one workshop at a time.

ENGL 070A. Poetry Workshop

A class, limited to 12, in which students write, read, translate, and talk about poetry. We will emphasize the discovery and development of each individual's distinctive poetic voice, imagistic motifs, and thematic concerns, within the context of contemporary poetics. Students should submit three to five pages of poetry for admission, at a time announced during fall semester. The workshop will meet once a week for four hours. Admission and credit are granted at the discretion of the instructor.

1 credit.

Spring semester each year.

Spring 2003. Bolton.

ENGL 070B. Fiction Writers' Workshop

We'll approach the challenge of constructing compelling narratives through a series of formal exercises and experiments. Students will read and comment on each other's writing as they work to hone their own style and clarify their central thematic concerns. Twelve students are admitted to the class on the basis of a writing sample submitted during fall semester.

1 credit.

Spring semester each year.

Spring 2003. Staff.

ENGL 070C. Advanced Poetry Workshop

Intensive volumes of poetry often represent their authors' conscious statements, made through selection, organization, and graphic presentation. This course—in which students design and complete volumes of their own work—is normally intended as an advanced workshop for students who have taken the Poetry Workshop (ENGL 070A), or—with the instructor's permission—students who have taken ENGL 070D, 070E, or 070G. Limited to 12. Admission and credit are granted at the discretion of the instructor.

1 credit.

Fall 2002. Schmidt.

ENGL 070D. Grendel's Workshop (New Texts From Old)#

John Gardner rewrote the ancient epic *Beowulf* in modern idiom from the monster's point of view. Shapers like Césaire and Auden have brought Shakespeare's *Tempest* into the 20th century. 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.

1 credit.

Not offered 2002-2003.

ENGL 070E. Lyric Encounters#

Matthew Arnold called it "a criticism of life" and Dylan Thomas "a naked vision." Emily Dickinson defined it as a blow: "If I feel physically as if the top of my head were taken off, I know that it is poetry." Students will examine varieties of the lyric and then shape their own criticisms, visions, cerebral explosions in response.

1 credit.

Not offered 2002-2003.

ENGL 070F. Journalism Workshop

Matthew Arnold said journalism is "literature in a hurry." In this workshop, we will teach journalism with that idea in mind, from mastering the basics to writing with literary flourish. This introduction will cover everything from reporting and writing to ethics and objectivity. Students will report and write stories on a regular basis and will also stay on top of the day's news, in addition to acquainting themselves with recent thought concerning the state of journalism. The stories will challenge students to employ the skills learned in class in "real-world" settings. This course will focus on hard news and newspapers, although it will explore other areas of journalism. Prominent journalists will often visit the class as guest teachers. Enrollment limited to 15.

1 credit.

Fall 2002. Dowkings.

ENGL 070G. Writing Nature#

Writing about nature forces us to attend to both. We'll work in four different modes of writing: journals, nonfiction prose, poetry, and experimental fiction. Most weeks, we'll spend the first class analyzing famous models of nature writing and the second discussing student writing. Three times during the semester, we'll go on field walks to help ground our writing in specific observation.

1 credit.

Fall 2002. Bolton.

ENGL 070K. Directed Creative Writing Projects

Students—whether course or honors majors—who plan a directed writing project in fiction or poetry must consult with the department chair and with a member of the department's writing faculty who might supervise the project and must submit a prospectus to the department by way of application for such work before the beginning of the semester during which the project is actually done. The number of these ventures the department can sponsor each year is limited. Deadlines for the written applications for the Directed Creative Writing Projects are the Mondays immediately following the fall and spring breaks. Normally limited to juniors and seniors who have taken an earlier workshop in the department.

For creative writing projects in the Honors Program, the 2-credit field will normally be defined as a 1-credit workshop (ENGL 070A, 070B, or 070C) paired with a 1-credit Directed Creative Writing Project (ENGL 070K). The approximate range of pages to be sent forward to the examiners will be 20 to 30 pages of poetry or 30 to 50 pages of fiction. There will be no

written exam for the creative writing project; the student's portfolio will be sent directly to the examiner, who will then give the student an oral exam 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.

1 credit.

Staff.

071: GENRE STUDIES

See also ENGL 081. Theory of the Novel.

ENGL 071B. The Lyric in English***

A survey of the history of the lyric poem in English from its origins in Old and Middle English to contemporary poetry, using an anthology. There will also be special emphasis on the essentials of prosody, the study of meter and rhythm. Each version of the course will also feature the in-depth study of one poet. For 2003: John Donne.

Note: By arrangement with the professor, this course may be counted as either pre-1830 or post-1830 but not both.

1 credit.

Spring 2003. Schmidt.

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.

1 credit.

Spring 2003. Bolton.

ENGL 071F. Gothic Possibilities

"High Gothic" flourished in England in the 1790s; "Southern Gothic" adapted the conventions of the form to the demands of modernist fiction and the culture of the American South. Among the Gothic possibilities we will consider: sensationalism (Lewis), domestication (Radcliffe), parody (Austen), autobiography (Porter), fragmentation (Faulkner), and cultural critique (Toomer).

1 credit.

Not offered 2002-2003.

ENGL 071G. Satire: Spirit and Art

In satire, folly lives undisturbed with wit, blasphemy with adoration, dullness with ingenuity, and whimsy with gravity. This course speculates about the odd nature of this formless and ambiguous genre—its problematical standing, its claims to moral purpose, its power or impotence. Texts, from verse to narratives in fiction and film, include futuristic works of Aldous Huxley and Margaret Atwood; anachronistic views of Ishmael Reed and Gore Vidal; extended ironies of Shirley Jackson and Jonathan Swift; dark and comic views of urban culture by Nathanael West, Langston Hughes, John Kennedy Toole, and Homer Simpson.

1 credit.

Not offered 2002-2003.

ENGL 071J. Cherchez la femme: The "Mystery" of Woman in the Mystery Genre

From Eden on, our cultural narratives of deception and discovery have often centered on Woman, vulnerable, culpable, and duplicitous. The concept of woman as potential victim and perpetrator powered many detective novels popular in the 19th and 20th centuries and has paradoxically enabled startling re-visions of the genre by contemporary women writers. Our investigation of this "mystery" will involve male authorities—Conan Doyle, Chandler, Hammett—and female private "I"s—Sara Paretsky, Sue Grafton, and Barbara Wilson.

1 credit.

Not offered 2002-2003.

ENGL 071K. Lesbian Novels Since World War II

This course will examine 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?

1 credit.

Spring 2003. N. Johnson.

ENGL 071M. James Merrill and the Epic Poem

An introduction to what may be the most important epic poem published in our lifetime, James Merrill's *The Changing Light at Sandover* (1984). It is a moving mixture of tragedy and comedy featuring conversations with the dead via an Ouija board and the heroic exploits of God Biology recycling souls and cloning genius. We will begin the course with a brief look at Dante's *Inferno*, one earlier epic poem important to *Sandover*.

Enrollment limited to 15.

1 credit.

Not offered 2002-2003.

072-079: COMPARATIVE LITERATURE/ LITERATURE IN TRANSLATION

ENGL 072. Proust, Joyce, and Faulkner

Selections from Proust's *Remembrance of Things Past*, Joyce's *Dubliners* and *Ulysses* entire, and Faulkner's *The Sound and the Fury* and *Absalom, Absalom!* Emphasis on the ideological and formal tenets of modernism.

1 credit.

Not offered 2002-2003.

ENGL 073. Modernism: Theory and Practice

Drawing on a range of theorists and practitioners, this course will explore some salient energies and problems of modernism. Theorists will include Nietzsche, Freud, Weber, Simmel, Adorno, Benjamin, Bakhtin, and de Certeau, among others. Practitioners will be chosen from among the following writers: Joyce, Kafka, Proust, Rilke, Mann, Woolf, and Faulkner.

1 credit.

Not offered 2002-2003.

ENGL 073A. Mapping the Modern

(Cross-listed as SOAN 052)

The course seeks to explore some of the salient issues, achievements, and problems that serve to map Western modernity. Beginning with "prophetic voices" from the mid-19th century, we then concentrate upon "urban fables" of early 20th-century high modernism, concluding briefly with late-20th-century "postmodern lenses." Texts will be chosen from among the following writers: Marx, Baudelaire, Nietzsche, and Dostoevsky; Rilke, Kafka, Freud, Joyce, and Woolf; Weber, Simmel, Adorno, Benjamin, and Lukacs; Bakhtin, Arendt, Canetti, and de Certeau; Calvino and Borges; Berman and Harvey. The central topics under study are the phenomena of the modern subject and the modern city, as expressed in literature, analyzed in sociology and critical theory, and represented in a range of cultural practices.

1 credit.

Not offered 2002-2003.

ENGL 074. Modern Epic: Tolstoy, Joyce, and García-Márquez

This course will examine three "encyclopedic" texts (*War and Peace*, *Ulysses*, *One Hundred Years of Solitude*) that rehearse and transform inherited paradigms of cultural identity, purpose, and destiny. Through sustained attention to formal and ideological tenets of these specific texts, we will also seek to interrogate some of the salient procedures of realism, modernism, and postmodernism.

1 credit.

Not offered 2002-2003.

ENGL 075. South Asian Diasporas: Culture, Politics, and Place

This interdisciplinary course surveys a century of migration from the Indian subcontinent overseas, and examines the impact of South Asian immigration on the racial and cultural economies of the United States, the United Kingdom, and Canada. Literary, historical, ethnographic and cinematic texts explore the following topics: the history of Indian immigration to the Caribbean and North America in the 19th century; queer South Asian diasporas, gendered narratives of immigration; and the politics of popular culture among second-generation South Asian youth. The course emphasizes how South Asians in diaspora negotiate new forms of national identity and cultural citizenship, with specific attention to axes of gender, generation, sexuality, and class.

1 credit.

Spring 2003. Mani.

ENGL 078. The Black African Writer

The texts in this course reflect the shared need of women and men to come to terms with a past usurped by colonial regimes and traditions tested by modernist visions. Writers of narratives and poetry meditate on the national pre-

sent as well as on the shape of things to come even as they search the past. Authors include Chinua Achebe, Buchi Emecheta, Ama Ata Aidoo, Amos Tutuola, Sembene Ousmane, Ngugi wa Thiong'o, and Nuruddin Farah.

1 credit.

Not offered 2002-2003.

ENGL 079. Beyond Translation: The Challenge of Bi-Lingual Creative Writing in Africa

(Cross-listed as BLST 079)

1 credit.

Spring 2003. Anyidoho.

080-096: CRITICAL THEORY, FILM, AND MEDIA STUDIES

ENGL 080. Critical and Cultural Theory

An introduction to texts and contexts in contemporary critical theory and cultural studies. We will read narrative, psychoanalytic, Marxist, poststructuralist, feminist, queer and postcolonial theory, raising questions of subjectivity, difference, ideology, representation, methodology, and cultural politics.

1 credit.

Not offered 2002-2003.

ENGL 081. Theory of the Novel

A study of novels representative of the novel's development as a form in conjunction with different theories of the novel. We will consider the origins of the novel, the relationship between the history of the novel and the history of sexuality, and debates regarding the novel and the politics of realism, modernism, and contemporary postmodernism. Authors include: Watt, Lukacs, Brecht, Armstrong, Jameson, Richardson, Eliot, and Woolf.

1 credit.

Not offered 2002-2003.

ENGL 082. Transnational Feminist Theory

This class introduces perspectives in feminist theory 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 politics? Through critical inquiry into major texts in transnational feminist studies, the course dynamically reconceptualizes the relationship between women and nation; between gender and globalization; and between feminist theory and practice. Readings include selections from Grewal and Kaplan, Spivak, Lorde, and Hooks.

1 credit.

Spring 2003. Mani.

ENGL 083. Feminist Theory

Close readings of a range of feminist theory, from early feminist texts which attempt to establish the fact of sex-based oppression to later works addressing psychoanalysis and the problem of "master discourse"; the issue of what is "woman"; and questions of how class, sex, gender, imperialism, and race intersect.

1 credit.

Not offered 2002-2003.

ENGL 085. "Whiteness" and Racial Difference

A look at the history of how "racial" identities and differences have been constructed in past and contemporary cultures, especially in the United States. Includes writings on the subject by cultural critics of all races.

1 credit.

Not offered 2002-2003.

ENGL 086. Postcolonial Literature and Theory

A comparative study of postcolonial literature and theory within a global framework, emphasizing the political, historical, and cultural dimensions of these texts. Of central concern will be how the "empire writes back": its representations of political and literary histories, nationalism, race, and gender. Readings by Said, Aijaz Ahmad, Amin, Rushdie, Emecheta, Ousmane, Dangarembga, Achebe, Nwapa, and Mariamma Ba.

1 credit.

Not offered 2002-2003.

ENGL 087. American Narrative Cinema

Considers film as narrative form, audiovisual medium, industrial product, and social practice, emphasizing the emergence and dominance of classical Hollywood as a national cinema, with some attention to independent narrative traditions such as "race movies." Genres such as the western, the melodrama, and film noir express aspirations and anxieties about

race, gender, class and ethnicity in the United States. Auteurist, formalist, Marxist, feminist, and psychoanalytic methods will be explored.

1 credit.

Not offered 2002-2003.

ENGL 087A. Topics in American Cinema: Film of the Seventies

This course examines the renewal of American movies from *Bonnie and Clyde* (1967) to *Star Wars* (1977). We will focus on two topics: the rise of young directors, such as Altman, Coppola, Lucas, Scorsese, and Spielberg; and the influence of the period's social upheavals, including Vietnam, Watergate, feminism, and civil rights. We will also explore how filmmakers adapted classical Hollywood genres (the musical, the Western, and the war movie) to new social contexts as well as how experimental films both resembled and differed from their mainstream counterparts.

1 credit.

Fall 2002. Charney.

ENGL 088. American Attractions: Leisure, Technology, and National Identity

Visual spectacles such as Barnum's museum, minstrel, and Wild West shows and vaudeville shaped American "identity" from ethnic, racial, religious, geographical, and gender differences and hierarchies, anticipating the national audiences of the Hollywood studio system and television networks. This team-taught interdisciplinary class focuses on the history and analysis of U.S. popular culture from the Civil War to the present.

1 credit.

Not offered 2002-2003.

ENGL 089. Women and Popular Culture: Fiction, Film, and Television

This course looks at Hollywood "women's films" and television soap operas, their sources in 19th- and 20th-century popular fiction and melodrama, and the cultural practices surrounding their promotion and reception. How do race, class, and sexual orientation intersect with gendered genre conventions, discourses of authorship and critical evaluation, and the paradoxes of popular cultural pleasures? *Uncle Tom's Cabin*, *Gone With the Wind*, *Rebecca*, *The Joy Luck Club*.

1 credit.

Not offered 2002-2003.

ENGL 090. Queer Media

How are sexual identities mediated by popular culture? How do lesbian and gay film and video makers "queer" sexual norms and standard media forms? Challenging classic Hollywood's heterosexual presumption and mass media appropriations of lesbian and gay culture, we will examine lesbian and gay aesthetic strategies and modes of address in contexts such as the American and European avant-gardes, AIDS activism, and diasporan film and video movements.

1 credit.

Not offered 2002-2003.

ENGL 091. Feminist Film and Media Studies

This course focuses on critical approaches to films and videos made by women in a range of historical periods, national production contexts, and styles: mainstream and independent, narrative, documentary, video art, and experimental. Readings will address questions of authorship and aesthetics, spectatorship and reception, image and gaze, race, sexual, and national identity, and current media politics.

1 credit.

Not offered 2002-2003.

ENGL 093. Studies in Film and Literature

A study of the complex ways in which film and literature interact. *Heart of Darkness* as the source and inspiration for *Apocalypse Now*. The collaboration of Handke and Wenders on *Wings of Desire*. The self-reflexive meta-forms of Pirandello and Resnais. Dramatic and cinematic treatments of Kaspar Hauser and the *Elephant Man*. Versions of *Beauty and the Beast* by Cocteau and Disney.

1 credit.

Not offered 2002-2003.

097-099: INDEPENDENT STUDY AND CULMINATING EXERCISES

ENGL 097. Independent Study and Directed Reading

Students who plan an independent study or a directed reading must consult with the appro-

priate instructor and submit a prospectus to the department by way of application for such work before the beginning of the semester during which the study is actually done. Deadlines for the receipt of written applications are the second Monday in November and the first Monday in April. Normally limited to juniors and seniors.

0.5-1 credit.

Staff.

ENGL 098, 098A. Senior Thesis

Course majors in the department may pursue a thesis of their own choosing under the supervision of a member of the department. The thesis may be for 1 (40-50 pages) or 2 (80-100 pages) credits. A brief prospectus for the project must be submitted for approval by the department in April of the junior year. Before submitting this prospectus, Course majors should consult with the department chair and with the department member who might supervise the project. This work must be separate from that of the senior culminating essay, required of every course major for graduation.

1 or 2 credits.

Staff.

ENGL 099. Senior Culminating Essay

During the fall and spring terms of the senior year, each course major is required to write a senior essay. Proposals are due in the fall, and completed essays are due in the spring. Details about the essay are available in the English Literature Department Office. One-half credit will be awarded for the essay, normally in the spring term; the essay will receive a regular letter grade.

0.5 credit.

Spring semester. Staff.

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.

GROUP I: (Pre-1830)

ENGL 101. Shakespeare*

Study of Shakespeare as dramatist and poet. 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 through all the plays before entering the seminar.

2 credits.

Fall 2002: N. Johnson. *Spring 2003:* Campos.

ENGL 102. Chaucer and Medieval Literature*

A survey of English literature, primarily poetry, from the 8th through the 15th century with an emphasis on Chaucer. Texts will include *Beowulf, Sir Gawain and the Green Knight, The Canterbury Tales, Troilus and Criseyde, Pearl, Piers Plowman*, selected medieval plays, Arthurian materials, and Margery Kempe's autobiography. Chaucer will be read in Middle English; other works will be read in translation or modernized versions.

2 credits.

Spring 2003. Williamson.

ENGL 106. Renaissance Epic*

The two major English epics of the period, Spenser's *Farie Queene* and Milton's *Paradise Lost*, considered in contexts of social and literary history, including two epic antecedents, Virgil's *Aeneid* and Tasso's *Jerusalem Delivered.*

2 credits.

Not offered 2002-2003.

ENGL 107. Renaissance Literature*

Covers a range of Renaissance writing, emphasizing relations between texts and their social realms. We'll study the private exchange of elite poetic texts, the relation between fame and stigma for published authors, the profession of the playwright, the roles of women who wrote, and the uses of writing in the Civil War. Our readings will include significant amounts of Shakespeare, non-Shakespearean drama, criticism, and theory.

2 credits.

Not offered 2002-2003.

ENGL 110. Romantic Poetry*

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.

2 credits.

Not offered 2002-2003.

GROUP II (Post-1830)

ENGL 111. Victorian Literature and Culture

This seminar will treat novels, nonfictional works, and visual art from the Victorian period in the context of Britain's age of empire. We will consider the major issues of the day—the "Condition of England" question, the "woman question," theories of evolution and revolution, the role of aesthetics—and how they are engaged and represented by different media and disciplines. Works by Carlyle, Mill, Marx, Darwin, Gaskell, Eliot, Gissing, Schreiner, Wilde, among others.

2 credits.

Fall 2002. Lesjak.

ENGL 112. Women and Literature

Women's Poetry of the Twentieth Century: "Tell it slant," Emily Dickinson advises, and women poets—whether or not they have read her work—have typically taken her subversive advice to heart. How women "slant" their truth, and how their poetic methods differ—if at all—from those of their male counterparts will form the center of this inquiry into Modernist and post-Modernist feminist aesthetics.

2 credits.

Not offered 2002-2003.

ENGL 115. Modern Comparative Literature

The fall semester will focus on fiction responsive to colonial and postcolonial conditions associated with British and American empire and hegemony. Writers will include Conrad, Forster, Achebe, Emecheta, Faulkner, García-Márquez, Morrison, Silko, Erdrich, and Rushdie. Considerable attention will also be paid to ancillary theoretical and critical materials.

The spring semester will focus on Modernism: theory and practice. Drawing on a range of authors writing between the 1840s and the 1940s, this seminar will attend to the conceptual underpinnings of European modernism and will seek to come to terms with several of its most salient texts. Primary readings will be drawn from among the following writers: Kierkegaard, Marx, Freud, Dostoevsky, Weber, Nietzsche, Rilke, Kafka, Proust, Woolf, Adorno, and Benjamin. Secondary readings will include essays by Lukacs, Bakhtin, Canetti, De Certeau, and others. Students should have read Joyce's *Portrait of the Artist as a Young Man* prior to taking this seminar.

2 credits.

Not offered 2002-2003.

ENGL 116. American Literature

Advanced work in U.S. literary history. Students who enroll in this course should nominate one or two works of literature to be considered for the syllabus. These will be supplemented by other primary and secondary works of American literature and history chosen by the instructor. Prior work in U.S. literature and/or history is recommended.

2 credits.

Fall 2002. Schmidt.

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.

2 credits.

Not offered 2002-2003.

ENGL 120. Critical and Cultural Theory

"Culture is one of the two or three most complicated words in the English language" concedes Raymond Williams in *Keywords*. The influence of linguistics on philosophy and anthropology will lead us to the subject of culture—and the subject in culture. Marx, Freud, Saussure, Benjamin, Levi-Strauss, Fanon, Irigaray, Foucault, Sedgwick, and de Lauretis.

2 credits.

Spring 2003. White.

ENGL 121. The Harlem Renaissance in The Jazz Age

This study extends and challenges received conceptions of the Harlem Renaissance by reading the era in relation to The Jazz Age—African American modernism side by side with American cultural nationalism. It weighs the effects of focusing on intersections between American/African American (and African) cultural positions and their impact on each following World War I. Texts may range from

Hughes and Hurston to Stein and O'Neill.

2 credits.

Not offered 2002-2003.

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, during the fall of the senior year.

2 credits.

Staff.

ENGL 183. Independent Study

Students may prepare for an honors examination in a field or major figure comparable in literary significance to those offered in the regular seminars. Independent study projects must be approved by the department and supervised by a department member. Deadlines for the receipt of written applications are the second Monday in November and the first Monday in April.

2 credits.

Staff.

Environmental Studies

Coordinator: **ARTHUR McGARITY** (Engineering)
Holly Castleman (Administrative Assistant)

Committee: **Elizabeth Bolton** (English)
E. Carr Everbach (Engineering)
Raymond Hopkins (Political Science)[3]
Wendy Horwitz (Psychology)
Jose-Luis Machado (Biology)
Rachel Merz (Biology)
Carol Nackenoff (Political Science)
Hans Oberdiek (Philosophy)
Frederick Orthlieb (Engineering)[2]
Colin Purrington (Biology)
Richard Valelly (Political Science)
Mark Wallace (Religion)
Larry Westphal (Economics)

2 Absent on leave, spring 2003.

3 Absent on leave, 2002-2003.

Profound anthropogenic changes are occurring in the land, water, and air around us, and education needs to respond to these changes. Swarthmore's heritage of social concern compels us to educate students so that they are well informed about vital, current issues and capable of full political participation. The College has a responsibility to provide means for the study of environmental problems and to encourage students to develop their own perspectives on these problems. The environmental studies concentration is one way the College meets these responsibilities.

Environmental studies is truly interdisciplinary and offers numerous opportunities for rigorous interdisciplinary work because environmental issues have scientific, engineering, social, political, economic, literary, and philosophical dimensions that must be addressed. The concentration helps guide students to the many academic fields that afford a perspective on environmental problems and enables them to explore questions most compelling to them from the vantage point of various disciplines in the natural and social sciences, engineering, and the humanities.

REQUIREMENTS AND RECOMMENDATIONS

A concentration in environmental studies consists of an integrated program of five courses plus a capstone seminar taken in addition to a regular major.

Concentrators must take five courses from the list that follows, including at least one course in both environmental science/technology and environmental social science/humanities and at least one more from either of these two groups for a minimum of three courses in these two categories. Up to two courses may be chosen from the list of adjunct courses. Students should regularly check the program's Web site for additions and changes to course lists. Students may petition the Faculty Committee on Environmental Studies to have courses taken at other institutions fulfill some of these requirements. At least three of the five courses must be outside the major. The interdisciplinary minor will require four courses outside the major for the Class of 2004 and optionally for the Class of 2003. One of the courses may be independent work or a field study (in the United States or abroad) supervised by a member of the committee (ENVS 090). In addition to the five courses, each concentrator will participate in the capstone seminar in environmental studies (ENVS 091) during the spring

semester of the senior year. The capstone seminar will involve advanced interdisciplinary work on one or more issues or problems in environmental studies. Leadership of the capstone seminar rotates among the members of the Faculty Committee on Environmental Studies.

COURSES IN ENVIRONMENTAL SCIENCE/TECHNOLOGY

The environmental science/technology category includes courses that emphasize techniques and methodologies of the sciences and engineering and whose subject is central to environmental studies. Therefore, all concentrators will be familiar with a body of scientific knowledge and scientific approaches to environmental problems.

CHEM 001. Chemistry in the Human Environment

BIOL 036. Ecology

BIOL 037. Systematic Botany

BIOL 039. Marine Biology

BIOL 116. Microbial Processes and Biotechnology

BIOL 121. Physiological Ecology

BIOL 130. Behavioral Ecology

BIOL 137. Biodiversity

ENGR 004A. Introduction to Environmental Protection

ENGR 004E. Introduction to Sustainable Systems Analysis

ENGR 063. Water Quality and Pollution Control

ENGR 066. Environmental Systems

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.

Spring 2003. Everbach.

GEOL 103 (Bryn Mawr College). Environmental Geology.

COURSES IN ENVIRONMENTAL SOCIAL SCIENCES/HUMANITIES

The environmental social science/humanities category includes courses that are central to environmental studies and focus on values, their social contexts, and their implementation in policies. Thus, all concentrators will have studied the social context in which environmental problems are created and can be solved.

ECON 076. Economics of the Environment and Natural Resources

EDUC 065. Environmental Education

POLS 043. Environmental Policy and Politics

ENGL 005L. Reading Nature

POLS 222 (Bryn Mawr College). Introduction to Environmental Issues

PSYC 057. Psychology of Environmental Problems

RELG 022. Religion and Ecology

SOAN 030E. Ethnoecology: The Resurrection of Traditional Environmental Knowledge

SOAN 030B. Seeds of Change: The Environmental Consequences of the Agricultural Revolution in Prehistory

ADJUNCT COURSES

The following are courses that are relevant to environmental studies that can be included in the five courses required for the concentration but are not central enough to justify their inclusion in the preceding groups:

BIOL 016. Microbiology

BIOL 017. Microbial Pathogenesis and Immune Response

BIOL 026. Invertebrate Zoology

BIOL 027. Crop Plants

ENGR 003. Problems in Technology

ENGR 004B. Swarthmore and the Biosphere

ENGR 035. Solar Energy Systems

ENVS 002. Human Nature, Technology, and the Environment

ENVS 090. Directed Reading in Environmental Studies (Advanced permission of instructor is required.)

ENVS 092. Research Project

MATH 061. Modeling

PHYS 020. Principles of the Earth Sciences

POLS 047. Politics of Famine and Food Policy

POLS 065. Politics of Population

Poland Environmental Studies Foreign Study Program

A program of study is available at universities in Krakow, Poland, for students who desire a foreign study experience in environmental studies. Students usually take three courses taught in English consisting of the survey course Environmental Science and Technology in Poland plus two other courses that depend on student interests. In addition, students are required to take an intensive orientation course on Polish language and culture.

Environmental Studies in Ghana, West Africa

An integrated program in environmental studies built around a research project with a Ghanian mentor is available in spring 2003. See the Web site at http://esig.swarthmore.edu for more information.

Film and Media Studies

Coordinators: **PATRICIA WHITE** (English Literature)[1]
MARION FABER (German)

Committee: **Miguel Díaz-Barriga** (Sociology/Anthropology)
Bruce Grant (Sociology/Anthropology)
Haili Kong (Chinese)
Sunka Simon (German)[3]
Carina Yervasi (French)[1]
Leo Charney, Visiting Assistant Professor (part time)[5]

1 Absent on leave, fall 2002.
3 Absent on leave, 2002-2003.
5 Fall 2002.

Moving images have been one of the most distinctive innovations and experiences of the past century. In today's media-dependent culture, developing a critical understanding and a historical knowledge of media forms is vital. Film and media studies provides an interdisciplinary understanding of the history, theory, language, and social and cultural aspects of film, with some emphasis on other moving-image genres such as video, television, and computer-based media; introduces research and analytical methods; and encourages cross-cultural comparison of media forms, histories, institutional contexts, and audiences. Film and media studies incorporates courses from visual ethnography, psychology, and literary and cultural studies and offers core courses in the field, providing some opportunity for training in production to enhance critical studies.

Students may add a minor in film and media studies to any major, and students in the Honors Program may pursue an honors minor in film and media studies, by meeting the requirements set forth subsequently. Students interested in pursuing a special major in film and media studies should review the following guidelines and consult with the coordinator. All students interested in incorporating film and media studies into their programs must submit a proposal as part of their sophomore paper or apply by submitting a modified plan of study in the junior year or early in the senior year. This proposal should be developed in consultation with advisers from the Film and Media Studies Committee and is subject to approval.

REQUIREMENTS AND RECOMMENDATIONS

Minor

All students must take a minimum of 5 credits, which may be selected from the courses and seminars listed later or from those taken abroad, at Bryn Mawr, Haverford, or University of Pennsylvania, when the work is approved by the committee. The 5 credits should include FMST 001: Introduction to Film and Media Studies, normally taken in the first or second year; and FMST 092: Film Theory and Culture, normally taken in the senior year. Additional courses in aesthetics, film/media history, national cinemas, production, visual ethnography, and cultural studies should be selected with a broad program in mind. Students in the Class of 2003 may choose to graduate with either the concentration or the minor in film and media studies; the requirements are identical.

Honors Minor

Students in the Honors Program may minor in film and media studies by meeting the requirements set forth earlier and by preparing for and taking one external exam. The preparation usually consists of FMST 092: Film Theory and Culture plus the 1-credit honors attachment 092A but may incorporate a 1- or 2-credit thesis or other course combination or seminar work with the approval of the film and media studies coordinator. At least 2 credits of the work in the honors minor must be in a department or field outside the student's honors major. Senior honors study (SHS) may consist of a revised essay submitted for a course or sem-

inar in the preparation or may follow the SHS procedures for the seminar in question. No SHS is available for a thesis.

Special Major

Special course or honors majors in film and media studies must be approved by the Film and Media Studies Committee and by the departments from which the applicant intends to draw 2 or more credits for the program. Students must take a minimum of 9 credits. FMST 001 and FMST 092 are required, and students must also take at least 1 course in a national cinema. Special majors will write a thesis or do a thesis project (FMST 098 or 180) to fulfill the senior comprehensive requirement. Students are encouraged to take FMST 002 or a film/video production course at another institution. Remaining courses and seminars may be drawn from a range of departments (work in at least two departments in addition to film and media studies is required for each program). Such courses do not have to be selected from the list below if they are approved by the film and media studies coordinator (e.g., Directing or Lighting Design in Theater or Photography in Art).

COURSES

FMST 001. Introduction to Film and Media Studies

Provides groundwork for further study in the discipline. Introduces students to concepts, theories, and methods of film, video, and television studies such as formal analysis of image and sound, aesthetics, historiography, genres, authorship, issues of gender, race, ethnicity, and nation, economics, and reception and audience studies. Emphasis on developing writing, analytical, and research skills. Films and videos by Benning, Hitchcock, Godard, Murnau, Sembene, Scorsese, Trinh, Welles, and others and selected television genres.

1 credit.

Fall 2002. Charney.

FMST 002. Video Production Workshop

Provides instruction in basic technical aspects of digital video production and background in formal properties of video- and filmmaking. Exercises are designed to ensure a sound technical foundation as well as to familiarize students with the aesthetic principles underlying a variety of film styles and traditions. Prerequisite: A prior film studies course and permission of instructor. Limited to nine students. Students will be responsible for production expenses.

1 credit.

Spring 2003.

FMST 092. Film Theory and Culture

Capstone course covering major paradigms and debates in classical and contemporary film theory and historiography: realism, montage, narratology, semiotics, apparatus theory, theories of the avant-garde, Third Cinema, spectatorship, and cultural studies. For senior minors and special majors, and other seniors and juniors with background in film studies and instructor's permission. Authors: Bazin, Benjamin, de Lauretis, Deleuze, Eisenstein, Hansen, Kracauer, and Wollen. Directors: Akerman, Eisenstein, Frampton, Haynes, Godard, Lanzman, Ophuls, Powell, Vertov, and Welles.

1 credit.

Spring 2003. White.

FMST 092A. Honors Attachment to Film Theory and Culture

1 credit.

Spring 2003. White.

FMST 097. Independent Study

0.5-1 credit.

FMST 098. Thesis

For students completing a special major in course.

1 credit.

FMST 180. Thesis

For students completing a special major in honors.

2 credits.

ADDITIONAL COURSES

For descriptions of the following courses, please consult the appropriate section of the course catalog:

Film and Media Studies

Courses Offered 2002-2003

ENGL 087A. Topics in American Cinema: Films of the '70s (Charney)

RUSS 024: East European and Soviet Cinema (Komaromi)

SOAN 091. Practicum in Visual Ethnography (Díaz-Barriga)

SOAN 111. Visual Ethnography (Díaz-Barriga)

PSYC 068. Reading Culture (Gergen)

Courses Not Offered 2002-2003

CHIN 055. Contemporary Chinese Cinema (Kong)

CHIN 056. History of Chinese Cinema (Kong)

ENGL 087. American Narrative Cinema (White)

ENGL 088. American Attractions (White/Ullman)

ENGL 089. Women and Popular Culture: Fiction, Film, and Television (White)

ENGL 090. Queer Media (White)

ENGL 091. Feminist Film and Media Studies (White)

ENGL 093. Studies in Film and Literature (Williamson)

FREN 073. Roman et cinéma: Revolutionizing Everyday Life (Yervasi)

GERM 088. Frauen und Film (Faber)

GERM 056. Populärkultur (Simon)

LITR 028F. Francophone Cinema: Configurations of Space in Postcolonial Cinema (Yervasi)

LITR 051G. Race and Gender in European Cinema (Simon)

LITR 055G. Film and Literature in Weimar Germany (Faber)

PSYC 048. Technology, Self, and Society (Gergen)

Francophone Studies

Coordinator: **BERNOUSSI SALTANI** (French) (fall 2002)[9,12]
GEORGE MOSKOS (French) (spring 2003)[11]
Eleonore Baginski (Administrative Coordinator)

Committee: **Jean-Vincent Blanchard** (French)
Robert DuPlessis (History)
James Freeman (Music)
Bruce Grant (Sociology/Anthropology)[1]
Cynthia Halpern (Political Science)
Sally Hess (Dance)
Tamsin Lorraine (Philosophy)
Micheline Rice-Maximin (French)[2]
Mark Wallace (Religion)
Philip Weinstein (English)[3]
Carina Yervasi (French)[1,10]

1 Absent on leave, fall 2002.
2 Absent on leave, spring 2003.
3 Absent on leave, 2002-2003.
9 Campus coordinator, Swarthmore Program in Grenoble, fall 2002.
10 Campus coordinator, Swarthmore Program in Grenoble, spring 2003.
11 Program director, Swarthmore Program in Grenoble, fall 2002.
12 Program director, Swarthmore Program in Grenoble, spring 2003.

The minor in Francophone studies explores areas and peoples significantly influenced by and participant in Francophone cultures throughout the world: Africa, the Americas, Europe, and Southeast Asia. It takes a broad view of cultural achievements and thus will examine cultural diversity and identity at all community levels. Through the use of analytical methods drawn from both the humanities and the social sciences, the minor encourages interdisciplinarity in courses, seminars, and student programs of study. Within a cultural studies approach, various perspectives will be used to establish new critical and theoretical paradigms to understand better the complex relations and reciprocal influences between "centers" and "peripheries."

Through the study of an important transnational culture, the minor will prepare students for graduate education and careers in international relations, business, law, and academic disciplines and enable them to participate better in our increasingly globalized world. Besides the study of Francophone language, literature, and culture courses offered in the Department of Modern Languages, students will have the opportunity of using French-language materials in many of the courses and seminars offered by other departments.

REQUIREMENTS AND RECOMMENDATIONS

A minor in Francophone studies consists of 5 credits from courses designated subsequently. *Students should note that most courses have prerequisites, which must be satisfied before courses may be taken.* No more than 2 credits may be from the student's major department, and at least 2 credits must come from courses marked #. Only 1 credit taken abroad may count toward the minor. At least 3 credits must come from *core* courses and seminars, whereas only 2 credits may come from *cognate* courses or seminars. Students are expected to work in at least two departments.

To ensure a strong groundwork for all minors, 1 of the credits must be a core course; we particularly recommend FREN 025 and HIST 022, but any of the core courses or seminars can function as an introductory course. In addition

to the 5 credits, each minor will complete a 15- to 20-page independent, interdisciplinary senior paper. The initial proposal and bibliography, which are due immediately after the Thanksgiving break, must be approved by two professors in two different departments. The completed paper is due at the end of spring break. The defense will occur in May.

Students are required to be proficient in the French language: to complete FREN 004 or the equivalent. They are strongly encouraged to study abroad in a French-speaking country. In addition, they must either take an advanced literature or culture course in French or use French-language sources in the senior paper. In any case, students are encouraged to read French-language materials in the original language whenever possible.

Course Minor

Courses and seminars that may be offered for a Francophone studies minor are the following (# indicates courses that cover Francophone material outside of France and/or multicultural material):

The * means courses offered 2002-2003.

CORE COURSES AND SEMINARS

(75 to 100 percent Francophone content): *At least 3 credits required.*

Courses in Disciplines Other Than French

ARTH 017. Nineteenth-Century European Art*

Seminars in Disciplines Other Than French

ARTH 168. Dada and Surrealism

THEA 106. Theater History Seminar

French Courses Numbered 012 and Above

FREN 012C. Literature and Culture of Quebec#, *

FREN 012C. Cultures française et maghrébine#

FREN 012L. Introduction à l'analyse littéraire*

FREN 022. Le Cinéma française: Le Cinéma de la ville

FREN 023. Topics in French Civilization#

FREN 024. Mysticisme et littérature maghrébine#

FREN 025. Introduction to the Francophone World#, *

FREN 028. Francophone Cinema: Configurations of Space in Postcolonial Cinema #,+

FREN 030. Topics in Seventeenth- and Eighteenth-Century Literature: L'invention de la modernité féminine en France (16e-18e)*

FREN 033. Le Monde francophone: fictions d'enfance#

FREN 036. Poésies d'écritures françaises#

FREN 037. Culture et civilisation#

FREN 040. French Theatre and Cultural Studies

FREN 060. Le Roman du 19ème siècle

FREN 061. Odd Couplings: Writing and Reading Across Gender Lines*

FREN 062. Le Romantisme

FREN 065. Poésie de la modernité: de Baudelaire aux Surréalistes

FREN 067. Twentieth-Century French Theater: Reading and Performance

FREN 070. Théâtre Moderne

FREN 070F. Caribbean and French Civilizations and Cultures*

FREN 071F. French Critical Theory: From Foucault to Baudrillard*

FREN 072. Le Roman du 20ème siècle: Women in the Literary Field

FREN 073. Roman et cinéma: Revolutionizing Everyday Life

FREN 075F. Haïti and the French Antilles and Guyane in Translation#

FREN 076. Ecritures au féminin#

FREN 077. Prose francophone: Littérature et société#

FREN 078. Théâtre et société#

FREN 079F. Scandal in the Ink: Queer Traditions in French Literature

FREN 080. Social Issues in Caribbean Texts (Cross-listed as LITR 080F, cross-listed with black studies)

FREN 091. Special Topics (Counting as # depending on the topic of the year) Histoire/s et fiction#, *

French Seminars

FREN 102. Baroque Culture and Literature
FREN 104. Stendhal et Flaubert
FREN 105. Proust
FREN 106. Poésie symboliste: autour de Mallarmé
FREN 108. Le Roman du 20ème siècle: romans modernes et contemporain*
FREN 109. Le Romantisme
FREN 110. Ecritures françaises hors de France: Fiction et réel#
FREN 111. Espaces Francophones#
FREN 112. Ecritures Francophones: Fiction and History in the French-speaking World#
FREN 113. Voyage et littérature#, *
FREN 114: Théâtre d'écritures françaises#
FREN 115: Paroles de Femmes#

COGNATE COURSES AND SEMINARS

(30 percent Francophone content minimum): *No more than 2 credits may count toward the concentration.*

Cognate Courses

ARTH 056. Print Culture in Early Modern Europe*
DANC 022. History of Dance: Europe's Renaissance Through 1900
DANC 036. Dance and Gender
ECON 082. Political Economy of Africa#
ENGL 072. Proust, Joyce, and Faulkner
HIST 001U. First-Year Seminar: The Atlantic World
HIST 003. Modern Europe*
HIST 008B. Modern Africa, 1880 to Present#
HIST 020. Official and Popular Cultures in Early Modern Europe
LING 027. Sociolinguistics of African Languages*
LITR 014. Modern European Literature
MUSI 004. Opera
MUSI 009. Music of the Caribbean
MUSI 022. Nineteenth-Century Music
MUSI 023. Twentieth-Century Music
MUSI 038. Color and Spirit
PHIL 039. Existentialism
POLS 003. Introduction to European Politics
POLS 012. Modern Political Thought
RELG 011B. Introduction to Islam*
RELG 053. Islam in the Modern World*
SOAN 003B. Nations and Nationalisms*
SOAN 023B. History of Culture Concept

Cognate Seminars (30 percent Francophone content minimum)

HIST 117. State and Society in Early Modern Europe*
HIST 122. Revolutionary Europe 1750-1870
HIST 124. Europeans and Others Since 1750
HIST 140. The Colonial Encounter in Africa#, *
PHIL 139. Phenomenology, Existentialism, and Poststructuralism*
POLS 101. Political Theory: Modern
RELG 112. Postmodern Religious Thought
SOAN 102. History and Myth
SOAN 103. Gift and Fetish
SOAN 123. Culture, Power, Islam

Note: Among all the courses listed above, those satisfying the requirement of at least 2 credits covering Francophone material ***outside of France*** *and/or* ***multicultural materials*** *are marked #.* These can be courses in French or in other disciplines. FREN 091 (Special Topics) may count among this category, depending on the topic of the year.

MINOR IN FRANCOPHONE STUDIES

To be eligible to *minor* in Francophone studies for the Honors Program, students must complete all the requirements for the Francophone studies minor. This entails the completion of 5 credits and the writing of the senior paper. The senior paper deadlines are as follows: Initial proposal and bibliography are due immediately after the fall break. The first draft is due to the director immediately after Thanksgiving break. The last draft is due to all French faculty by the end of spring break. The completed paper is due mid-April. The defense will take place in May.

Candidates for an honors minor will offer *a sin-*

gle 2-credit preparation outside the designated honors major. The student will follow the requirements for senior honors study for the minor in the department in which the seminar is offered and take that exam.

German Studies

Coordinator: **MARION FABER** (German)
Eleonore Baginski (Administrative Coordinator)

Committee: **Richard Eldridge** (Philosophy)
James Freeman (Music)
Pieter Judson (History)[3]
James Kurth (Political Science)
Tamsin Lorraine (Philosophy)
Michael Marissen (Music)
Braulio Muñoz (Sociology and Anthropology)
Sunka Simon (German)[3]
Hansjakob Werlen (German)

3 Absent on leave, 2002-2003.

The concentration in German studies grows out of the connection between German thought and art of the 19th and 20th centuries. Figures such as Goethe, Wagner, Nietzsche, Marx, and Freud, for example, go beyond the boundaries of particular disciplines. In addition, the study of German history and politics enriches and is enriched by the study of German literature and art. A combination of approaches to German culture introduces the student to a field of knowledge crucial to contemporary society and prepares the student for graduate work in a good number of academic disciplines as well as for various international careers. The concentration may be undertaken in the course program or in the Honors Program. Concentrators should consult the program coordinator during the sophomore year to plan their work toward the concentration.

REQUIREMENTS AND RECOMMENDATIONS

Students are required to take 5 credits from designated courses in German studies, 3 of which must be outside the student's major department. To ensure a common groundwork for all concentrators, students must take the core course, GERM 014: Introduction to German Studies. To ensure work in depth, at least 1 credit must be a thesis on an interdisciplinary topic, normally to be proposed at the end of the junior year and written in the fall semester of the senior year. An interdisciplinary thesis for the student's major department may fulfill this requirement.

It is required that students do substantial work in the German language (GERM 004 or the equivalent). It is also strongly recommended that students study in Germany (for a summer or, preferably, for a semester) if at all possible. After studying abroad, concentrators must take at least one additional class in German studies. Students who do not take an advanced literature course must either use original German sources in the thesis or add an attachment in German to one course in the concentration.

Note: A student can accomplish a special major in German studies by taking 5 additional credits from the courses listed subsequently.

Course Minor

Requirements. The requirements for the German studies course minor are identical to the general requirements (5 credits, including the core course GERM 014) except that students need *not* write an interdisciplinary thesis.

Honors Minor

Requirements. The German studies concentration offers only a minor in the Honors Program. Students in the Honors Program are expected to be sufficiently proficient in spoken and written German to complete all their work in German and 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 course work

both in the department and at the College.

Prerequisites. GERM 014 and an advanced course in German studies.

Preparations. A seminar in German studies (or, in lieu of the seminar, two advanced courses in German studies).

Senior Honors Study and Examination

Honors preparation will include a revised version of a seminar paper (approximately 3,000 words) from the seminar for which the student is being examined. Otherwise, preparation for the examination will be discussed with the director of German studies on a case-by-case basis to ensure adequate preparation for the honors examination. No credit will be given for the revised paper.

The honors examination will take the form of a three-hour written examination based on a German studies seminar or, in lieu of the seminar, two advanced courses in German studies and a 30- to 45-minute oral examination based on all previous work in the field.

The following courses and seminars may be offered for a German studies concentration:

COURSES *(1 credit)*

German courses numbered 004 and above.

LITR(G) courses taught in English.

HIST 028. Nations and Nationalism in Eastern Europe

HIST 035. The Jew as Other

HIST 036. Modern Germany

HIST 037. History and Memory: Perspectives on the Holocaust/LITR 037G

MUSI 006. Beethoven and the Romantic Spirit

MUSI 022. Nineteenth-Century Music

MUSI 033. Lieder

MUSI 034. Bach

MUSI 035. Late Romanticism

PHIL 029. Philosophy of Modern Music*

PHIL 039. Existentialism*

PHIL 049. Marx, Nietzsche, and Freud

SOAN 083. Senior Colloquium on Art and Society*

SEMINARS *(2 credits)*

HIST 122. Revolutionary Europe+

HIST 125. Fascist Europe

MUSI 101. Bach

PHIL 114. Nineteenth-Century Philosophy (fall 2002)

PHIL 137. German Romanticism and Idealism

PHIL 139. Phenomenology, Existentialism, and Poststructuralism

RELG 106. Contemporary Religious Thought

SOAN 101. Critical Modern Social Theory

SOAN 105. Modern Social Theory

SOAN 115. Freud and Modern Social Theory

GERM 104. Goethe und seine Zeit

GERM 105. Die deutsche Romantik

GERM 108. German Studies Seminar: Wien und Berlin

GERM 110. German Literature After World War II

GERM 111. Genres (fall 2002: Der deutsche Roman)

* *Cognate course:* No more than two may be counted toward the German studies concentration.

\+ *Cognate seminar:* No more than one may be counted toward the German studies concentration.

History

STEPHEN P. BENSCH, Professor[3]
ROBERT S. DUPLESSIS, Isaac H. Clothier Professor of History and International Relations and Acting Chair
LILLIAN M. LI, Professor
MARJORIE MURPHY, Professor
ROBERT E. WEINBERG, Professor
TIMOTHY J. BURKE, Associate Professor
ALLISON DORSEY, Associate Professor
BRUCE DORSEY, Associate Professor
PIETER M. JUDSON, Associate Professor and Chair[3]
DIEGO ARMUS, Assistant Professor
JOHN TURNER, Visiting Assistant Professor (part time)
THERESA BROWN, Administrative Assistant

3 Absent on leave, 2002-2003.

COURSE OFFERINGS AND PREREQUISITES

The courses and seminars offered by the History Department attempt to give students a sense of the past; an acquaintance with the social, cultural, and institutional developments that have produced the world of today; and an understanding of the nature of history as a discipline. The discipline of history is a method of analysis that focuses on the contexts in which people have lived and worked. Our courses and seminars emphasize less the accumulation of data than the investigation, from various viewpoints, of those ideas and institutions—political, religious, social, economic, and cultural—by which people have endeavored to order their world. The History Department's curriculum introduces students to historical methodology and the fundamentals of historical research and writing.

The study of history prepares students for a wide range of occupations and professions because it develops their analytical, writing, and research skills. Former Swarthmore history majors can be found in all sectors of the economy, ranging from Wall Street to the world of medicine, from elementary and high schools to trade unions and public interest foundations and institutes, from journalism and publishing to consulting, and from the private to the public sector. In particular, many of our former majors claim that studying history was excellent preparation for law school and enabled them to succeed as attorneys.

Courses and seminars offered by the History Department are integral to most interdisciplinary programs, such as black studies, Francophone studies, German studies, Latin American studies, peace studies, and women's 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 teaching certification to major in history (see section on Teaching Certification for more information).

Survey Courses

Survey courses (002-011) are open to all students without prerequisites and are designed to serve the needs of students who seek a general education in the field as well as to provide preparation for a range of upper-level courses. Survey courses provide broad chronological coverage of a particular field of history. 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.

First-Year Seminars

First-year seminars (HIST 001A-001Z; 1 credit) explore specific historical issues or periods

in depth in a seminar setting; they are open to first-year students 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.

Upper-Division Courses

Upper-division courses (HIST 012-099; 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) taken *one* of the courses numbered 001-011; (2) received an Advanced Placement score of 3 in the same area as the course they wish to take; (3) received an Advanced Placement score of 4 or 5 in any area; (4) received the permission of the instructor; *or* (5) taken Classics courses 031, 032, 042, 044, or 056. Exceptions are courses designated "not open to first-year students" or where specific prerequisites are stated.

Double-Credit Seminars

Admission to these seminars 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 is required of all students entering seminars. In addition, the opinions of department members who have taught the student are solicited.

Sophomores hoping to take history seminars in their junior and senior years should give special thought to the seminars that they list in their sophomore papers. The department will weigh the merit of each request on the basis of the importance of the seminar to the student's proposed program as well as the student's qualifications. Seminar enrollments are normally limited to nine. If you are placed in a seminar at the end of your sophomore year, you will be one of nine students guaranteed a space and you are, in effect, taking the space of another student who might also like to be in the seminar. Consequently, you should not list any seminar in your sophomore paper without being quite certain that you intend to take it if you are admitted.

REQUIREMENTS

Major and Minor

Admission to the department as a major or minor normally requires at least two history courses taken at Swarthmore with a B average and a satisfactory standard of work in all courses. Courses in Greek and Roman history offered by the Classics Department count toward this prerequisite. 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.

All majors (course and Honors programs) in history must take at least 9 credits in history that fulfill the following requirements:

1. At least 6 of the 9 credits are normally done at Swarthmore.
2. At least one course or seminar at Swarthmore from each of the following categories: (a) all courses and seminars before 1750 (including CLAS 031, 032, 042, 044, and 056) and (b) all courses and seminars in areas outside Europe and the United States, specifically Africa, Asia, Latin America, and the Near East. This distribution requirement is designed to have students explore various fields of history and engage in comparative historical analysis. A list of these distribution courses is on file in the department office.

Course Major

Complete the Senior Research Seminar (HIST 091) in which students write a research paper based on primary and secondary sources. This course satisfies the College's requirement that all majors and concentrations have a culminating exercise for their majors. *The research paper should build on a cluster of courses that the student has defined. The department encourages students to suggest possible research topics in their sophomore papers and requires them to select topics by the end of their junior year.*

Course Minor

Complete 5 history credits at Swarthmore College (AP, transfer credit, and foreign study courses do not count). Two of the 5 credits must be from courses above the introductory level and must include HIST 091 and/or an honors seminar.

Thesis

A student who wishes to write a thesis should state her or his intention by submitting a proposal at the beginning of the senior year. The department must approve the topic before the student can enroll in HIST 092 (Thesis). The thesis should be a work of about 10,000 to 15,000 words (50-75 pages), and a brief oral examination will be conducted on completion of the thesis.

Major and Minor in the Honors Program (External Examination Program)

Seminars are the normal mode of preparation for students majoring in history in the Honors Program. Majors in the Honors Program will complete three double-credit seminars and 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. Students may substitute Honors Thesis (HIST 180) for one of their seminars. The thesis and revised seminar papers are due by May 2.

Minors in the Honors Program will complete one double-credit seminar in addition to 3 credits taken at Swarthmore (AP, transfer credit, and foreign study courses do not count) and include one revised paper from that seminar in their portfolio.

Students in seminars take a three-hour written examination at the end of each seminar and will receive a grade from the seminar instructor for their overall performance in the seminar, including 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 and discuss their progress.

Seminars are a collective, collaborative, and cooperative venture among students and faculty members designed to promote self-directed learning. Active participation in seminar is, therefore, required of all students. Evaluation of performance in seminar will be based on the quality of seminar papers and comments during seminar discussions, in addition to the written examination. 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 seminar, completion of all reading assignments before seminar, respect of the needs of other students who share the reserve binders and readings, and eagerness to engage in a scholarly discussion of the issues raised by the readings and seminar papers. 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 earn double-credit for seminars and should be prepared to work at least twice as hard as they do for single-credit courses.

The revised seminar papers are written in two stages. During the first stage, students must confer with their seminar instructor as to what papers they are preparing for honors and what revisions they 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 May 2. Students who fail to submit their revised papers by the deadline will not complete the Honors Program.

The department also 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.

Students enrolled as minors in history will submit one revised paper as part of their portfolio. It is due by May 2.

History

FOREIGN STUDY

The History Department encourages students to pursue the study of history abroad and grants credit for such study as appropriate. We believe that history majors should master a foreign language as well as immerse themselves in a foreign culture and society. To receive Swarthmore credit for history courses taken during study abroad, or at other colleges and universities in the United States, a student must have departmental preapproval and have taken at least one history course at Swarthmore (normally before going abroad). The department is unable to offer credit for courses taken abroad or elsewhere in the United States in which no department member has expertise. Students who want to receive credit for a second course taken abroad or elsewhere in the United States must take a second history course at Swarthmore. Students must receive a grade of C or higher to receive history credit at Swarthmore.

ADVANCED PLACEMENT/INTERNATIONAL BACCALAUREATE

The History Department will automatically grant 1 credit to students who have achieved a score of 4 or 5 in either the U.S. or European History Advanced Placement examinations if they take any course numbered 001 through 011. Students who want credit for two Advanced Placement history examinations for which they scored a 4 or 5 must take a second history course at Swarthmore and earn a grade of C or higher. This course need not be a course numbered 001-0010. Advanced Placement credit may be counted toward the number of courses required for graduation and may be used to help fulfill the College's distribution requirements. A grade of 4 or 5 allows students to take any upper-division course in the History Department.

The History Department will also grant 1 credit to students who have achieved a score of 6 or 7 in the IB examinations if they take any course numbered 001 through 010 and earn a grade of C or higher. IB credit may be counted toward the number of courses required for graduation and may be used to help fulfill the College's distribution requirements.

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.

TEACHER CERTIFICATION

History majors can complete the requirements for teacher certification through a program approved by the state of Pennsylvania. Because of a change in teacher certification regulations that occurred in November 2000, students completing certification during through 2003 will fulfill the requirements for Social Studies certification, and those who complete certification in 2004 and beyond will complete the requirements for Citizenship Education. For further information about the relevant set of requirements, please contact the Department of Educational Studies director or see the Department of Educational Studies Web site: www.swarthmore.edu/SocSci/Education/.

COURSES

HIST 001A. First-Year Seminar: The Barbarian North

The seminar will explore how Germanic and Celtic societies emerged and solidified their identities from ca. 100 to 1050 A.D.

This course may count toward a major or minor in medieval studies.

1 credit.

Not offered 2002-2003. Bensch.

HIST 001B. First-Year Seminar: Radicals and Reformers in America

Visions of social change from the American Revolution to the 20th century. A look at individuals and movements that attempted to transform American institutions, cultural patterns, or social behavior. Previous topics have included Revolution, slave resistance, abolitionists, feminists, sex reformers, labor radicals, socialists, anarchists, and activists for racial equality.

1 credit.

Spring 2003. Bruce Dorsey.

HIST 001C. First-Year Seminar: Sex and Gender in Western Traditions

How have perceived natural differences between the sexes contributed historically to social and legal inequalities among men and women?

This course may count toward a concentration in women's studies (Class of '03) or a minor in women's studies (Class of '03 and thereafter).

1 credit.

Not offered 2002-2003. Judson.

HIST 001E. First-Year Seminar: The Self-Image of Latin America: Past, Present, and Future.

The course explores the views on Latin America developed by Latin Americans who, through their writings and frequently also through their political militancy, helped to define the successive agendas for change in their own countries and in the region at large.

This course may count toward a concentration in Latin American studies (Class of '03) or a minor in Latin American studies (Class of '03 and thereafter).

Spring 2003. Armus.

HIST 001G. First-Year Seminar: Women, Family, and the State in China

This seminar will consider the roles of Chinese women and family both in traditional times and in the 20th century, including elite and peasant society. Drawing from diverse sources (literary, philosophical, anthropological, etc.), the seminar will examine the ways in which culture and the state have defined these roles.

This course may count toward a major or minor in Asian studies. It may also count toward a concentration or minor in Women's studies (Class of '03).

Primary distribution course. 1 credit.

Fall 2002. Li.

HIST 001I: First-Year Seminar: African American Women's History

An examination of the uniqueness of the black female experience in American society from slavery to the contemporary period.

This course may count toward a concentration in black studies and women's studies (Class of '03) or a minor in black studies and women's studies (Class of '03 and thereafter).

1 credit.

Not offered 2002-2003. Allison Dorsey.

HIST 001J. First-Year Seminar: The 1950s: A New History of the Cold War Era

The recent opening of the former Soviet Union archives has created a firestorm of historical debate concerning the politics of the Cold War. This seminar focuses on that debate and the new scholarship introduced into the hotly contested issues of McCarthyism, Isolationism and Containment, the Korean War, Truman's issuance of the Loyalty Oath, Eisenhower's leadership, the Central Intelligence Agency's role in Guatemala, Iran, Cuba, and Nicaragua.

1 credit.

Fall 2002. Murphy.

HIST 001N. First-Year Seminar: The Production of History

In this course, we will examine public productions of history and historical knowledge and the complex dialogue between these visions of history and the professional work of academic historians.

1 credit.

Not offered 2002-2003. Burke.

HIST 001P. First-Year Seminar: History of the Left

This seminar focuses on the people and events that shaped the history of the Left in the United States.

1 credit.

Not offered 2002-2003. Murphy.

HIST 001Q: First-Year Seminar: Angels of Death: Russia Under Lenin and Stalin

This seminar focuses on the history of Russia from the Revolution of 1917 through the death of Stalin. Particular attention is paid to assessing the impact of Lenin and Stalin on developments in the Soviet Union and the interplay among socioeconomic, cultural, and ideological currents. Course materials include documents, novels and short stories, monographs, and films.

1 credit.

Not offered 2002-2003. Weinberg.

HIST 001S. First-Year Seminar: The American West, 1830-1950

An introduction to the history of the American West, beginning with the forced removal of the Cherokee and tracing the development of an "American" culture in the region between the Mississippi and the Pacific Ocean. Focuses on the diversity of traditions in the West, including the experiences and contributions of first nation peoples, African Americans, Latinos, and Asian Americans.

1 credit.

Fall 2002. Allison Dorsey.

HIST 001T: First-Year Seminar: Cross and Crescent: Muslim-Christian Relations in Historical Perspective

The course will selectively explore the interaction of Muslim and Christian communities from the emergence of Islam to contemporary Bosnia.

This course may count toward a major or minor in medieval studies.

1 credit.

Not offered 2002-2003. Bensch.

HIST 001U: First-Year Seminar: The Atlantic World

Study of the cultural, social, political, and economic movements that created a new world in the Atlantic basin between the 15th and 19th centuries.

1 credit.

Fall 2002. DuPlessis.

HIST 001Y. First-Year Seminar: The History of the Future

The future has arrived, but it is not what it used to be. In this seminar, we will trace the cultural and intellectual history of the future.

1 credit.

Not offered 2002-2003. Burke.

HIST 002A. Medieval Europe

The course will explore the emergence of Europe from the slow decline of the Roman world and the intrusion of new Germanic and Celtic peoples (third to the 15th centuries).

This course may count toward a major or minor in medieval studies.

Primary distribution course. 1 credit.

Not offered 2002-2003. Bensch.

HIST 002B. Early Modern Europe

The modern world began to be born in Europe between the 15th and 18th centuries—replete with all the contradictions that have marked modernity ever since. Using primary sources, recent scholarship, and film, this course explores the manifestations of that paradoxical civilization: Renaissance and Reformation, secular state building and religious war, Scientific Revolution and witch hunts, emergence of capitalism and renewed serfdom, Enlightenment and enslavement, and revolution and restoration.

Primary distribution course. 1 credit.

Not offered 2002-2003. DuPlessis.

HIST 003. Modern Europe

A survey that covers the 19th and 20th centuries, with an emphasis on the political, social, and cultural forces that have shaped modern Europe. Topics may include industrialization and its social consequences, nationalism and state building, imperialism, mass consumerism, revolutions, socialism and fascism, the two world wars, the Holocaust, and the collapse of communism.

Recommended for teacher certification.

Primary distribution course. 1 credit.

Spring 2003. Weinberg.

HIST 004A. Colonial Latin America

A survey of Latin America, from the pre-Columbian civilizations to the 1820s. Course explores the encounter of Amerindian and European peoples and cultures and the process of conquest, resistance, and mutual transformation that ensued over the next three centuries. Topics may include economic and social aspects of the major indigenous civilizations, the impact of the Iberian conquest, the emergence of a colonial society, slavery, the imperial efforts to reform and adjust the colonies to a changing international order, and the process that culminated in the wars of independence.

This course may count toward a concentration in Latin American studies (Class of '03) or a minor in Latin American Studies (Class of '03 and thereafter).

Primary distribution course. 1 credit.

Fall 2002. Armus.

HIST 004B. Modern Latin America

Thematic course on the independence period

of Latin American history. It emphasizes the neo-colonial context in which regional experiences, particular issues, and national histories occurred. Topics include changes and continuities in the formation of nation-states, paths of economic development, racial and ethnic issues, revolutionary and reformist agendas, gender and religious changes, international and rural-urban migrations, popular and elite cultures, and the peripheral position of the region vis-à-vis hegemonic European and U.S. powers.

This course may count toward a concentration in Latin American studies (Class of '03) or a minor in Latin American studies (Class of '03 and thereafter).

Primary distribution course. 1 credit.

Spring 2003. Armus.

HIST 005A. The United States to 1877

A thematic survey of American society, culture, and politics from the colonial era through the American Civil War and Reconstruction.

Recommended for teacher certification.

Primary distribution course. 1 credit.

Not offered 2002-2003. Bruce Dorsey.

HIST 005B. The United States from 1877 to 1945

A survey of American society, culture, and politics from the Compromise of 1877 to the Japanese internment. Primary sources, literature, song, and historical monographs will help students explore and deepen their understanding of the history of the decades following the "second American revolution."

Recommended for teacher certification.

Primary distribution course. 1 credit.

Not offered 2002-2003. Allison Dorsey.

HIST 005C. The United States Since 1945

World War II, recovery, the Cold War, McCarthyism, domestic politics from Truman to Reagan, suburbanization, the New Left, and the counterculture, civil rights, black power, women's liberation, Watergate, and the imperial presidency, Vietnam, and the rise of the right.

Recommended for teacher certification.

Primary distribution course. 1 credit.

Spring 2003. Murphy.

HIST 006. The Formation of the Islamic Near East

An introduction to the history of the Near East from the seventh to the 15th centuries.

This course may count toward a major or minor in medieval studies.

Primary distribution course. 1 credit.

Not offered 2002-2003. Bensch.

HIST 006B. Modern Middle East

This course covers the history of the Middle East from the post-Suleymanic Ottoman Empire up to the present. We examine the fall of the Ottoman Empire, the rise of Western dominance, the struggle for independence, attempts at reform, the Arab-Israeli conflict, oil, the Iranian revolution, the Gulf War, the rise of Islamist movements and the ongoing repercussions. A particular focus is on the interplay between religion and politics and the nature of power and authority. The course is designed to give the historical background necessary for understanding current events in the Middle East in their proper context.

1 credit.

Fall 2002. Turner.

HIST 007A. History of the African American People, 1619-1865

A survey of the social, political, and economic history of African Americans from the 1600s to the Civil War. Focuses on slavery and resistance, the development of racism, the slave family (with special emphasis on women), and the cultural contributions of people of African descent.

This course may count toward a concentration in black studies (Class of '03) or a minor in black studies (Class of '03 and thereafter).

1 credit.

Fall 2002. Allison Dorsey.

HIST 007B. History of the African American People, 1865-Present

A study of the history of African Americans from Reconstruction through the present. Emancipation, industrialization, cultural identity, and political activism are studied through monographs, autobiography, and literature.

This course may count toward a concentration in black studies (Class of '03) or a minor in black studies (Class of '03 and thereafter).

1 credit.

Spring 2003. Allison Dorsey.

HIST 008A. West Africa in the Era of the Slave Trade, 1500-1850

This survey course focuses on the development of the slave trade and its impact on Africa.

This course may count toward a concentration in black studies (Class of '03) or a minor in black studies (Class of '03 and thereafter).

1 credit.

Not offered 2002-2003. Burke.

HIST 008B. Mfecane, Mines, and Mandela: Southern Africa from 1650 to the Present

A survey of 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. Issues covered include the early history of Cape Town, the expansion of British colonial authority in the 19th century, the formation of the Zulu Empire and the "mfecana," missionaries and religious practice, the rise of apartheid, the making of a "new South Africa," postcolonial crises in Zimbabwe and Mozambique, and the spread of HIV-AIDS throughout the region.

This course may count toward a concentration in black studies (Class of '03) or a minor in black studies (Class of '03 and thereafter).

1 credit.

Fall 2002. Burke.

HIST 008C. From Leopold to Kabila: Central Africa's Bad 20th Century

A survey of central African history from the coming of Belgian colonial rule to recent conflicts in the Congo and Rwanda.

1 credit.

Not offered 2002-2003. Burke.

HIST 009A. Chinese Civilization

The history of Chinese civilization and culture from prehistoric times until the early 19th century, emphasizing religious and philosophical traditions, the development of the Chinese state and empire, dynastic rule, Confucian literati and bureaucracy, social and economic change, rebellion, and disorder. Readings include literature, philosophy, anthropology, and other historical materials.

This course may count toward a major or minor in Asian studies.

Primary distribution course. 1 credit.

Spring 2003. Li.

HIST 009B. Modern China

The course examines the tumultuous changes in China from the early 19th century until the present. Topics include the Opium War, the treaty ports and imperialism, the Taiping and Boxer rebellions, the reform movement, the communist revolution, and the post-Maoist era. Emperors, scholar-officials, rebels, peasants, Maoists, and entrepreneurs are the figures in this tale.

This course may count toward a major or minor in Asian studies.

Primary distribution course. 1 credit.

Fall 2002. Li.

HIST 010: Traditional Japan

(Cross-listed as ARTH 031)

An interdisciplinary introduction to Japan, from prehistoric times to the early 19th century, exploring relationships between visual and material culture and social and political institutions. Topics include archaeology and myth, the imperial system, samurai values, Buddhist and castle architecture, the popular culture of the urban merchant class, and Japan's changing relations to China and the West.

This course may count toward a major or minor in Asian studies.

1 credit.

Not offered 2002-2003. Li.

HIST 012. Chivalric Society: Knights, Ladies, and Peasants

The emergence of a new knightly culture in the 11th and 12th centuries will be explored through the Peace of God, crusades, courtly love, lordship, and seigneurialism.

This course may count toward a major or minor in medieval studies.

1 credit.

Not offered 2002-2003. Bensch.

HIST 014. Friars, Heretics, and Female Mystics: Religious Turmoil in the Middle Ages

An exploration of radical movements of Christian perfection, poverty, heresy, and

female mystics that emerged in Europe from the 11th to the 15th centuries.

This course may count toward a major or minor in medieval studies.

1 credit.

Not offered 2002-2003. Bensch.

HIST 015. Medieval Towns

Were medieval towns the "seedbeds of modernity"? The course will explore the historical and ideological debates surrounding the question.

This course may count toward a major or minor in medieval studies.

1 credit.

Not offered 2002-2003. Bensch.

HIST 016. Sex, Sin, and Kin in Early Europe

Western kinship and sexual mores will be examined as they crystallized from Roman, Christian, Germanic, and Celtic traditions.

This course may count toward a major or minor in medieval studies or a concentration in women's studies (Class of '03) or a minor in women's studies (Class of '03 and thereafter).

1 credit.

Not offered 2002-2003. Bensch.

HIST 019. The Italian Renaissance

The emergence of a new culture in the city-states of Italy between the 14th and 16th centuries.

1 credit.

Not offered 2002-2003. DuPlessis.

HIST 020. Official and Popular Cultures in Early Modern Europe

Explorations of thought and practice in Western Europe between the later 15th and 18th centuries.

1 credit.

Not offered 2002-2003. DuPlessis.

HIST 022. Early Modern France and the Francophone New World

France and its North American and Caribbean colonies from the late 15th to the 18th centuries.

This course may count toward a concentration in Francophone studies (Class of '03) or a minor in Francophone studies (Class of '03 and thereafter).

Optional language attachment: French.

1 credit.

Not offered 2002-2003.

HIST 023. The Sacred and the Social in Early Modern Europe

Examination of changes in European religious beliefs and practices between the 15th and 18th centuries. Topics include theological and ecclesiological Reformations, women in religious movements, religious roots of rebellion, Inquisition and witch hunts, toleration and skepticism, Protestantism and capitalism, Christian confessionalism, and trends within Judaism.

1 credit.

Not offered 2002-2003. DuPlessis.

HIST 024. Transitions to Capitalism

Capitalism, now the globally dominant form of economic organization, was born in early modern Europe. This course analyzes the complex, protracted, uneven, and contested emergence of the new economic and social order. Among the topics considered are the end of feudalism, the agricultural and consumer "revolutions," capitalism and slavery, gender divisions of labor, proletarianization, work cultures and consciousness, labor protest, mercantilism and economic ideology, proto-industries, and early factories, and theories of capitalism.

1 credit.

Not offered 2002-2003. DuPlessis.

HIST 026. Modern Iran

This course will focus on the cultural, social, and political development of Iran from the rise of the Safavid dynasty up to the election of Muhammad Khatami in 1997. Particular points of focus will be; state formation, the influence of the West on 19th- century economic and intellectual development, 20th-century internal struggles between the religious and political elite, the effects of oil and great power intervention, the rise of activist Islam and the revolution, women and society, the war with Iraq, and life after Khomeini.

1 credit.

Spring 2003. Turner.

HIST 027. To the Barricades: The European Revolutionary Tradition

An examination of Europe's revolutionary tradition, starting with the French Revolution and ending with the Russian Revolution. Topics include class formation, revolutionary ideologies, and the cultures and mythologies of

revolution, such as socialism, anarchism and socialist-feminism, and the culture and mythology of revolution.

This course may count toward a concentration in Francophone studies (Class of '03) or a minor in Francophone studies (Class of '03 and thereafter).

1 credit.

Not offered 2002-2003. Weinberg.

HIST 028. Nations and Nationalism in Eastern Europe, 1848-1998

This course traces the historical construction of nationalist identities, social movements, and self-proclaimed nation-states out of multiethnic communities and multicultural empires in Eastern Europe, from the revolutions of 1848 to the fall of Yugoslavia.

First-year students admitted with permission of professor.

Optional language attachment: German.

This course may count toward a concentration in peace studies (Class of '03) or a minor in peace studies (Class of '03 and thereafter).

1 credit.

Not offered 2002-2003. Judson.

HIST 029. Sexuality and Society in Modern Europe

Historical constructions of sex, sexual identities, and sexual practices in Western societies since 1700.

This course may count toward a concentration in women's studies (Class of '03) or a minor in women's studies (Class of '03 and thereafter).

1 credit.

Not offered 2002-2003. Judson.

HIST 030. France Since 1789: Revolution and Empire

The political, social, cultural, and economic history of France and its global empire since the great revolution.

This course may count toward a concentration in Francophone studies (Class of '03) or a minor in Francophone studies (Class of '03 and thereafter).

Optional language attachment: French.

1 credit.

Not offered 2002-2003. Judson.

HIST 031. Revolutionary Iconoclasm: Tearing Down the Old, Building the New

A comparative study of efforts by revolutionaries since 1789 to transform their societies and cultures. Case studies include France in the 1790s, Russia in the 1920s, China in the 1960s, Iran in the 1980s, and Afghanistan in the 1990s.

1 credit.

Not offered 2002-2003. Weinberg.

HIST 032. Jewish Nationalisms and Identities

This course focuses on the political expression of Jewish identity since the emergence of Zionism in the late 19th century. We will explore the central texts of Zionist thought in an effort to understand the nature of Jewish identity in the 20th century.

This course will be cross-listed with religion.

1 credit.

Not offered 2002-2003. Weinberg and Deutsch.

HIST 035. From Emancipation to Extermination: European Jewry's Encounter With Modernity

This course focuses on the fate of European Jewry from the beginning of emancipation in the late 18th century to the Holocaust. Major themes include the process of emancipation, Jewish and non-Jewish responses to emancipation, religious reform, the transformation of Jewish identity, and Jewish reactions to modern anti-Semitism. Readings include primary documents, memoirs, and literature.

This course may count toward a concentration in German studies (Class of '03) or a minor in German studies (Class of '03 and thereafter).

1 credit.

Fall 2002. Weinberg.

HIST 036. Modern Germany

German politics, society, and culture in the 19th and 20th centuries. Topics include the revolutions of 1848, industrial society and the Imperial state, German political culture and its critics, World War I and revolution, politics, culture and society under the Weimar and Nazi regimes, the social costs of postwar reconstruction in East and West Germany, recent reunification, and the legacy of the Holocaust.

This course may count toward a concentration in German Studies (Class of '03) or a minor in German studies (Class of '03 and thereafter).

Optional language attachment: German.

1 credit.

Not offered 2002-2003. Judson.

HIST 037. History and Memory: Perspectives on the Holocaust

(Cross-listed as LITR 037G)

This course explores the roots of Nazism, the implementation of the Final Solution and the legacy of the Holocaust through an interdisciplinary approach relying on primary sources, historical scholarship, memoirs, music, painting, and film. Authors include Primo Levi, Art Spiegelman, and Nietzsche. Films include *Triumph of the Will*, *Shoah*, *The Wannsee Conference*, and *Jud Suss*.

This course may count toward a concentration in German studies or peace studies (Class of '03) or a minor in German studies or peace studies (Class of '03 and thereafter) and toward the social science *or* humanities distribution requirements.

1 credit.

Spring 2003. Faber and Weinberg.

HIST 038. Russia in the 20th Century

This course focuses on the Bolshevik seizure of power, consolidation of communist rule, rise of Stalin, de-Stalinization, and the collapse of the Soviet Union.

1 credit.

Fall 2002. Weinberg.

HIST 041. The American Colonies

The history of the mainland British American colonies within an Atlantic colonial world from 1600 to 1760. Topics include contact and conflict between European and American Indian cultures, origins of slavery in America, economics and labor, popular religion (including Puritans, Quakers, evangelicals, and African-American faiths), witchcraft, family and gender, and the political and military conflicts within the British empire on the eve of the American Revolution.

1 credit.

Fall 2002. Bruce Dorsey.

HIST 042. The American Revolution

Revolutionary developments in British North America between 1760 and 1800.

1 credit.

Not offered 2002-2003. Bruce Dorsey.

HIST 045. Themes in U.S. History: The 1950s

Postwar America, suburbanization, rock 'n roll, baby boom, the revival of Hollywood, television, the Red Scare, cold war politics, and domestic bliss.

1 credit.

Not offered 2002-2003. Murphy.

HIST 046. The Coming of the Civil War

Social change on the eve of the Civil War; the conflict over free and slave labor; slavery and an African-American culture; and causes of the Civil War.

1 credit.

Not offered 2002-2003. Bruce Dorsey.

HIST 048. Murder in a Mill Town: A Window on Social Change During the Early Republic

Explores topics in the social and cultural history of America between the American Revolution and the Civil War by examining primary source documents concerning the trial of a Methodist minister for murdering a female factory worker in Fall River, Mass., in 1833. Topics include gender, sexuality, industrialization, religious revivalism, mental illness, and popular politics.

1 credit.

Spring 2003. Bruce Dorsey.

HIST 049. Race and Foreign Affairs

A history of U.S. foreign affairs with attention paid to the origins of racialism and the impact of expansionism on various ethnic and racial groups.

This course may count toward a concentration in public policy or peace studies (Class of '03) or a minor in public policy or peace studies (Class of '03 and thereafter).

1 credit.

Not offered 2002-2003. Murphy.

HIST 050. The Making of the American Working Class

A colloquium on the history of the industrial revolution in America.

This course may count toward a concentration in public policy (Class of '03) or a minor in public policy (Class of '03 and thereafter).

1 credit.

Not offered 2002-2003. Murphy.

HIST 052. History of Manhood in America

Meanings of manhood and the various constructions of masculine identity in America between the 18th and 20th centuries. Topics include politics, work, family, sexuality, race, war, and violence, drinking, sports, popular culture, and the myth of the self-made man.

This course may count toward a concentration in women's studies (Class of '03) or a minor in women's studies (Class of '03 and thereafter).

1 credit.

Fall 2002. Bruce Dorsey.

HIST 053. Topics in African American Women's History

Black women in the modern civil rights movement (1945-1975). Study of black women's experiences in the struggle for equal rights in mid-20th-century America. Examines gendered notions of political activism, leadership styles, and the rise of black feminism.

This course may count toward a concentration in black studies and women's studies (Class of '03) or a minor in black studies and women's studies (Class of '03 and thereafter).

1 credit.

Spring 2003. Allison Dorsey.

HIST 054. Women, Society, and Politics

This course will examine the historic roots of contemporary gender relations in Capitol Hill from the Anita Hill testimony in the Clarence Thomas hearings to the sad tale of Monica Lewinsky and Linda Tripp.

This course may count toward a concentration in women's studies (Class of '03) or a minor in women's studies (Class of '03 and thereafter).

1 credit.

Fall 2002. Murphy.

HIST 064. Migrants and Migrations: Europeans in Latin America and Latinos in the United States

The course will explore the interaction between global forces and local and individual circumstances in the migration experience. We will focus on two movements of people: those who emigrated from Europe to certain areas in Latin America and Latin Americans who moved to the United States and are becoming Latinos. Topics may include problems of urban ecology; ethnic segregation; class formation; the reproduction of social inequalities; the use of social networks; patterns of socializing; work, cultural, social, and political citizenship; nationalism; assimilationism and cultural pluralism; and the construction of ethnicity.

This course may count toward a concentration in Latin American studies (Class of '03) or a minor in Latin American studies (Class of '03 and thereafter).

1 credit.

Not offered 2002-2003. Armus.

HIST 067. The Urban Experience in Modern Latin America

This course will focus on the transformation of the Latin American urban world from the 1870s to the 1980s. Topics include social conditions of urban life and labor, international and rural-urban migration, modernity in the periphery, urban economies, and popular protests and responses to new forms of social control, state repression, and professional expertise. Readings include books and articles written by historians, sociologists, urban planners, and anthropologists.

This course may count toward a concentration in Latin American studies (Class of '03) or a minor in Latin American studies (Class of '03 and thereafter).

1 credit.

Spring 2003. Armus.

HIST 068. Primary Text Workshop

This is a course in applied history. Working with materials in McCabe Library and in close cooperation with the McCabe staff, students will create a joint project intended to be of some practical use to a wider community. This project will be based on historical documents and archival materials. We will be creating an annotated hypertext version of an important document from colonial African history, Frederick Lugard's *The Dual Mandate in British Tropical Africa*, with the intent of making the resulting document available for online use by the public. In 2003-2004, we will work on assembling the materials for a three-dimensional interactive simulation of18th-century Philadelphia.

Enrollment in this class is restricted to 12 students, juniors and seniors only. History majors will be given preference.

1 credit.

Fall 2002. Burke.

HIST 075. Modern Japan

The amazing transformation of Japan from a feudal society to a modern nation-state from the early 19th century to the late 20th, including both its successful and its tragic elements. Topics include Tokugawa feudalism, the Meiji restoration, the Japanese empire, economic and social development, Japanese militarism and the Pacific War, Japan's postwar growth, and its contemporary society.

This course may count toward a major or a minor in Asian studies.

1 credit.

Not offered 2002-2003. Li.

HIST 077. Orientalism East and West

From Marco Polo to Madame Butterfly, from Pearl Buck to Fu Manchu, Westerners have constructed images of the "Orient" that have ranged from fantastic to demonic. Using images mainly from China to Japan, and occasionally from India and the Islamic world, this course will consider their contexts; their authors; and the political, ideological, and other purposes that they served. Materials will include literature, memoirs, wartime and Cold War propaganda, art, opera, and film. This course will also consider the "Oriental's Orientalism"—Asian self-images that have been influenced by the West.

Prerequisite: An introductory history course or permission of the instructor.

This course may count toward a major or minor in Asian studies.

1 credit.

Not offered 2002-2003. Li.

HIST 078. Beijing and Shanghai: Tale of Two Cities

Study of China's two major cities since the early 19th century: Beijing—the imperial capital, twice marauded by foreign troops, contested by warlords, and later the capital of the People's Republic of China—and Shanghai—treaty port governed by Western powers, center of business and labor, radical politics, crime and corruption, and modern culture. In the second half of the course, students will develop research projects using English-language sources.

History majors anticipating HIST 091 or 092 and Asian studies majors developing thesis topics may find this useful preparation, but this course is also open to other students.

This course may count toward a major or minor in Asian studies.

1 credit.

Fall 2002. Li.

HIST 086. The Whole Enchilada: Debates in World History

In the first part of the course, we will read a number of the major attempts at writing comprehensive world history, including works by Braudel, McNeill, and Wolf. For the balance of the semester, we will discuss various debates in the field of world history, ranging from the timing and location of the Industrial Revolution to the nature of contemporary globalization.

1 credit.

Not offered 2002-2003. Burke.

HIST 087. Development and Modern Africa: Historical Perspectives

This course examines the idea and practice of "development" in the last century of African life through its intellectual, institutional, and economic history.

Prerequisite: A prior course in the social sciences.

This course may count toward a concentration in black studies (Class of '03) or a minor in black studies (Class of '03 and thereafter).

1 credit.

Not offered 2002-2003. Burke.

HIST 088. The Social History of Consumption

This course examines the role of consumption and commodities in the making of the modern world, focusing largely but not exclusively on the history of European and North American societies.

1 credit.

Spring 2003. Burke.

HIST 089. The History of Reading

We will examine the intertwined histories of reading, writing and printing, with particular attention to the global dissemination and evolution of practices and institutions of literacy since the invention of the printing press.

1 credit.

Not offered 2002-2003. Burke.

HIST 091. Senior Research Seminar

Students are expected to write a 25-page paper based on primary and secondary sources.

Required of all course majors.

1 credit.

Fall 2002. DuPlessis.

HIST 092. Thesis

A single-credit thesis, available to all majors in their senior year, on a topic approved by the department. Students may not register for HIST 092 credit/no credit.

1 credit.

Fall 2002 and spring 2003. Staff.

HIST 093. Directed Reading

Individual or group study in fields of special interest to the student not dealt with in the regular course offerings. The consent of the department chair and of the instructor is required.

HIST 093 may be taken for 0.5 credit as HIST 093A.

SEMINARS

HIST 111: The Medieval Mediterranean

The course will examine the interchange and friction among Byzantium, Islam, and Latin Christendom cultures as the sea passed from Islamic to Christian control from the seventh to the 14th centuries.

This course may count toward a major or minor in medieval studies.

2 credits.

Not offered 2002-2003. Bensch.

HIST 116. The Italian Renaissance

Topics in the development of the Renaissance state, society, and culture in Italian communes between the 14th and 16th centuries.

2 credits.

Not offered 2002-2003. DuPlessis.

HIST 117. State and Society in Early Modern Europe

Comparative analysis of state formation, economic development, and social change in continental Europe and England from the 16th to the 18th centuries.

2 credits.

Spring 2003. DuPlessis.

HIST 122. Revolutionary Europe, 1750 to 1871

Selected topics in the social, economic, and political history of Europe from the French Revolution to the Paris Commune.

This course may count toward a concentration in German studies and Francophone studies (Class of '03) or a minor in German studies and Francophone studies (Class of '03 and thereafter).

2 credits.

Not offered 2002-2003. Weinberg.

HIST 125. Fascist Europe

This seminar studies European fascism in the context of societies torn by world war, class conflict, and economic depression. The primary focus will be on fascist movements, regimes, and cultural politics in Italy and Germany, with a secondary comparative focus on Hungarian, Romanian, and French varieties of fascism.

This course may count toward a concentration in German studies (Class of '03) or a minor in German studies (Class of '03 and thereafter).

Not offered 2002-2003. Judson.

HIST 128. Russia in the 19th and 20th Centuries

Focus 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.

2 credits.

Fall 2002. Weinberg.

HIST 130. Early America in the Atlantic World

The "new world" of European contact and conquest in the Americas, along with the African slave trade. Primary attention to the British North American colonies and the American Revolution.

2 credits.

Not offered 2002-2003.

HIST 133. U.S. Political and Diplomatic History I: The Age of Nationalism

The history of nation building, national identity, political ideologies and movements, from the American Revolution through the U.S.-Philippines War.

2 credits.

Not offered 2002-2003.

HIST 134. U.S. Political and Diplomatic History II: The Rise of Globalism

The emergence of the United States as a world power, with emphasis on expansionism, national interest, and global mission.

This course may count toward a concentration in peace studies (Class of '03) or a minor in peace studies (Class of '03 and thereafter).

2 credits.

Fall 2002. Murphy.

HIST 135. American Social History

Everyday life in America from the colonial era to the present. Topics include conflicts between Native American and European American cultures, slavery and its aftermath, constructions of race, and industrialization and changing patterns of work. Other themes include religious revivalism and reform, working-class culture, gender, family and sexuality, immigration, urbanization and suburbanization, and popular culture.

2 credits.

Spring 2003. Murphy.

HIST 137. Topics in African American History

Seminar focused on the study of slavery in the United States between 1550 and the end of the Civil War. Emphasis placed on the link between black enslavement and the development of democracy, law, and economics. Topics addressed include the Atlantic Slave Trade, development of the southern colonies, black cultural traditions, and slave community.

This course may count toward a concentration in black studies (Class of '03) or a minor in black studies (Class of '03 and thereafter).

2 credits.

Spring 2003. Allison Dorsey.

HIST 140. The Colonial Encounter in Africa

Focus on the social, economic, and cultural dimensions of the colonial era in modern Africa. Topics discussed include the complicated construction of the colonial state, migrancy and colonial labor systems, struggles over religious and cultural practices, the making of African modernities, gender and sexuality, and the contemporary legacy of colonial rule.

This course may count toward a concentration in black studies (Class of'03) or a minor in black studies (Class of '03 and thereafter).

2 credits.

Fall 2002. Burke.

HIST 144. State and Society in China, 1750-2000

From the height of imperial grandeur, through the turmoil of rebellion, war, and foreign domination, to the upheavals of the Maoist era, the relationship between state and society in China has undergone many changes while retaining familiar characteristics. Some have seen in China "a state stronger than society," whereas others have found signs of an emerging "civil society." Using the latest historical scholarship, this seminar will explore the last emperors, the bureaucracy and examination system, law and family, local elites, cities and merchants, popular religion and rebellions, political reform and revolution, and other topics spanning three periods: the mid-Qing (1750-1850), late Qing and Republic (1850-1950), and the People's Republic of China (1950-2000).

This course may count toward a major or minor in Asian studies.

2 credits.

Spring 2003. Li.

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, Latin American modernities and race, class and gender conflicts.

This course may count toward a concentration in Latin American studies (Class of '03) or a minor in Latin American studies (Class of '03 and thereafter).

2 credits.

Fall 2002. Armus.

HIST 180. Honors Thesis

For students writing an honors thesis.

2 credits. 2002-2003. Staff.

Interpretation Theory

Coordinator: **JEAN-VINCENT BLANCHARD** (Modern Languages and Literatures)

Committee: **Timothy Burke** (History)
Michael Cothren (Art)[3]
Nathaniel Deutsch (Religion)[3]
Richard Eldridge (Philosophy)
Kenneth Gergen (Psychology)[2]
Bruce Grant (Sociology and Anthropology)[1]
Cynthia Halpern (Political Science)[3]
Carolyn Lesjak (English Literature)
Tamsin Lorraine (Philosophy)
Braulio Muñoz (Sociology and Anthropology)
Patricia Reilly (Art)
Robin Wagner-Pacifici (Sociology and Anthropology)
Mark Wallace (Religion)
Patricia White (English Literature)[1]
Philip Weinstein (English Literature)[3]

1 Absent on leave, fall 2002.
2 Absent on leave, spring 2003.
3 Absent on leave, 2002-2003.

The concentration in interpretation theory has been providing students and faculty with an interdisciplinary forum for exploring the nature and politics of representation for more than a decade. Work done in the concentration reaches across the disciplines and reflects a long-standing drive to understand the world through the constructs of its interpretive propositions. While the concentration's interdisciplinarity takes its lead from the hermeneutics of Vico and Dilthey, students use their programs to develop a flexible, deeply historical grasp of what is more commonly regarded today as critical and cultural theory.

Students in any major may add either a concentration or an honors minor for external examination in interpretation theory to their program by fulfilling the requirement stated subsequently. Students begin by proposing their program to the concentration coordinator.

CONCENTRATION REQUIREMENTS

Students complete 6 credits toward the concentration. Four rules guide the selection.

1. All concentrators take a 1-credit capstone seminar, team taught by two faculty from different departments. Students complete this capstone in the spring of the senior year only.
2. With a view to both historical depth and methodological breadth, students select at least one course from the "one-asterisk" group (historical development of interpretive practices) and at least one course from the "two-asterisk" group (breadth of current interpretive perspectives across the disciplines). "Asterisked" courses must be chosen from different departments. These depth/breadth requirements are normally completed by the end of the junior year.
3. The three remaining courses are elective but draw on at least one further department. All told, at least 4 of the 6 interpretation theory credits must be outside the major.
4. A minimum B average is required for all concentrators by their junior and senior years.

Currently offered courses relevant to the concentration include the following:

INTP 091. Capstone Seminar: Page to Screen, Text to Hyper-Text

This seminar explores the production, circulation, and interpretation of on-line texts. Do digital media create truly new forms of representation, authorship, and reading that require new strategies of interpretation? We will discuss the history of the transition between established cultural forms and on-line texts and ask how much this history has determined the form of contemporary digital culture. We will examine a variety of on-line materials, including e-mail, hyper-text, multiplayer games, asynchronously based on-line communities, e-commerce sites, and IRC or other synchronous chat rooms. Books for the course include Howard Rheingold, *The Virtual Community*; Julian Dibble, *My Tiny Life*; Janet Murray, *Hamlet on the Holodeck* as well as texts and Web texts from Tim Jordan, *Cyberpower*, Steven Johnson, and *Interface Culture*.

1 credit.

Spring 2003. Burke and Maxwell.

ARTH 001. Critical Study in the Visual Arts (Staff)*/**

BIOL 006. History and Critique of Biology (Gilbert)

CLAS 036. Classical Mythology (Munson)**

ENGL 073. Modernism: Theory and Practice (Weinstein)**

ENGL 081. Theory of the Novel (Lesjak)**

ENGL 083. Feminist Theory (Lesjak)**

ENGL 085. "Whiteness" and Racial Differences (Schmidt)**

ENGL 086. Postcolonial Literature and Theory (Lesjak)*

ENGL 087. American Narrative Cinema (White)**

ENGL 088. American Attractions: Leisure, Technology, and National Identity (White)**

ENGL 091. Feminist Film and Media Studies (White)**

ENGL 115. Modernism (Weinstein)**

ENGL 120. Critical and Cultural Theory (White)**

FMST 091. Feminist Film and Media Studies (White)**

FMST 092. Film Theory and Culture (White)**

FREN 030. L'invention de la modernité (Blanchard)*

FREN 061. Writing and Reading Across Gender Lines (Moskos)

FREN 071F. Introduction to French Critical Theory (Blanchard)**

FREN 076. Femmes et écrivains (Rice-Maximin)

FREN 079. Scandal in the Ink: Queer Traditions in French Literature (Moskos)*/**

FREN 116. La critique littéraire (Blanchard)

HIST 0001N. The Production of History (Burke)**

HIST 029. Sexuality and Society in Modern Europe (Judson)

HIST 060. Cultural Constructions of Africa (Burke)**

HIST 068. Primary Text Workshop (Burke)

HIST 088. Social History of Consumption (Burke)

INTP 090. Directed Reading

INTP 091. Capstone Seminar

INTP 092. Thesis

PHIL 017. Aesthetics (Eldridge)*

PHIL 019. Philosophy of Social Sciences

PHIL 026. Language and Meaning (Eldridge)

PHIL 079. Poststructuralism (Lorraine)**

PHIL 106. Aesthetics (Eldridge)*

PHIL 114. Nineteenth-Century Philosophy (Eldridge)*

PHIL 116. Language and Meaning (Eldridge)

PHIL 139. Phenomenology, Existentialism, and Poststructuralism (Lorraine)*

PHIL 145. Feminist Theory Seminar (Lorraine)

PHYS 029. Gender and Physical Science (Bug)**

POLS 011. Ancient Political Theory (Halpern)**

POLS 012. Modern Political Theory (Halpern)**

POLS 013. Feminist Political and Legal Theory (Halpern and Nackenoff)

POLS 100. Ancient Political Theory (Halpern)**

POLS 101. Political Theory: Modern (Halpern)**

PSYC 037. Concepts of the Person (Gergen)**

PSYC 044. Psychology and Women (Marecek)**

PSYC 048. Technology, Self, and Society (Gergen)

PSYC 068. Reading Culture (Gergen)**

PSYC 089: Psychology, Economic Rationality, and Decision Making (Schwartz)**

PSYC 106. Personality Theory and Interpretation (Gergen)*

RELG 005. Problems of Religious Thought (Wallace)**

RELG 015B. Philosophy of Religion (Wallace)*

RELG 018B. Modern Jewish Thought and Literature (Deutsch)**

RELG 048. The Summoned Self: Levinas and Ricoeur (Deutsch and Wallace)**

RELG 112. Postmodern Religious Thought (Wallace)**

SOAN 003B. Nations and Nationalisms (Grant)**

SOAN 006B. Symbols and Society (Wagner-Pacifici)**

SOAN 10K. Gender and Sexuality (Axel)**

SOAN 022B. Cultural Representations (Díaz-Barriga)**

SOAN 023B. History of the Culture Concept (Grant)*

SOAN 026B. Discourse Analysis (Wagner-Pacifici)**

SOAN 026C. Power, Authority, and Conflict (Wagner-Pacifici)

SOAN 30G. Colonialism and Postcoloniality (Axel)*/**

SOAN 40C. History in/and Anthropology (Axel)*/**

SOAN 043B. Shamanism (Grant)**

SOAN 044B. Colloquium: Art and Society (Muñoz)**

SOAN 044D. Colloquium: Critical Social Theory (Muñoz)

SOAN 56B. Standoffs, Breakdowns, and Surrenders (Wagner-Pacifici)

SOAN 101. Critical Modern Social Theory (Muñoz)*

SOAN 110. Performance Theory: Gender and Sexuality (Axel)**

SOAN 111. Terror (Axel)**

SOAN 114. Political Sociology (Wagner-Pacifici)

Note: This list is annually revised; any courses attached to the concentration at the time taken will be counted. For the most up-to-date, semester-by-semester list of courses, please consult the concentration Web pages at: http://www.swarthmore.edu/SocSci/InterpTheory/index.htm.

Other courses may be considered on petition to the Interpretation Theory Committee. These may include relevant courses offered at Bryn Mawr, Haverford, and the University of Pennsylvania.

Latin American Studies

Chair: **JOHN HASSETT** (Modern Languages and Literatures)
Jenny Gifford (Administrative Assistant)

Committee: **Diego Armus** (History)
Miguel Díaz-Barriga (Sociology and Anthropology)
Joan Friedman (Modern Languages and Literatures)
Hugh Lacey (Philosophy)
Jose-Luis Machado (Biology)
Braulio Muñoz (Sociology and Anthropology)
Steven Piker (Sociology and Anthropology)
Aurora Camacho de Schmidt (Modern Languages and Literatures)
Kenneth Sharpe (Political Science)

REQUIREMENTS AND RECOMMENDATIONS

Interdisciplinary Minor

All students must complete the following requirements:

1. *Language*. Latin American Studies (LAS) requires the successful completion of SPAN 004B or its equivalent. This requirement is waived for native speakers of Spanish or Portuguese and for students who demonstrate sufficient competence in either one of these languages.
2. *Study abroad*. All students are required to spend a minimum of one semester abroad in a program approved by both LAS and the Office of Foreign Study. A semester's internship or a community service project in Latin America fulfills this requirement in only exceptional cases, with the support of a faculty member and the approval of the LAS Committee. Study abroad must be pursued in Spanish or Portuguese.
3. *Courses*. All students must take a minimum of 5 credits in LAS, which may include seminars and courses taught at the College or courses taken abroad in an approved program. A minimum of 1 credit must be taken in each of the minor's three areas: (1) Latin American Politics and History, (2) Latin American Literature, and (3) Latin American Societies and Cultures. Of the required five courses, at least 1 credit must be taken at Swarthmore in each of two different areas. Only 1 of the total 5 credits required by the LAS minor may overlap with a student's major or other minor.

Honors Minor

Students must have completed all requirements for the interdisciplinary minor to complete an honors minor in LAS. From within these offerings, they may select a seminar taken to fulfill the interdisciplinary minor's requirements for outside examination. However, the chosen seminar chosen may not be an offering within their major department.

COURSES

The following courses may be counted toward a minor in LAS:

Latin American Politics and History

HIST 004A. Colonial Latin America

HIST 004B. Modern Latin America

HIST 064. Migrants and Migrations: Europeans in Latin America and Latinos in the United States

HIST 067. The Urban Experience in Modern Latin America

HIST 148. Race, Class, and Nationalism in Modern Latin America

POLS 057. Latin American Politics

POLS 109. Comparative Politics: Latin America

Latin American Literature

LITR 052SA. Contemporary Latin American Literature

LITR 060SA. Spanish American Society Through Its Novel

LITR 061SA. Women's Testimonial Literature of Latin America

LITR 063SA. La Frontera: The Many Voices of the U.S.-Mexico Border

LITR 065SA. Indigenous Peoples in Latin America

LITR 066SA. Latin American Poetry of Resistance

SPAN 013. Introducción a la literatura hispanoamericana

SPAN 076. Grandes voces de América: la poesía del siglo XX

SPAN 078. Literatura Mexicana y movimientos sociales del siglo XX

SPAN 080. La narrativa chilena desde el golpe militar

SPAN 082. La Mujer Mirando al Hombre

SPAN 083. El tirano latinoamericano en la literaturea

SPAN 085. Narrativa hispánica contemporánea de los Estados Unidos

SPAN 086. El "Nuevo Mundo": magia, visión y realidad

SPAN 101. La novela hispanoamericana del siglo XX

SPAN 106. Visiones narratives de Carlos Fuentes

SPAN 108. La narrativa de Isabel Allende: la escritura como Sobrevivencia

SPAN 110. Política y póetica: los mundos de Pablo Neruda, Octavio Paz y Ernesto Cardenal

Latin American Societies and Culture

MUSI 009. Music of the Caribbean

SOAN 002C. Introduction to Latinos in the United States

SOAN 022D. Latin American Urbanization

SOAN 022E. Indigenous Resistance and Revolt in Latin America

SOAN 022G. Social Movements in Latin America

SOAN 024B. Latin American Society and Culture

SOAN 024C. Spanish American Society Through Its Novel

SOAN 141. Chicano/a Culture, Politics, Practice

SPAN 010SA. En busca de América Latina

Linguistics

AKOSUA ANYIDOHO, Visiting Professor from the University of Ghana
SEAN CRIST, Visiting Instructor and Phonetics Laboratory Coordinator
THEODORE FERNALD, Associate Professor and Chair
DAVID HARRISON, Visiting Assistant Professor and Mellon Postdoctoral Fellow
DONNA JO NAPOLI, Professor[2]
ERIC RAIMY, Visiting Assistant Professor
KARI SWINGLE, Instructor
JEFF WU, Administrative Assistant

2 Absent on leave, spring 2003.

The discipline of linguistics is the study of language. On the most general level, it deals with the internal structure of language, the history of the development of language, the information language can give us about the human mind, and the roles language play in influencing the entire spectrum of human activity.

The relevance of linguistics to the disciplines of psychology, philosophy, sociology, anthropology, and language study has been recognized for a long time. A knowledge of linguistics has recently become important to a much wider range of activities in today's world. It is a basic tool in artificial intelligence and is an increasingly valuable tool in literary analysis. It is fundamental to an understanding of communication skills and is a foundational discipline to cognitive science. Because the very nature of modern linguistic inquiry is to build arguments for particular analyses, the study of linguistics gives the student finely honed argumentation skills, which stand in good stead in careers in law, business, and any other profession where such skills are crucial.

Linguistics is at once a discipline in itself and the proper forum for interdisciplinary work of any number of types. Language is both the principal medium that human beings use to communicate with each other and the bond that links people together and binds them to their culture. The study of language is the study of the very fabric of our humanity.

Two majors are offered in the course program administered through the Linguistics Program. These are linguistics (LING) and the special major in linguistics and languages (LL).

Two honors majors are administered through the Linguistics Program: LING and the special honors major LL.

All LING and LL majors (honors or course) must take one course or seminar from each of the following three lists:

1. Sounds: LING 045 and 052
2. Forms: LING 050
3. Meanings: LING 026, 040, and 116

All LING and LL majors (honors or course) will be expected to take LING 006 or 061. If the student speaks a non-Indo-European language, this requirement is waived.

All LING and LL majors (honors or course) must write a thesis in the fall of the senior year. For course students, this course is LING 100. For honors students, this course is LING 195.

Students are encouraged to study abroad, and all departmentally approved courses taken in linguistics abroad can be used to fulfill requirements for the major or minor.

REQUIREMENTS

Linguistics

This major consists of 8 credits in linguistics, where the student may or may not choose to count LING 001 as part of the major.

Linguistics and Languages

The student may combine the study of linguistics with the serious study of two foreign languages. The languages can be modern or ancient. For this major, precisely 6 credits in linguistics and 3 credits in each of the two languages, for a total of 12 credits, are required.

For a modern language taught by the Department of Modern Languages and Literatures, there must be one composition and diction course (numbered 004 or above) and two other courses (numbered 011 or above) or a seminar.

For a classical language taught by the Classics Department, there must be one intermediate-level course (numbered 011-014) and one seminar.

Some work in each foreign language included in the major must be done in the student's junior or senior year.

If one or both of the foreign languages is modern, the student must study abroad for at least one semester in an area appropriate for one of the foreign languages.

Students at Bryn Mawr College (BMC) or Haverford College (HC)

Any student from the tri-college community is welcome to major in linguistics. HC and BMC students need only talk with their home campus dean and the chair of linguistics at Swarthmore College to arrange a major plan.

Students from HC and BMC can also do honors in linguistics. The honors portfolio and its preparation are identical to those for Swarthmore honors students, except that the examiner(s) will be internal rather than external.

HONORS MAJOR: LINGUISTICS

The major consists of 8 credits in linguistics, not counting senior honors study (SHS) credits, where the student may or may not choose to count LING 001 as part of the major.

The thesis and two research papers will constitute the portfolio for honors.

The thesis may be on any topic in linguistics and need not be related to course work. It will be written in fall of the senior year in LING 195. Work may be collaborative with at most one other student at the discretion of the faculty. The examination will consist of a one-hour discussion with the external reader.

The research papers will be on topics selected from a list prepared by the external readers and will be on core areas of linguistics and directly related to course work the student has taken. The areas will be selected from any combination or blend of the following: phonetics, phonology, morphology, syntax, semantics, historical, comparative, and social linguistics.

The student will prepare for these research papers by taking at least 4 credits of course work (2 credits in each of the research paper areas). The students will work independently on these papers, without collaboration and without faculty guidance in the spring of the senior year in LING 199 (SHS) for 1 credit. The examination will consist of a 30-minute discussion with the reader for each paper.

The Linguistics Program puts no restrictions on the minors that can be combined with this major.

SPECIAL HONORS MAJOR: LINGUISTICS AND LANGUAGES

The major consists of 6 credits in linguistics, not counting senior honors study (SHS), plus 3 credits in each of two languages (as in the course major in linguistics and languages). The portfolio for this special major will consist of a 2-credit thesis and three research papers that follow the same guidelines as those above under the honors major in linguistics, with the proviso that one of the relevant language departments will administer one of those research papers. The examination will consist of a single 90-minute panel discussion with all four external readers.

MINORS

There are three minors administered through the Linguistics Department, each of which can be done in the course or the Honors programs. The requirements are the following:

1. Theory: LING 040, 045, and 050
2. Phonology/Morphology: LING 043, 045, and 025 or 052
3. Syntax/Semantics: LING 040, 043, 050

In addition, students must complete any two other credits in linguistics.

Linguistics

HONORS MINOR

Students who do a course major in linguistics may count linguistics for the minor in the Honors Program. In that case, the portfolio for honors will consist of a 2-credit thesis written in fall of the senior year in LING 195. The student will also take LING 199 (SHS) for 0.5 credit in spring of the senior year.

Students who do not do a course major in linguistics have different requirements for the minor. A single research paper will constitute the portfolio for honors. This research paper will have the same topics and guidelines for preparation and examination as the research papers described earlier for the majors. In addition, all honors minors must take LING 199 (SHS) in the spring of the senior year for 0.5 credit, which is beyond the 5 credits required for all minors.

The Linguistics Program puts no restrictions on the majors that can be combined with this minor.

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.

Primary distribution course. 1 credit.

Fall 2002: Raimy and Harrison. *Spring 2003:* Crist.

LING 002. Exploring Acoustics

(See ENGR 002.)

This course counts for distribution in NS only, regardless of rubric.

1 credit.

Everbach.

LING 003. First-Year Seminar: Language and the Deaf

This course will look at many issues connected to language and Deaf people in the United States, with some comparisons to other countries. We will consider linguistic matters in the structure of American Sign Language, as well as societal matters of the Deaf, including literacy and civil rights. A one-hour language drill outside of class is required.

All students are welcome to do a community service credit in LING 006.

1 credit.

Fall 2002. Napoli.

LING 004. Comparative Phonology of the East Asian Languages

We will explore and contrast the systems of speech sounds of several East Asian languages, including but not limited to Korean, Japanese, and the Chinese language family. This course counts toward Asian studies.

Prerequisite: None.

1 credit.

Not offered 2002-2003.

LING 005. Structure of the Japanese Language

We will examine the major structures of the Japanese language. In addition to covering the phonological, morphological, and syntactic subsystems of Japanese, we will discuss the writing system, sociolinguistic variation, and possible relationships with other languages, all in the context of Japanese culture. No previous knowledge of Japanese or of linguistics will be assumed. This course counts toward Asian studies.

All students are allowed to participate in a rudimentary introduction to the Japanese language for an additional 0.5 credits. Sign up for LING 005A.

Prerequisite: None.

1 credit (plus optional 0.5 credits under 005A).

Not offered 2002-2003.

LING 006. Structure of American Sign Language

In this course, we look at the linguistic structures of American Sign Language (ASL): phonology, morphology, syntax, semantics, and history of ASL. We also discuss issues of cul-

ture, literacy, and politics pertinent to deaf communities.

All students are required to participate in a rudimentary introduction to ASL for an additional 0.5 credits. Sign up for LING 006A.

Prerequisites: at least two out of LING 001, 040, 043, 045, and 050.

All students are welcome to do a community service project in LING 095.

1 credit (plus 0.5 credit under 006A).

Not offered 2002-2003.

LING 007. Beginning Hebrew for Text Study

(See RELG 057.)

This course counts for distribution in humanities (HU) under the religion rubric and in social sciences (SS) under the linguistics rubric.

1 credit.

Fall 2002 and spring 2003.

Plotkin.

LING 008A. Russian Phonetics

(See RUSS 008A.)

0.5 credit.

Fedchak.

LING 014. Old English/History of the Language

(See ENGL 014.)

This course counts for distribution in humanities (HU) under the English rubric, and in social sciences (SS) under the linguistics rubric.

1 credit.

Williamson.

LING 016. History of the Russian Language

(See RUSS 016.)

This course counts for distribution in (HU) under the Russian rubric and in SS under the linguistics rubric.

1 credit.

Forrester.

LING 018. Language Policy in the United States

This course will survey the present policies and laws relevant to language use in the United States and the relevance of these policies to public access, social services, education, and the judicial system. The three major topics will be national language policy in the United States, language policy in education, and language policy in the judicial system.

Prerequisite: None.

1 credit.

Not offered 2002-2003.

LING 020. Computational Linguistics

This course will survey various areas of computer processing of natural language. Topics will include speech synthesis and recognition, text parsing and generation, and machine translation.

Prerequisites:

CPSC 021 (or equivalent) and LING 001 (or equivalent).

1 credit.

Fall 2002. Crist.

LING 024. Discourse Analysis

(See SOAN 026B.)

1 credit.

Wagner-Pacifici.

LING 025. Language, Culture, and Society

(Cross-listed as SOAN 040B.)

An investigation of the influence of cultural context and social variables on verbal communication. Topics covered include dialectal varieties, creoles, language and gender, and language and education.

Prerequisite: At least one linguistics course.

Primary distribution course. 1 credit.

Not offered 2002-2003.

LING 026. Language and Meaning

(See PHIL 026.)

This course counts for distribution in HU under the philosophy rubric and in SS under the linguistics rubric.

1 credit.

Eldridge.

LING 027. Pidgin and Creole Languages in West Africa

(Counts toward the minor in black studies)

This course examines various theories of the origin and development of pidgin and creole languages, their sociohistorical significance, their use in the modern world, and general lin-

guistic structure. It focuses on the origin, development, and spread of pidgin English in West Africa as well as the sociolinguistics of pidgins used in different countries in the subregion (users, uses, functions, attitudes, etc.). This course also dwells on the structural analysis and comparison of Camerounian, Nigerian, and Ghanaian pidgins.

1 credit.

Spring 2003. Anyidoho.

LING 030. Languages of the World

This course covers the richness and variety of human languages. We consider languages from all over the world, focusing on cross-linguistic generalizations and variations to develop an appreciation of the intricate conceptual, logical, and physiological resources on which each language draws.

No prerequisites.

Primary distribution course. 1 credit.

Spring 2003. Swingle

LING 033. Introduction to Classical Chinese

(See CHIN 033.)

This course counts for distribution in HU or SS under either rubric.

1 credit.

Berkowitz.

LING 034. Psychology of Language

(See PSYC 034.)

1 credit.

Kako.

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 HU under the philisophy rubric and in SS under the linguistics rubric. The primary distribution course, however, is in SS only.

Primary distribution course. 1 credit.

Spring 2003. Fernald.

LING 043. Morphology and the Lexicon

This course looks at word formation and the meaningful ways in which different words in the lexicon are related to one another in the world's languages.

Prerequisite: LING 001, 040, 045, or 050.

1 credit.

Spring 2003. Raimy.

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 presents the theories that account for them.

Primary distribution course. 1 credit.

Fall 2002. Harrison.

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.

Primary distribution course. 1 credit.

Fall 2002. Swingle.

LING 052. Historical and Comparative Linguistics

We study the reconstruction of prehistoric linguistic stages, the establishment of language families and their interrelationships, and the examination of processes of linguistic change. In spring 2002, a special focus will be on the Germanic language family and the use of computers in historical linguistics.

Prerequisite: LING 001, LING 030, or LING 045 or permission of the instructor.

1 credit.

Not offered 2002-2003.

LING 054. Oral and Written Language

(Cross-listed as EDUC 054) (Studio course)

This course examines children's dialogue and its rendering in children's literature. Each student will pick an age group to study. There will be regular fiction-writing assignments as well as primary research assignments. This course is for linguists and writers of children's fiction and anyone else who is strongly interested in child development or reading skills. It is a course in which we learn through doing.

The course will focus strictly on preschool and elementary school children the next time it is offered.

All students are welcome to do a community service credit in LING 096.

Prerequisite: One of LING 001, 040, 045, or 050.

1 credit.

Not offered 2002-2003.

LING 055. Writing Systems, Decipherment, and Cryptography

The course is an introduction to the representation of natural language in a nonfundamental, more or less permanent form. We begin with a typology of the writing systems of the world. Then we will look at some of the great archaeological decipherments of the past (e.g., Egyptian hieroglyphic, Linear B, and Mesoamerican), and we will decipher some Maya texts together. Next, we consider cryptography, focusing on the Navajo Code and the Enigma Machine of World War II, and we will finish up with modern encryption techniques for electronic transmissions.

Prerequisite: One of LING 001, 030, or 045.

1 credit.

Spring 2003. Fernald.

LING 057. Movement and Cognition

(Cross-listed as DANC 076 and MATH 007) (Studio course)

English, Scottish, Balkan, and Italian folk dance are analyzed, using group theory, graph theory, morphological theory, and syntactic theory, in an effort to understand the temporal and spatial symmetries of the dances. One focus will be a comparison of the insights offered by the mathematical and linguistic approaches.

Prerequisites: No prerequisites are required for dance and math. All necessary concepts and movements will be taught in the class. You must be willing to approach formal systems and to move your body. One course in linguistics is required.

This course counts for distribution in HU or SS under any rubric. It does not count for natural science (NS) distribution.

1 credit.

Not offered 2002-2003.

LING 061. Structure of Navajo

An examination of the major phonological, morphological, syntactic, and semantic structures in a non-Indo-European language. We will also consider the history of the language and its cultural context.

Prerequisites: At least two out of LING 001, 030, 040, 043, 045, and 050.

1 credit.

Not offered 2002-2003.

LING 063. Structure of Akan

(Counts toward black studies minor)

The course will focus on Akan, a tonal language found in the southern and central parts of Ghana, West Africa. Akan is the most common language of the 44 indigenous languages used by Ghana's population of 18.5 million people. It is also spoken on the Ivory Coast. The course will examine its phonological (including vowel harmony and tonal system), morphological, syntactic, and semantic structures. The features that distinguish the three major dialects of the language (Twi, Akwapim, and Fante) will also be discussed.

Prerequisites: At least two out of LING 001, 030, 040, 043, 045, and 050.

1 credit.

Spring 2003. Anyidoho.

LING 070F. Caribbean and French Civilizations and Cultures

(See FREN 070F.)

This course counts for distribution in HU only, under either rubric.

1 credit.

Rice-Maximin.

LING 070R. Translation Workshop

(See LITR 070R.)

This course counts for distribution in HU

under the literature rubric and in SS under the linguistics rubric.

1 credit.

Forrester.

LING 080. Intermediate Syntax and Semantics

This course is designed to provide theoretical and cross-linguistic breadth in topics involving the interaction of syntax and semantics. You will refine your skills of analysis and argumentation. Topics and languages considered will vary. This course is open to all students who have taken syntax or semantics. In spring 2002, this course is a continuation of LING 050, with a particular focus on current syntactic analyses of extraction.

Prerequisite: LING 050.

1 credit.

Spring 2003. Swingle.

LING 092. Research Practicum in Psycholinguistics

(See PSYC 092.)

1 credit.

Kako.

LING 094. Research Project

With the permission of the program, students may elect to pursue a research program.

1 credit.

Fall or spring. Staff.

LING 095. Community Service Credit: Language and the Deaf

This course offers credit for community service work. You may work with children at the Oral Program for the Hearing Impaired at the Kids' Place in Swarthmore. Prerequisites are LING 045, LING 006, the permission of the directors of both the Linguistics and Education programs and the agreement of a faculty member in linguistics to mentor you through the project. You would be required to keep a daily or weekly journal of your experiences and to write a term paper (the essence of which would be determined by you and the linguistics faculty member who mentors you in this).

1 credit.

Fall or spring. Staff.

LING 096. Community Service Credit: Literacy

This course offers credit for community service work. You may work with children in Chester public schools on literacy. The prerequisites are LING/EDUC 054, the permission of the directors of both the Linguistics and Education programs and the agreement of a faculty member in linguistics to mentor you through the project. You will be required to keep a daily or weekly journal of your experiences and to write a term paper (the essence of which would be determined by you and the linguistics faculty mentor).

1 credit.

Fall or spring. Staff.

LING 100. Research Seminar

All course majors in LING and LL must write their senior paper in this seminar. Only seniors are admitted.

1 or 2 credits.

Fall 2002. Fernald, Raimy, and Swingle.

LING 195. Senior Honors Thesis

All honors majors in linguistics and honors minors who are also course majors must write their thesis for 2 credits in the seminar.

Fall 2002. Fernald, Raimy, and Swingle.

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.

Spring 2003. Fernald.

SEMINARS

LING 105. Seminar in Phonology

This seminar will consider recent developments in the theory of phonology. Topics vary.

1 or 2 credits.

Not offered 2002-2003.

LING 106. Seminar in Morphology

This seminar will consider recent developments in the theory of morphology. Topics vary.

1 or 2 credits.

Not offered 2002-2003.

LING 109. Seminar in Syntax

This seminar will consider recent developments in the theory of syntax. Topics vary.

1 or 2 credits.

Not offered 2002-2003.

LING 111. Seminar in Semantics: Strategies of Semantic Analysis and Argumentation

This seminar deals with interactions between the interpretations of nominal expressions (NPs or DPs) and varieties of predicates. Topics included are quantifier binding and scope; anaphora; distinctions between definite and indefinite descriptions; individual-, stage-, and kind-level predicates; and theories about all of these phenomena.

Prerequisite: LING 040 or permission of the instructor.

1 or 2 credits.

Fall 2002. Fernald.

LING 116. Language and Meaning

(See PHIL 116.)

This seminar counts for distribution in HU under the philosophy rubric and in SS under the LING rubric.

Eldridge.

LING 119. Evolution, Culture, and Creativity

(See SOAN 119.)

Piker.

LING 120. Anthropological Linguistics: Endangered Languages

(Cross-listed as SOAN 80B)

In this seminar, we address some traditional issues of concern to both linguistics and anthropology, framed in the context of the ongoing, precipitous decline in human linguistic diversity. With the disappearance of languages, cultural knowledge (including entire technologies such as ethnopharmacology) is often lost, leading to a decrease in humans' ability to manage the natural environment. Language endangerment thus proves relevant to questions of the language/ecology interface, ethnoecology, and cultural survival. The seminar also addresses the ethics of fieldwork and dissemination of traditional knowledge in the Internet age and includes a practical workshop on field methods.

Prerequisites: one course in linguistics or anthropology or permission of the instructor.

Not offered 2002-2003.

LING 134. Psycholinguistics Seminar

(See PSYC 134.)

Kako.

Mathematics and Statistics

DEBORAH J. BERGSTRAND, Professor (part time)
CHARLES M. GRINSTEAD, Professor and Chair
EUGENE A. KLOTZ, Professor
STEPHEN B. MAURER, Professor
HELENE SHAPIRO, Professor
PHILIP J. EVERSON, Associate Professor
THOMAS HUNTER, Associate Professor[3]
DON H. SHIMAMOTO, Associate Professor
JANET C. TALVACCHIA, Associate Professor
GARIKAI CAMPBELL, Assistant Professor[3]
TODD A. DRUMM, Assistant Professor
CHERYL P. GROOD, Assistant Professor
AIMEE S.A. JOHNSON, Assistant Professor
STEVE WANG, Assistant Professor
JAMES WISEMAN, Visiting Assistant Professor
STEVEN AMGOTT, Computer Laboratory Coordinator
STEPHANIE SPECHT, Administrative Assistant

3 Absent on leave, 2002-2003.

People study mathematics and statistics for several reasons—for the pleasure of it or for its usefulness as a tool. The Department of Mathematics and Statistics tries to meet a variety of needs. It offers a program that will enable students to develop a firm foundation in pure mathematics and to see mathematical and statistical methods used to solve in a precise way problems arising in physical science, computer science, social science, and operations research. Mathematics and statistics have grown enormously in recent years, developing an increasing number of specialties and applications. All mathematical endeavor, however, is based on logical argument, abstraction, and an analytical approach to problem solving. Ideally, the study of mathematical sciences develops the ability to reason logically from hypothesis to conclusion, to analyze and solve quantitative problems, and to express one's thoughts clearly and precisely. In addition, the department faculty members hope that studying mathematics will foster an appreciation for the beauty and power of its methods, abstract approach, and rigorous structure.

REQUIREMENTS AND RECOMMENDATIONS

First-Year Courses

Mathematics and statistics courses appropriate for incoming first-year students with traditional (precalculus) high school preparation include STAT 001 (Statistical Thinking), STAT 002 (Statistical Methods), MATH 003 (Introduction to Mathematical Thinking), MATH 004 (Calculus Concepts), MATH 005 (Calculus I), MATH 005S (Calculus I Seminar), and MATH 009 (Discrete Mathematics). STAT 001, MATH 003, MATH 004, MATH 005S, and MATH 009 are primary distribution courses. More advanced courses are available to first-year students as explained later. Students who would like to begin calculus (MATH 004, 005, or 005S) but are not sure they are prepared should take the departmental calculus readiness exam when they arrive on campus. Entering students may place into higher-level courses (typically the half-semester courses 006A, 006B, and 006C or the semester courses 006S, 016, 016H, and 018) by scoring sufficiently well on the departmental calculus placement exam or by taking certain standardized exams (see later).

Placement Procedure

To gain entrance to any mathematics course (but not to gain entrance to statistics courses), *students must take at least one of the following exams:* the AP or IB (standardized) exams, Swarthmore's Calculus Placement Exam, or Swarthmore's Calculus Readiness Exam. Students who do take one of the standardized exams may be required to take the departmental exams as well. The Calculus Placement Exam is sent to entering first-year students over the summer, along with detailed information about the rules for placement and credit. The Calculus Readiness Exam is given *during first-year orientation only.*

Advanced Placement (AP) and Credit Policy

AP 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 only placement, not credit. Credit is awarded on the basis of the AP and the International Baccalaureate (IB) exams, as follows:

- 1 credit (for STAT 002) for a score of 4 or 5 on the Statistics AP Test of the College Board
- 1 credit (for MATH 005) 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 005 and 006A) for a score of 5 on the AB Calculus AP Test (or for the AB subscore of the BC Test) or a score of 6 or 7 on the higher-level IB
- 2 credits (for Math 005, 006A, and 006B) for a main score of 5 on the BC Calculus AP Test

Alternatively, any entering student who places out of MATH 005, 006A, or 006B may receive credit for the courses placed out of by passing the final exams in these courses with a grade of straight C or better. These exams must normally be taken during the student's first semester at Swarthmore, at the time when the final exam is given for the course. Students who wish to take these exams must arrange to do so with the departmental placement coordinator and should do so during their first semester at Swarthmore. Students who are eligible for AP *credit* for a course but who take the course anyway will not receive the AP credit.

First-year students seeking AP and/or credit for *calculus taken at another college or university* must normally validate their work by taking the appropriate Swarthmore examination, as described earlier. For work beyond calculus completed before entering Swarthmore, students should consult the departmental placement coordinator to determine the Swarthmore course into which they should be placed. The department will not normally award AP credit for work above the MATH 006 level, however.

Introductory Statistics

Students who do not know calculus can take STAT 001 or 002. STAT 001 is intended to show how statistics is used to help obtain an understanding of the world around us. STAT 002 is a more practical course for students who expect to use statistics in their own work. Students who know a semester of calculus should take STAT 002C instead of STAT 002. Both STAT 002 and 002C lead to STAT 027 on multivariate statistical analysis. Students with a strong background in mathematics can begin with the more theoretical STAT 053 and continue with the 1-credit seminar STAT 111.

Requirements for a Major in Mathematics

Students apply for a major in the middle of the second semester of the sophomore year. A prospective applicant should expect that by the end of the sophomore year, he or she will have received credit for, or placement out of, at least four of the following five courses: Calculus I (MATH 005 or 005S), Calculus II (MATH 006A and 006B or 006S), Discrete Mathematics (MATH 009), Linear Algebra (MATH 016 or 016H), and Several Variable Calculus (MATH 018 or 018H). All majors must complete MATH 016 and 018 by the end of the first semester of the junior year.

In addition, a candidate should have a grade-point average in mathematics and statistics courses of at least C+. This should include at least one grade at the B level. In some cases,

applicants may be deferred, pending successful work in courses to be designated by the department.

By graduation, a mathematics major must have at least 10 credits in mathematics and statistics courses. At most, 5 of the credits counted in the 10 may be for courses numbered under 025. (Certain courses in this category are not to count toward the major. These are so indicated under the course listings in this catalog.) Furthermore, every major is required to obtain credit for, or place out of, each of the following courses: MATH 005 or 005S; MATH 006A and 006B or 006S; MATH 016 or 16H; MATH 018 or 018H; MATH 047; and MATH 049. The two upper-level core courses, MATH 047 (Introduction to Real Analysis) and MATH 049 (Introduction to Modern Algebra), will be offered every fall semester. At least one of these two should be taken no later than the fall semester of the junior year. Finally, course majors must satisfy the departmental comprehensive requirement by passing MATH 097: Senior Conference. Progress of majors will be reviewed at the end of each semester. Students not making satisfactory progress may be dropped from the major.

Mathematics majors are urged to study in some depth a discipline that makes use of mathematics and to acquire some facility with the computer. Students bound for graduate work should obtain a reading knowledge of French, German, or Russian.

Special Emphases

The preceding requirements allow room to choose an optional special emphasis within the mathematics major. For instance:

A student may major in mathematics with an *emphasis on statistics* by taking the following courses at the advanced level: (1) the core analysis course (MATH 047); (2) Mathematical Statistics I (STAT 053) and possibly Mathematical Statistics II (STAT 111; (3) Probability (MATH 105); (4) Multivariate Statistics (STAT 027) or, perhaps, Econometrics (ECON 135); and (5) another mathematics course numbered 025 or higher. Students are encouraged but not required to select the core algebra course (MATH 049) if they choose this emphasis.

Students interested in *mathematics and computer science* should consider a mathematics major with a concentration in computer science or an Honors Program with a mathematics major and a computer science minor. Details on these options are in the catalog under computer science.

Sample program for majors considering graduate work in *social or management science* or a master's in business administration. Basic courses: MATH 005 (or 005S), 006A and 006B (or 006S), 009, 016, and 018; CPSC 020; advanced courses: (1) Modeling (MATH 061); (2) at least one of Probability (MATH 105), Mathematical Statistics I (STAT 053), and possibly Mathematical Statistics II (STAT 111); (3) at least one of Combinatorics (MATH 065) or Operations Research (ECON 032); (4) the two required core courses (MATH 047 and MATH 049); and (5) Differential Equations (MATH 030). Because this program is heavy (one who hopes to use mathematics in another field must have a good grasp both of the mathematics and of the applications), one of the core course requirements may be waived with permission of the department.

Sample program for students considering graduate work in *operations research*. Basic courses: same as previous paragraph. Advanced courses: (1) the two required core courses (MATH 047 and MATH 049); (2) Combinatorial Optimization (MATH 072) and Combinatorics (MATH 065); (3) Mathematical Statistics (STAT 053); and (4) at least one of Number Theory (MATH 037), Modeling (MATH 061), or Probability (MATH 105).

Teacher Certification

We offer teacher certification in mathematics through a program approved by the state of Pennsylvania. Because of a change in teacher certification regulations that occurred in November 2000, students completing certification through 2003 will need to fulfill somewhat different course requirements from those who complete certification in 2004 and beyond. For further information about the relevant set of requirements, please contact the Educational Studies chair, the Mathematics Department chair, or the Educational Studies Department Web site: www.swarthmore.edu/SocSci/Education/.

Mathematics Course Minor

By graduation, a mathematics course minor should have obtained 6 credits in mathematics

or statistics. Furthermore, every mathematics course minor is required to obtain credit for, or place out of, each of the following courses: MATH 005 or 005S; MATH 006A-006B or 006S; MATH 016 or 016H; and MATH 018 or 018H. In addition, every mathematics course minor must obtain at least 2 credits in mathematics or statistics courses whose numbers are greater than 030. At least 1 of these 2 credits must be obtained from MATH 047 or 049. Progress of mathematics course minors will be reviewed at the end of each semester. Students not making satisfactory progress may be dropped from the minor.

Statistics Course Minor

By graduation, a statistics course minor should have obtained 6 credits in mathematics or statistics. Furthermore, every statistics course minor is required to obtain credit for, or place out of, each of the following courses: MATH 005 or 005S; MATH 006A-006B or 006S; MATH 016 or 016H; and MATH 018 or 018H. In addition, every statistics course minor must obtain credit for, or place out of, STAT 053 and STAT 111. Progress of statistics course minors will be reviewed at the end of each semester. Students not making satisfactory progress may be dropped from the minor.

The Honors Program

Requirements for acceptance as a mathematics major in the Honors Program are more stringent than those for the course major and include a grade-point average in mathematics and statistics courses of B+ or better. Potential honors majors may want to consider including in the sophomore year a course that emphasizes theory and provides an opportunity for writing proofs. Department faculty can give advice on appropriate courses.

The program for an honors major in mathematics shall consist of preparations for external examination in three fields of 2 credits each, and an additional credit in one of the three chosen preparations, for a total of 7 distinct credits. Each preparation consists of a required core course together with a second credit in that field selected from a list of courses and seminars designated by the department. For the honors major, two of the preparations shall be in algebra and analysis, and every program must include at least one of MATH 101 (Real Analysis Seminar) or MATH 102 (Algebra Seminar). These two seminars will be offered every spring semester. Each student may select the third preparation from a list of fields that includes discrete mathematics, geometry, statistics, and topology. The department must approve any alternatives to these.

Students who wish to complete an honors minor in mathematics must have credit for, or place out of, MATH 005 or 005S, MATH 006A and 006B or 006S, MATH 016 or 016H, and Math 018 or 018H. For the honors portion of their program, minors must complete one 2-credit preparation chosen from among any of the fields described earlier. Again, any alternatives must have departmental approval.

COURSES

STAT 001. Statistical Thinking

Statistics provide methods for collecting and analyzing data and generalizing from the results of the analysis. Statistics are used in a wide variety of fields, and the course provides an understanding of the role of statistics. It is intended for students who want an appreciation of statistics without the need to learn how to apply statistical methods. It provides an intuitive understanding of statistical concepts and makes use of modern statistical software for the Macintosh computer. This course cannot be counted toward a major in mathematics.

Primary distribution course. 1 credit.

Fall 2002. Everson.

STAT 002. Statistical Methods

(Cross-listed as SOAN 010E)

Data on one variable are examined through graphical methods and the computations of averages and measures of variation. Relationships between two variables are studied using methods such as chi-square, rank correlations, analysis of variance, and regression analysis. The course is intended for students who want a practical introduction to statistical methods and who intend to do statistical analysis primarily in the biological and social sciences. It is not a prerequisite for any other department course except STAT 027, nor can it be counted toward a major in the department. Recommended for students who have not studied calculus (those who know a semes-

ter of calculus are advised to take STAT 002C instead).

Primary distribution course. 1 credit.

Fall 2002. Wang.

STAT 002C. Statistics

(Cross-listed as SOAN 010F)

This calculus-based introduction to statistics covers most of the same methods examined in STAT 002, but the course is taught on a higher mathematical level. The course is intended for anyone who wants an introduction to the application of statistical methods.

Prerequisite: MATH 004 or 005.

Primary distribution course. 1 credit.

Spring 2003. Staff.

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. Students planning to go on to calculus should consult with the instructor. This course does not count toward a major in mathematics.

Primary distribution course. 1 credit.

Fall 2002. Bergstrand.

MATH 004. Calculus Concepts

Introduction to the concepts, methods, and applications of calculus. MATH 004 proceeds more gently and less far than MATH 005 and is intended primarily for students whose preparation is limited or weak. Students who have had calculus in high school may not take MATH 004 without permission of the instructor. Students who complete MATH 004 are encouraged to continue on to MATH 005 or MATH 006A (or 006S). They may receive credit for MATH 005 by taking it after MATH 004 with permission of the department. Otherwise, credit is not granted for both MATH 004 and MATH 005.

Prerequisite: Permission to take this course through Swarthmore's Calculus Readiness Exam or Calculus Placement Exam (see "Placement Procedure" earlier).

Primary distribution course. 1 credit.

Spring 2003. Bergstrand.

MATH 005. Calculus I

This first-semester calculus course will introduce topics in the differentiation and integration of functions of one variable. These topics include limits and the definition of the derivative, interpretations and applications of the derivative, techniques of differentiation, graphing and extreme value problems, the logarithm and exponential functions, the integral, and the fundamental theorem of calculus.

Prerequisite: Permission to take this course through Swarthmore's Calculus Readiness Exam or Calculus Placement Exam (see "Placement Procedure" earlier).

1 credit.

Fall 2002. Klotz, Wiseman.

MATH 005S. Calculus I Seminar

MATH 005S covers the same material as the lecture-based MATH 005 but uses a seminar format (10-14 students) with additional meetings and lots of hands-on activities (e.g., writing, oral presentations, group work, and computer work). Intended for students who think they could benefit from the collaborative seminar format and who wish to be challenged to excel in calculus so that they gain more confidence to continue with mathematics and science.

Prerequisite: Permission to take this course through Swarthmore's Calculus Readiness Exam or Calculus Placement Exam (see "Placement Procedure" earlier).

Primary distribution course. 1 credit.

Fall 2002. Grinstead.

Note on MATH 006

The material following MATH 005 is divided into four, 0.5-credit courses, 006A, 006B, 006C, and 006D. Each course will run full time for one-half semester. Students may take any number of these courses. Normally, however, students coming from MATH 005 will take 006A and either 006B or 006C. Students enroll at the beginning of each semester for all versions of MATH 006 they plan to take at any time during the semester. MATH 006S is a full-

semester seminar version of MATH 006A and 006B.

MATH 006A. Calculus IIA

This course is a continuation of the material begun in MATH 005 and is the prerequisite for MATH 016 (Linear Algebra) and MATH 018 (Several Variable Calculus) as well as for 006B and 006C. Topics will include applications of the integral, inverse trigonometric functions, methods of integration, and improper integrals. MATH 006A is a 0.5-credit course.

Prerequisite: MATH 005 or 005S or placement by examination (see "Advanced Placement and Credit Policy" earlier).

0.5 credit.

Each semester (first half).

Fall 2002. Shapiro.

Spring 2003. Drumm, Klotz.

MATH 006B. Calculus IIB

This course is an introduction to infinite series and approximation. Topics include Taylor polynomials and Taylor series, convergence tests, and the use of power series. Other topics, such as applications to differential equations and Fourier series, may be introduced, time permitting. MATH 006B should be taken by anyone planning to take mathematics courses beyond the freshman-sophomore level. It is required of all students majoring in mathematics, chemistry, physics, or engineering. MATH 006B is a 0.5-credit course.

Prerequisite: MATH 006A or placement by examination (see "Advanced Placement and Credit Policy" earlier).

0.5 credit.

Fall semester (each half) and spring semester (second half).

Fall 2002. Grood, Shapiro, Shimamoto.

Spring 2003. Johnson, Klotz.

MATH 006C. Calculus IIC

This course emphasizes the differential aspects of several variable calculus covered in the first half of MATH 018. In addition, multivariable integration may be touched on as well as such topics as differential equations and probability. MATH 006C is intended primarily for students interested in applications (especially in economics) who consider MATH 006 one of their last mathematics courses and who do not plan to take MATH 018. Students may (but normally will not) take both MATH 006C and MATH 018. This course cannot be counted toward a major in mathematics. MATH 006C is a 0.5-credit course.

Prerequisite: MATH 006A or placement by examination (see "Advanced Placement and Credit Policy" earlier).

0.5 credit.

Each semester (second half).

Fall 2002. Wiseman.

Spring 2003. Wiseman.

MATH 006D. Postcalculus

A special course in the second half of the fall semester primarily for first-year students who place into MATH 006B in August. MATH 006D is for students who like mathematics and are curious to know what it might be like to major in it. Each year, the contents of 006D will be selected from the wealth of modern mathematics that cannot be introduced in standard freshman-sophomore courses. MATH 006D is a 0.5-credit course.

Prerequisites: MATH 006B (in exceptional cases, MATH 006A) and either departmental recommendation or permission of the instructor.

0.5 credit.

Fall 2002 (second half). Shimamoto.

MATH 006S. Calculus II Seminar

A continuation of MATH 005S, in the same style. Covers the material of MATH 006A and 006B.

Prerequisite: MATH 005 or 005S or placement by examination (see "Advanced Placement and Credit Policy" earlier).

Primary distribution course. 1 credit.

Not offered 2002-2003.

MATH 007. Elementary Topics in Mathematics in Applied Contexts

This course is offered occasionally and is interdisciplinary in nature. It provides an introduction to some area of mathematics in the context of its use in another discipline. A recent version of this course was taught in the Linguistics Program. This course does not count toward a major in mathematics.

1 credit.

Not offered 2002-2003.

MATH 009. Discrete Mathematics

An introduction to noncontinuous mathematics. The key theme is how induction, iteration, and recursion can help one discover, compute, and prove solutions to various problems—often problems of interest in computer science, social science, or management. Topics will include algorithms, graph theory, counting, difference equations, and finite probability with special emphasis on how to write mathematics.

Prerequisite: Permission to take this course through Swarthmore's Calculus Readiness Exam or Calculus Placement Exam (see "Placement Procedure'" earlier). Familiarity with some computer language is helpful but not necessary.

Primary distribution course. 1 credit.

Each semester.

Fall 2002. Grood.

Spring 2003. Maurer.

MATH 016. Linear Algebra

This course covers vector spaces, matrices, and linear transformations with applications to solutions of systems of linear equations, determinants, and eigenvalues.

Prerequisite: A grade of C or better in MATH 006A or MATH 009 or placement by examination (see "Advanced Placement and Credit Policy" earlier).

1 credit.

Each semester.

Fall 2002. Talvacchia.

Spring 2003. Drumm, Grood.

MATH 016H. Linear Algebra Honors Course

This honors version of MATH 016 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, especially if they are thinking of a mathematics major.

Prerequisite: A grade of B or better in MATH 006A or MATH 009 or placement by examination (see "Advanced Placement and Credit Policy" earlier).

1 credit.

Fall 2002. Johnson, Maurer, Shimamoto.

MATH 018. 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. Often there is one section for students who have had linear algebra (MATH 016 or 016H) and another for students who have not.

Prerequisite: MATH 006A or equivalent or placement by examination (see "Advanced Placement and Credit Policy" earlier).

Recommended: MATH 006B and MATH 016.

1 credit.

Each semester.

Fall 2002. Bergstrand, Johnson.

Spring 2003. Shapiro, Shimamoto.

MATH 018H. Several Variable Calculus Honors Course

This honors version of MATH 018 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 016H successfully.

Prerequisite: MATH 006B and a grade of C or better in MATH 016H, or permission of the instructor.

1 credit.

Spring 2003. Shimamoto, Talvacchia.

STAT 026. Topics in Statistics

The choice of topics will depend somewhat on the interest and mathematical background of the students, but they will include a study of issues in multivariate analysis and statistical inference (Bayesian statistics in particular).

Prerequisite: One course in statistics.

1 credit.

Not offered 2002-2003.

STAT 027. Multivariate Statistical Methods

This course will study methods for exploring relationships in data. In particular, we emphasize applications of linear models, including linear regression and the analysis of variance.

We also highlight the use of statistical graphics in visualizing trends and formulating hypotheses. The format of the course emphasizes interactive problem solving and presentations.

Prerequisite: STAT 002 or equivalent, or STAT 053, or STAT 001 and permission.

1 credit.

Alternate years.

Spring 2003. Wang.

MATH 030. Differential Equations

An introduction to differential equations that includes such topics as first-order equations, linear differential equations, series solutions, first-order systems of equations, Laplace transforms, approximation methods, and some partial differential equations.

Prerequisites: MATH 006B and either 018 or 006C or permission of the instructor. MATH 016 recommended strongly.

1 credit.

Spring 2003. Talvacchia, Wiseman.

MATH 037. Number Theory

The theory of primes, divisibility concepts, and multiplicative number theory will be developed. Students are also expected to learn how to construct a mathematical proof.

Prerequisites: MATH 016 and 018 or permission of the instructor.

Primary distribution course. 1 credit.

Alternate years.

Fall 2002. Shapiro.

MATH 045. Topics in Geometry

Course content varies from year to year, but recently the focus has been on the careful development of plane geometry, including basic axioms and the geometries that result: Euclidean, projective, and hyperbolic.

Prerequisites: None, but the course will be taught at a level suitable for students who have completed MATH 016 and 018. See the instructor if in doubt.

Primary distribution course. 1 credit.

Alternate years.

Not offered 2002-2003.

MATH 046. Theory of Computation

(Cross-listed as CPSC 046)

Please see computer science for description.

MATH 047. 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 will include continuity, compactness, connectedness, uniform convergence, differentiation, and integration.

Prerequisites: MATH 006B, 016, and 018 or permission of the instructor.

Primary distribution course. 1 credit.

Fall 2002. Grinstead.

MATH 048. Topics in Algebra

Course content varies from year to year depending on student and faculty interest. Recent offerings have included coding theory, groups and representations, finite reflection groups.

Prerequisite: MATH 016 and possibly MATH 049.

1 credit.

Alternate years.

Not offered 2002-2003.

MATH 049. 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.

Prerequisite: MATH 016 or permission of the instructor.

Primary distribution course. 1 credit.

Fall 2002. Grood.

STAT 053. Mathematical Statistics I

Based on probability theory, this course examines the statistical theory for the estimation of parameters and tests of hypotheses. Both small and large sample properties of the estimators are studied. The course concludes with the study of models dealing with relationships between variables, including chi-square and regression analysis.

Prerequisites: MATH 016 and 018 or permission of the instructor.

1 credit.

Alternate years.

Fall 2002. Everson.

MATH 061. Modeling

An introduction to the methods and attitudes of mathematical modeling. Because modeling in physical science and engineering is already taught in courses in those disciplines, applications in this course will be primarily to social and biological sciences. Various standard methods used in modeling will be introduced: differential equations, Markov chains, game theory, graph theory, and computer simulation. The emphasis, however, will be on how to apply these subjects to specific modeling problems, not on their systematic theory. The format of the course will include projects as well as lectures and problem sets.

Prerequisites: MATH 016 and 018 or permission of the instructor.

1 credit.

Alternate years.

Fall 2002. Wiseman.

MATH 065. Combinatorics

This course continues the study of noncontinuous mathematics begun in MATH 009. The topics covered include three broad areas: counting theory, graph theory, and design theory. The first area includes a study of generating functions and Polya counting. The second area is concerned with relations between certain graphical invariants. Topics such as extremal graph theory and Ramsey theory may be introduced. The third area introduces combinatorial structures such as matroids, codes, and Latin squares.

Prerequisites: MATH 009 and at least one other course in mathematics.

1 credit.

Alternate years.

Spring 2003. Bergstrand.

MATH 072. Topics in Combinatorial Optimization

Topics vary from year to year. Past topics have included linear programming, game theory, combinatorial algorithms, number theoretic algorithms, and complexity theory.

Prerequisites: MATH 009 and at least one higher-numbered mathematics course.

Recommended: CPSC 020.

1 credit.

Alternate years.

Not offered 2002-2003.

MATH 081. Partial Differential Equations

The first part of the course consists of an introduction to linear partial differential equations of elliptic, parabolic, and hyperbolic type via the Laplace equation, the heat equation, and the wave equation. The second part of the course is an introduction to the calculus of variations. Additional topics depend on the interests of the students and instructor.

Prerequisites: MATH 016, 018, and either MATH 030 or PHYS 050 or permission of the instructor.

1 credit.

Alternate years.

Not offered 2002-2003.

MATH 085. Topics in Analysis

Course content varies from year to year. Recent topics have included dynamical systems and the mathematics of financial derivatives. In 1999, the topic was Fourier analysis: Fourier series and integrals, inversion, applications to probability, number theory, and partial differential equations. In 2003, the topic will be chaotic dynamical systems and the qualitative analysis of nonlinear systems. Topics will include stability, existence and classification of equilibria, bifurcations, measurement of chaos, symbolic dynamics, and fractals.

Prerequisites: MATH 016 and 018. MATH 047 is also recommended.

1 credit.

Alternate years.

Spring 2003. Wiseman.

MATH 093/STAT 093. Directed Reading

MATH 096/STAT 096. Thesis

MATH 097. Senior Conference

This 0.5-credit course is required of all senior mathematics majors in the course program. 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 an oral presentation. In addition, honors minors typically will satisfy the senior honors study component of the minor by enrolling in Senior Conference for the purpose of writing a paper that extends the work within the minor. The work is spread throughout the year with the talks and/or papers normally presented in the spring. Students register for this course for the spring

semester but must also sign in with the instructor for the fall semester.

0.5 credit.

Fall 2002. Shimamoto.

SEMINARS

MATH 101. Real Analysis II

This seminar is a continuation of Introduction to Real Analysis (MATH 047). Topics may include the inverse and implicit function theorems, differential forms, calculus on manifolds, and Lebesgue integration.

Prerequisite: MATH 047.

1 credit.

Spring 2003. Johnson.

MATH 102. Modern Algebra II

This seminar is a continuation of Introduction to Modern Algebra (MATH 049). 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 049.

1 credit.

Spring 2003. Grood.

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 047.

1 credit.

Alternate years.

Spring 2003. Shapiro.

MATH 104. Topology

An introduction to point-set, combinatorial, and algebraic topology: topological spaces, classification of surfaces, the fundamental group, covering spaces, simplicial complexes, and homology (including related algebra).

Prerequisites: MATH 047 and 049.

2 credits.

Alternate years.

Not offered 2002-2003.

MATH 105. Probability

An introduction to measure-theoretic probability theory. Topics may include branching processes, renewal theory, random walks, stochastic processes, laws of large numbers, characteristic functions, the Central Limit Theorem, Markov chains, the Poisson process, and percolation.

Prerequisite: STAT 053.

1 credit.

Alternate years.

Not offered 2002-2003.

MATH 106. Advanced Topics in Geometry

The course content varies from year to year and will be chosen from among differential geometry, differential topology, and algebraic geometry. In 2000, the topic was differential geometry.

Prerequisites: depend on the topic chosen.

1 credit.

Alternate years.

Fall 2002. Talvacchia.

STAT 111. Mathematical Statistics II

This 1-credit seminar is offered as a continuation of STAT 053. It deals mainly with statistical models for the relationships between variables. The general linear model, which includes regression, variance, and covariance analysis, is examined in detail. Topics also include nonparametric statistics, sampling theory, and Bayesian statistical inference.

Prerequisite: STAT 053.

1 credit.

Alternate years.

Spring 2003. Everson.

Medieval Studies

Coordinator: **ELLEN ROSS** (Religion)

Committee: **Stephen Bensch** (History)[3]
Michael W. Cothren (Art History)[3]
Nathaniel Deutsch (Religion)[3]
Michael Marissen (Music)
Rosaria V. Munson (Classics)[3]
William N. Turpin (Classics)
Craig Williamson (English Literature)

3 Absent on leave, 2002-2003.

This interdisciplinary program offers an opportunity for an integrated study of European and Mediterranean civilization from the fourth to the 15th centuries. The period, which has a critical importance for the understanding of Western culture, can best be approached through a combination of several disciplines. Hence, six departments (Art, Classics, English Literature, History, Music, and Religion) cooperate to provide a course of study that may be offered as a major or minor in the Course Program or as a major or minor in the Honors Program.

REQUIREMENTS AND RECOMMENDATIONS

All students who major in the Course Program or major or minor in the Honors Program must satisfy the following distribution requirements:

One course in art history (ARTH 014, 047, or 145)

One course in history (HIST 002A, 006, 012-017, or 111)

One course in literature (ENGL 010, 014, 016, 102, or CLAS 014 or 060)

One course in religion (RELG 014B, 020B, 114, or 116) or philosophy (medieval)

(Please note possible prerequisites for the preceding courses.)

Course Major

1. Distribution requirements as listed previously.
2. Senior comprehensive examinations. Each major in course is required to complete the senior comprehensive written and oral examinations (normally taken at the end of the second semester of senior year). These examinations are planned as a culminating exercise to facilitate the review and integration of the various subjects and methods involved in the interdisciplinary field of medieval studies.
3. Students must complete at least 8 credits in medieval studies to graduate with a medieval studies major. (In addition to courses, these credits may include directed readings in medieval subjects and/or a thesis written during the first semester of the senior year.)

Course Minor

A minor in medieval studies will consist of 5 credits in medieval studies (see course and seminar options listed subsequently). These 5 credits must include work in at least three separate departments. Students are reminded that only 1 of the 5 credits can be in the department of their major.

Honors Major

1. Distribution requirements as listed earlier.
2. The four preparations for the Honors Program should reflect the interdisciplinary nature of this major and must include work in three of the following five areas: art history, history, literature, music, or religion/philosophy. The preparations may be constituted by some combination of the following: seminars, preapproved two-course combinations, courses with attachments, or a thesis. Students may design an integrated minor in another field by counting one of the medieval studies preparations in its home

department. Students who minor in another department will have to fulfill the minor prerequisites and requirements (including senior honors study minor requirements) stipulated by that department.

3. Senior honors study for majors in medieval studies will follow the policies of the individual departmental preparations used in the program. Majors will have a 90-minute oral panel with all four examiners present. Majors will have the regular individual oral for the single preparation.

Honors Minor

1. Distribution requirements as listed earlier.
2. The one preparation for the Honors Program should reflect the interdisciplinary nature of this minor and may be satisfied by one of the following: one seminar, a preapproved two-course combination, or one course with an attachment. The minor preparation must be in a department distinct from the student's major.
3. Senior honors study for minors in medieval studies will follow the policies of the individual departmental preparations used in the program. Minors will have a 90-minute oral panel with all four examiners present. Minors will have the regular individual oral for the single preparation.

COURSES

Courses currently offered in medieval studies (see catalog sections for individual departments to determine specific offerings in 2001-2002):

ARTH 014. Medieval Survey

ARTH 046/RELG 029. Monasticism and the Arts in the Christian Middle Ages

ARTH 047. Special Topics in Medieval Art

CLAS 060. Dante and the Classical Tradition

ENGL 010. Survey I: *Beowulf* to Milton

ENGL 014. Old English/History of the Language

ENGL 016. Chaucer

HIST 002A. Medieval Europe

HIST 006. The Formation of the Islamic Near East

HIST 012. Chivalric Society

HIST 014. Friars, Heretics, and Female Mystics: Religious Turmoil in the Middle Ages

HIST 015. Medieval Towns

HIST 016. Sex, Sin, and Kin in Early Modern Europe

LATN 014. Medieval Latin

MUSI 020. Medieval and Renaissance Music

MUSI 045. Performance (early music ensemble)

RELG 014B. Christian Life and Thought in the Middle Ages

RELG 020B. Prophets and Visionaries: Christian Mysticism Through the Ages

RELG 030B. The Power of Images: Icons and Iconoclasts

RELG 031B. Religion and Literature

MDST 096. Thesis

SEMINARS

Seminars currently offered in medieval studies:

ARTH 145: Gothic Art and Architecture

ENGL 102: Chaucer and Medieval Literature

HIST 111. The Medieval Mediterranean

RELG 116. The Body in Late Antiquity

RELG 114. Love and Religion

Modern Languages and Literatures

MARION J. FABER (German), Professor
JOHN J. HASSETT (Spanish), Professor
GEORGE MOSKOS (French), Professor[11]
KOFFI ANYINEFA (French), Visiting Associate Professor[5]
ALAN BERKOWITZ (Chinese), Associate Professor
AURORA CAMACHO de SCHMIDT (Spanish), Associate Professor
SIBELAN FORRESTER (Russian), Associate Professor
MARIA LUISA GUARDIOLA (Spanish), Associate Professor[2]
HAILI KONG (Chinese), Associate Professor
MICHELINE RICE-MAXIMIN (French), Associate Professor[2]
BERNOUSSI SALTANI (French), Associate Professor[9,12]
HANSJAKOB WERLEN (German), Associate Professor and Chair
DEENA R. AMIRY (French), Visiting Assistant Professor[5]
JEAN-VINCENT BLANCHARD (French), Assistant Professor
HENRY ERIK BUTLER, Mellon Post-Doctoral Fellow (German), Assistant Professor
HORACIO CHIONG RIVERO (Spanish), Assistant Professor
WILLIAM O. GARDNER (Japanese), Assistant Professor
ANN KOMAROMI (Russian), Assistant Professor
SUNKA SIMON (German), Assistant Professor[3]
SUJANE WU (Chinese), Assistant Professor
CARINA YERVASI (French), Assistant Professor[1,10]
KIMBERLY FEDCHAK (Russian), Language Instructor (part time)
JOAN FRIEDMAN (Spanish), Language Instructor (part time)
JOSHIKO JO (Japanese), Language Instructor (part time)
WOL-A KANG (Chinese), Language Instructor (part time)
MARY K. KENNEY (Spanish), Language Instructor (part time)
ELKE PLAXTON (German), Language Instructor (part time)
KIRSTEN E. SPEIDEL (Chinese), Language Instructor (part time)
PATRICIA VARGAS (Spanish), Language Instructor (part time)
ANTONIA LUNGHI (French), Visiting Language Instructor
MICHAEL JONES, Language Resource Center Director
ELEONORE BAGINSKI, Administrative Coordinator
DEBORAH DIFILIPPO, Administrative Assistant (part time)

1 Absent on leave, fall 2002.
2 Absent on leave, spring 2003.
3 Absent on leave, 2002-2003.
5 Fall 2002 (appointment that semester only).
9 Campus coordinator, Swarthmore Program in Grenoble, fall 2002.
10 Campus coordinator, Swarthmore Program in Grenoble, spring 2003.
11 Program director, Swarthmore Program in Grenoble, fall 2002.
12 Program director, Swarthmore Program in Grenoble, spring 2003.

The Department of Modern Languages and Literatures—consisting of Chinese, French, German, Japanese, Russian, and Spanish sections—provides Swarthmore students with an understanding of foreign cultures through their original languages and prepares them to engage effectively with an increasingly internationalized world. In addition to language courses, the department also offers a large variety of seminars and courses (some in English) that explore

authors, genres, aesthetic theories, and periods of literary and cinematic production and that investigate literature and culture as sites of contending social forces and values. In conjunction with demonstrated competence in the language, a foreign literature major will normally complete a minimum of 8 credits in advanced language literature, or culture courses, and a culminating exercise, such as a comprehensive examination. One of the required courses for the foreign literature major may be taken in English provided it is pertinent to the student's specific major. The department encourages interdisciplinary approaches within the guidelines of the programs in Asian studies, Francophone studies, German studies, Latin American studies, and Slavic studies. Students interested in the literature of more than one language are encouraged to consider a comparative literature major. Students should also take note of the related major in linguistics and languages.

REQUIREMENTS AND RECOMMENDATIONS

Courses numbered 001B to 004B are primarily designed to help students acquire the linguistic competence necessary to pursue literary and cultural studies in a foreign language through work with the language and selected texts of literary or cultural interest.

For a detailed description of the orientation in these courses, see the explanatory note on these language courses later. Courses numbered 011 or above emphasize the study of literature and culture as a humanistic discipline as well as competence in the spoken and written language.

Students who enter with no previous knowledge of a language and who are interested in majoring in a foreign literature should register for the intensive language courses (001B-002B) in the freshman year. Language courses numbered 003B and above, with the exception of Spanish, count toward the 8 credits required for the major.

Students who wish to continue a language begun elsewhere will be placed at the course level where they will profit best according to their score on the College Entrance Examination or placement tests administered by the department in the fall.

Prerequisites for majors are noted under the listing of each of the literatures taught. Exceptions to course requirements are made for those who show competence in the language of specialization. Students who speak Chinese, French, German, Japanese, Russian, or Spanish fluently should consult with the department before electing courses.

Majors are urged to select supporting courses in other literatures, in history, philosophy, linguistics, or art history. The department also recommends participation for a minimum of a summer and a semester in an academic program abroad. Linguistically qualified students in French may apply to the Swarthmore Program in Grenoble at the University of Grenoble, for one or two semesters in the sophomore or junior year. This program is particularly suited for majors in the humanities and the social sciences.

Students competent in Spanish should consider the Hamilton College Program in Madrid, Spain, which is cooperatively sponsored by Swarthmore. Other recommended programs include the Universitat de Illes Balears, in Palma de Mallorca; the University of Pennsylvania–Mexico; Pitzer College–Venezuela; and Washington University-St. Louis-Chile. For a complete listing of approved programs, students should consult with members of the Spanish section. (The Spanish section requires that its majors spend a minimum of one semester of study abroad in a program approved by the section.)

Students of German have the opportunity to join the Dickinson College program in Bremen during the spring semester of each year. Other programs students should consider are the Wayne State Junior Year in Germany (at the University of Munich or the University of Freiburg), the Wesleyan University Program in Regensburg, or the Duke Program in Berlin.

Students in Russian are strongly encouraged to spend at least one semester in the A.C.T.R. or C.I.E.E. language programs among others in Russia.

Study abroad is particularly encouraged for students of Chinese; academic credit (full or partial) is generally approved for participation in the 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 Board (IUB) Program at Tsing-hua University, the ACC Associated Colleges in China Program, and the Council on International Educational Exchange (CIEE) Program in Beijing, and the CET Program in Harbin. In Taiwan, these include the ICLP International Chinese Language Program and the Mandarin Training Center in Taipei and the University of Massachusetts Program in Tunghai. Students on scholarship may apply scholarship monies to designated programs of study abroad.

Study abroad is encouraged for students of Japanese. A carefully selected list of programs in Japan will be available to students interested in studying in Japan.

We offer teacher certification in modern languages (French, German, and Spanish) through a program approved by the state of Pennsylvania. Because of a change in teacher certification regulations that occurred in November 2000, students completing certification during 2002 to 2003 will need to fulfill somewhat different course requirements from those who complete certification in 2004 and beyond. For further information about the relevant set of requirements, please contact the Department of Educational Studies director, the Modern Languages Department chair, or the Department of Educational Studies Web site: www.swarthmore.edu/SocSci/Education/.

Students planning to do graduate work are reminded that, in addition to the language of specialization, a reading knowledge of other languages is often required for admission to advanced studies.

Advanced Placement

The department will grant 1 credit for incoming students who have achieved a score of 4 or 5 in Advanced Placement French, German, or Spanish examinations when they have successfully completed a 1-credit course in that language at the College.

International Baccalaureate

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 after they have successfully completed a 1-credit course in that language at the College.

LITERATURES IN TRANSLATION

Students acquainted with a particular foreign language are urged to elect an appropriate literature course taught in the original language. LITR courses provide students with the opportunity to study a literature that they cannot read in the original. These courses cannot be substituted for the 011- or 012-level courses to satisfy the departmental prerequisites for a major or minor in the original languages, but a student may take one of these courses to satisfy the 8-credit requirement of a foreign literature major provided that the course is pertinent to the specific literature of the major.

LITR 013R. The Russian Novel

(Cross-listed as RUSS 013)

The Russian novel represents Russia's best-known contribution to world culture, with well-known authors and famously thought-provoking works. We will survey the Russian novelistic tradition in classics from the 19th and 20th centuries to gain a basic understanding of Russian literary history, including the developments of romanticism, realism, symbolism, modernism, the picaresque novel, and post-modernism. We shall explore how the constantly evolving genre took shape in the Russian context from the period of Tsarist empire through restless pre-revolutionary years, the underground classics and émigré writings of the Soviet period, to innovations in the post-Stalin period and beyond.

No prerequisite.

Primary distribution course. 1 credit.

Spring 2003. Komaromi.

LITR 014. Modern European Literature

Studying key modernist works of fiction between 1900 and 1930, we will work in seminar format (presentation and critical discussion of student papers). Authors will include Nietzsche, Conrad, Joyce, Kafka, Proust, Thomas Mann, and Virginia Woolf. Intended especially for freshmen with an interest in literature. Limited to 12-13 first- and second-year students.

Primary distribution course. 1 credit.

Fall 2003. Faber.

LITR 015R. East European Literatures in Translation

(Cross-listed as RUSS 015)

Novels and stories by the most prominent 20th-century writers of this multifaceted and turbulent region. Analysis of individual works and writers with the purpose of appreciating the religious, linguistic, and historical diversity of Eastern Europe in an era of war, revolution, political dissent, and outstanding cultural and intellectual achievement. Readings, lectures, writing and discussion in English; qualified students may do some readings in the original language(s). Writing-intensive course limited to 15 students.

Primary distribution course. 1 credit.

Fall 2002. Forrester.

LITR 016CH. Substance, Shadow, and Spirit in Chinese Literature and Culture

(Cross-listed as CHIN 016)

This course will explore the literary and intellectual world of traditional Chinese culture, through original writings in English translation, including both poetry and prose. Topics to be discussed include Taoism, Confucianism, and the contouring of Chinese culture; immortality, wine, and allaying the mundane; and the religious dimension, disengagement, and the appreciation of the natural world. The course also will address cultural and literary formulations of conduct and persona and the expression of individualism in an authoritarian society.

No prerequisites.

Primary distribution course. 1 credit.

Fall 2002. Berkowitz.

LITR 017CH. The Legacy of Chinese Narrative Literature: The Story in Dynastic China

(Cross-listed as CHIN 017)

This course explores the development of diverse genres of Chinese narrative literature through readings of original writings in translation. Readings include tales of the strange, biographies and hagiographies, moral tales, detective stories, literary jottings, drama, novellas and novels, and masterworks of the Chinese literary tradition throughout the centuries of imperial China.

No prerequisites and no knowledge of Chinese or of China required.

1 credit.

Spring 2003. Berkowitz.

LITR 017J. Introduction to Japanese Culture: The Cosmology of Japanese Drama

(Cross-listed as JPNS 017)

This course will provide an introduction to Japanese culture through a study of its three great dramatic traditions: Noh masked drama, Bunraku puppet theater, and Kabuki. These fascinating and distinctive dramatic forms offer a microcosm of Japanese religion, history, literature, and visual aesthetics. In our course, we will explore how the Japanese stage becomes a pathway between human beings and the supernatural and between present times and the legendary past. The course will proceed through readings of plays, aesthetic treatises, and articles on the cultural and historical contexts of Japanese drama. Screenings of theatrical performances and films based on classic plays will offer a glimpse of the continuing legacy of these dramatic forms. No previous knowledge of Japanese language, history, or culture is required.

1 credit.

Fall 2002. Gardner.

LITR 018CH. The Classical Tradition in Chinese Literature

(See CHIN 018.)

1 credit.

Not offered 2002-2003.

LITR 018J. Topics in Japanese Literary and Visual Culture

(Cross-listed as JPNS 018)

1 credit.

Spring 2003. Gardner.

LITR 021R. Dostoevsky (in translation)

(Cross-listed as RUSS 021)

Writer, gambler, publicist, and visionary Fedor Dostoevsky is one of the great writers of the modern age. His work influenced Nietzsche, Freud, Woolf, and others and continues to exert a profound influence on thought in our own society down to the present day. 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 Russian may read some or all of the works in the original.

1 credit.

Not offered 2002-2003.

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.

1 credit.

Not offered 2002-2003.

LITR 024. Russian and East European Cinema.

(Cross-listed as RUSS 024)

This course will introduce the remarkable innovations in cinematic art of Russia, East Europe, and the Caucasus. Beginning from the tremendously influential early Soviet film, we will survey the work of a variety of established filmmakers as well as noted lesser-known or recent artists representing Armenian, Czech, Georgian, Hungarian, Polish, and Yugoslav cinema. Screenings will include films by Eisenstein, Tarkovsky, Wajda, Kusturica, Paradzhanov, and others. Supplementary readings, discussion, and assignments will provide students the opportunity to develop critical skills in filmic analysis. We will also work to understand the particular cultural, national, ethnic, and political forces shaping the work of filmmakers in this "other Europe" from the early 20th to the early 21st century.

1 credit.

Fall 2002. Komaromi.

LITR 025CH. Contemporary Chinese Fiction: Mirror of Social Change

(Cross-listed as CHIN 025)

Literary narratives of post–Mao China in translation. The selected stories and novellas articulate the historical specificity of ideological dilemmas and cultural dynamics in the imaginary process of dealing with love, politics, sex, morality, economic reform, and feminist issues.

1 credit.

Not offered 2002-2003.

LITR 027CH. Women Writers in 20th-Century China

(Cross-listed as CHIN 027)

This course will be a close study of the literature written by Chinese women, particularly focusing on social, moral, political, cultural, psychological, and gender-related issues through their texts as well as on their writing styles and literary contributions to modern Chinese literature. The chosen women writers will include those from Mainland, Taiwan, Hong Kong, and overseas expatriate Chinese writers as well as from different social and political groups. All the readings are in English translation. No previous preparation in Chinese is required. Open to the entire tricollege student body and taught on the Bryn Mawr campus.

1 credit.

Not offered 2002-2003.

LITR 028F. Francophone Cinema: Configurations of Space in Postcolonial Cinema

(Cross-listed as FREN 028)

We will examine historical and social displacement and mobility through narrative technique and themes in West African cinema. Films engage contemporary issues of diasporic cultures, immigration, and politics as they allow us to question the representations of space and mapping; sex and mobility; class and geography; violence, national identity, and desire. Discussions will center on both metaphorical and physical displacement.

1 credit.

Not offered 2002-2003.

LITR 037G. History and Memory: Perspectives on the Holocaust

(Cross-listed as HIST 037)

Despite an enormous amount of research and testimony, the Holocaust of European Jewry continues to generate compelling historical and interpretive questions. How, in fact, did it come about? Can we establish its connection to 19th-century German culture? How have feminist and revisionist interpretations

changed our understanding? What has been the impact of the Holocaust on contemporary American and German identity and politics? This course explores the roots of Nazism, the implementation of the Final Solution, and the legacy of the Holocaust through an interdisciplinary approach relying on primary sources, historical, scholarship, memoirs, music, painting, and film.

1 credit.

Spring 2003. Faber and Weinberg.

LITR 051G. Gender and Race in European Cinema

What are the historical, structural, thematic, and imaginary links between race and gender in the visual landscape of a postwar Europe struggling to come to terms with the Third Reich, the Holocaust, and the World War II? How do contemporary films visualize, analyze, resist, and (re-)produce the tensions in the united Europe's multicultural and multiethnic societies? In consultation with pertinent film criticism, literary theory, and journalistic inquiries, we will seek to come to an understanding of the complex interrelations between race, gender, visual representation, and 20th-century European history.

1 credit.

Not offered 2002-2003.

LITR 052SA. Contemporary Spanish-American Literature

The fiction of Spanish America has established itself as one of the most innovative and provocative of contemporary world literature. This course will begin by examining the roots of such innovation followed by a study of representative texts of the Latin American "boom" and "postboom" periods. Special attention will be paid not only to the formal aspects of these novels but also to the sociopolitical contexts in which they were written. Selected authors include María Luisa Bombal (Chile), Juan Rulfo (Mexico), Carlos Fuentes (Mexico), Gabriel García Márquez (Colombia), Mario Vargas Llosa (Peru), Manuel Puig (Argentina), Claribel Alegría (El Salvador), Isabel Allende (Chile), Luisa Valenzuela (Argentina), and Rosario Ferré (Puerto Rico).

Not offered as primary distribution course.

1 credit.

Fall 2002. Hassett.

LITR 054G. Post-War German Cinema

(Cross-listed as GERM 054)

A study of German Cinema from the "rubble films" of the immediate postwar period through the advent of the New German Cinema in the sixties to the present state of German film in the "postwall" era.

1 credit.

Not offered 2002-2003.

LITR 055CH. Contemporary Chinese Cinema: Mirror of Social Change (1984-2000)

(Cross-listed as CHIN 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.

1 credit.

Spring 2003. Kong.

LITR 055G. Film and Literature in Weimar Germany

(Cross-listed as GERM 055)

1 credit.

Not offered 2002-2003.

LITR 055SA. The Fiction of Contemporary Spanish-American Women Writers

1 credit.

Not offered 2002-2003.

LITR 056CH. History of Chinese Cinema (1905-1995)

(Cross-listed as CHIN 056)

This course investigates Chinese cinema in its 90-year development throughout different political regimes and cultural milieus. Cinematic texts, from silent film to the post-fifth-generation filmmaker's films, will focus on the issues related to nationhood, gender, and modernity, along with the development of the cinematic discourse in China.

1 credit.

Not offered 2002-2003.

LITR 060SA. Spanish American Society Through Its Novel

(See SOAN 037.)

This course will explore the relationship between society and the novel in Spanish America. Selected works by Carlos Fuentes, Mario Vargas Llosa, Isabel Allende, Gabriel García Márquez, Luisa Valenzuela, Elena Poniatowska, and others will be discussed in conjunction with sociological patterns in contemporary Spanish America. This is not a primary distribution course.

1 credit.

Spring 2003. Hassett and Muñoz.

LITR 061SA. Women's Testimonial Literature of Latin America

Marginal women—peasants, indigenous leaders, urban squatters, guerrillas, mothers of the disappeared, and victims of brutal repression—must "write" for all the world to listen. The fire of their texts, often mediated by an educated foreigner, subverts all power relations.

1 credit.

Not offered 2002-2003.

LITR 063CH. Comparative Perspectives: China in the Ancient World

(Cross-listed as CHIN 063)

Topics to be explored include obligation to self and society, individualism and the role of withdrawal, the heroic ethos, the individual and the cosmos, and the individual and gender roles.

No prerequisites; no knowledge of Chinese required.

1 credit.

Not offered 2002-2003.

LITR 063SA. La frontera: The Many Voices of the U.S.-Mexico Border

Sometimes defined as a wound, the U.S. southern border was created by war and is today the porous gate to capital, commodities, immigrant labor, refugees, drugs, and arms. A membrane where cultural integration is negotiated, the border is rich in tradition, resiliency, and absorbing capacity. It is also the scenario of new nationalistic forces that can erupt with violence. On both sides of the border, a literature of uncommon vitality records the binational experience.

1 credit.

Not offered 2002-2003.

LITR 065SA. Indigenous Peoples in Latin American Literature

This course looks critically at the representation of native peoples in Latin America, from the definition of "the Indian problem" to the idealization of ancient utopian kingdoms to which we must return.

1 credit.

Not offered 2002-2003.

LITR 066CH. Chinese Poetry

(Cross-listed as CHIN 066)

This course explores Chinese poetry and Chinese poetic culture, from early times to the present. While readings and discussion will be in English, and no knowledge of Chinese will be expected, an integral component of the class will be learning how to read a Chinese poem and learning a number of poems in the original.

1 credit.

Not offered 2002-2003.

LITR 066SA. Latin American Literature of Resistance

In this turbulent continent, poetry has been the site of truth telling, denunciation, condemnation, and hope. What García Márquez called "the immeasurable violence and pain of our history" is found in poems written on kitchen tables, in trenches, in exile and in prison, even in places of torture. Texts are the works of masters like Neruda and Cardenal but also of younger men and women poets who have changed pain into song.

1 credit.

Not offered 2002-2003.

LITR 067S. The Twentieth-Century Spanish Novel

This course will examine major works of Spanish writers who chose to remain in Spain after the Civil War of 1936 to 1939, even though they were opposed to the Franco regime. We will explore the variations of the social novel and testimonial literature as well as the ways in which authors sought to compensate for the lack of a free press without sacrificing the aesthetic quality of their works. Texts will include works by Camilo José Cela,

Ana María Matute, Carmen Laforet, Miguel Delibes, Carmen Martin Gaite, Luis Martín Santos, and others.

1 credit.

Not offered 2002-2003.

LITR 068G. History of German Film

(Cross-listed as GERM 068)

This course will be a thorough introduction to German film history from its inception in the late 1890s until the present. It will include an examination of early, "primitive" German cinema; expressionist film; the film of the avant-gardes in the 1920s and 1930s; fascist cinema; postwar "rubble" films; and the "young German film of the 1960s" and its developments into the new German Cinema of the 1970s. Also included will be a section on East German film, both before and after the fall of the wall. Taught in English.

1 credit.

Not offered 2002-2003.

LITR 068R. Underground Culture of the Soviet Period

(Cross-listed as RUSS 068)

This course will focus on political and artistic dissent in post-Stalin Soviet Russia from the late 1940s through the end of the 1980s. Russian intellectuals responded variously to the strictures of the Soviet regime: Some struggled for human rights, whereas others provocatively violated taboos in life and art. We will survey the development of alternative culture from the idealism of the Post-Stalin Thaws, to the crisis of 1968, throughout the disaffection of the 1970s, and up to the end of the Soviet period. Materials will reflect the underground literature of Samizdat and Tamizdat, alternative visual art, bards' songs and Russian rock, and alternative Soviet cinema. We will cover the legacy of Stalinist terror and the camps, issues of cultural memory, and the significance of the underground for the development of late- and post-Soviet Russian cultural values.

1 credit.

Not offered 2002-2003.

LITR 070F. Caribbean and French Civilizations and Cultures

(Cross-listed with black studies and as FREN 070F)

Study of the history of the French overseas departments with collateral readings of literary texts.

1 credit.

Not offered 2002-2003.

LITR 070R. Translation Workshop

(Cross-listed as LING 070 and RUSS 070)

This workshop in literary translation will concentrate on both 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. No prerequisites exist, but excellent knowledge of a language other than English (equivalent to a 004B course at Swarthmore or higher) is highly recommended or, failing that, access to at least one very patient speaker of a foreign language.

1 credit.

Offered 2003-2004. Forrester.

LITR 071F. French Critical Theory: From Foucault to Baudrillard

(Cross-listed with interpretation theory and as FREN 071)

An introduction to the major thinkers of post-modernity (Barthes, Lacan, Foucault, Derrida, and Baudrillard). We will read at the crossroads of literature, philosophy, history of science, and art to examine how the question of visual perception and representation has informed the critique of traditional conceptions of the textual sign. Taught in English.

1 credit.

Spring 2003. Blanchard.

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

(Cross-listed with black studies and as FREN 075F)

Study of literary texts and their rewriting of the local colonial history.

1 credit.

Not offered 2002-2003.

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

1 credit.

Not offered 2002-2003.

LITR 079F. Scandal in the Ink: Queer Traditions in French Literature

(Cross-listed as FREN 079)

In this course, we will use contemporary lesbian/gay/queer theory to reconsider French literary tradition(s). Writers will include Nicole Brossard, Colette, Michel Foucault, Jean Genet, André Gide, Hervé Guibert, Guy Hocquenghem, Violette Leduc, Marcel Proust, Monique Wittig, Christiane Rochefort, Renée Vivien, among others.

1 credit.

Not offered 2002-2003.

LITR 079R. Russian Women Writers

(Cross-listed as RUSS 079)

This course balances the picture of Russian literature by concentrating on the female authors whose activities and texts were for a long time excluded from the canon. From the memoirs of the first female president of the Russian Academy of Sciences and a female cavalry officer in the Napoleonic Wars, through the rise of the great prose novel and Modernist poets such as Anna Akhmatova and Marina Tsvetaeva, to the stunning frankness of post-Soviet authors and dramatists such as Arbatova, Petrushevskaia and Vasilenko. Although the course is in translation, students with good Russian skills may do part or all of the readings in the original.

1 credit.

Not offered 2002-2003.

LITR 080R. Literature of Dissent

(Cross-listed as RUSS 080)

This course will address the central place of dissent in Russian literature, its flowering in reaction to Tsarist and Soviet censorship. The theme leads to some of the most important works of 19th- and 20th-century Russian poetry and prose. Although the course is in translation, students with good Russian skills may do part or all of the readings in the original.

1 credit.

Spring 2003. Forrester.

LITR 081CH. Transcending the Mundane: Taoism in Chinese Literature and Culture

(Cross-listed as CHIN 081 and RELG 081)

Chinese civilization has been imbued with Taoism and Taoist topoi for some two and one-half millennia, from popular belief and custom to intellectual and literary culture. In addition to consideration of the texts and contexts of both philosophical and religious Taoism, the class will examine the articulation and role of Taoism in Chinese literature and culture and the enduring implications of the Taoist ethos. All readings will be in English.

Prerequisite: One introductory course on Chinese culture or religion or permission of the instructor.

1 credit.

Not offered 2002-2003.

LITR 091CH. Special Topics in Chinese Literature and Culture in Translation

(Cross-listed as CHIN 091)

1 credit.

Not offered 2002-2003.

EXPLANATORY NOTE OF FIRST- AND SECOND-YEAR LANGUAGE COURSES

Courses numbered 001B-002B, 003B, 004B carry 1.5 credits per semester. Three semesters in this sequence are equivalent to two years of work at the college level. Designed to impart an active command of the language and combine the study or review of grammar essentials and readings of varied texts with intensive practice to develop the ability to speak the language. Recommended for students with no previous knowledge of the language and those who are interested in preparing for intermediate or advanced courses in literature and culture taught in the original language. These courses (1) meet alternately as sections for grammar presentation and small groups for oral practice and (2) require work in the language resource center.

Students who start in the 001B-002B sequence must complete 002B to receive credit for 001B. However, students placing directly in 002B can receive 1.5 semester credits for that course. Courses numbered 003B and 004B may be taken singly for 1.5 semester credits.

Students cannot take a first-year language course for credit, after having taken the language in the second-year at Swarthmore.

Chinese

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 world.

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. Study abroad is particularly encouraged for students of Chinese; academic credit (full or partial) is generally approved for participation in the 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 IUB Program at Tsing-hua University, the ACC Associated Colleges in China Program, and the CIEE Program in Beijing, and the CET Program in Harbin. In Taiwan, these include the ICLP International Chinese Language Program and the Mandarin Training Center in Taipei and the University of Massachusetts Program in Tunghai.

Major and Minor

Chinese majors may construct a special major in Chinese, containing 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 major in 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 (see under Asian studies).

Students interested in majoring or minoring in Chinese should consult with the section head of Chinese as soon as possible.

Course Major: Special Major in Chinese

Chinese Language and Literature

1. Minimum of 10 credits
2. Must complete the following courses: 020, 021, 033 or equivalent; at least one course in translation on modern Chinese literature/film and one on premodern literature/culture
3. Study abroad in a program approved by the section is strongly recommended; transferred credits normally may be counted toward the major
4. Minimum of 6 credits of work must be completed at Swarthmore
5. One credit can be earned from another department on a China-related subject with the approval of the Chinese section
6. Culminating exercise

Chinese Studies

1. Minimum of 10 credits
2. Must complete the following courses: 012 or higher; at least two additional courses on language/literature/culture/film, one concerning the modern period and one the premodern period
3. Study abroad in a program approved by the section is strongly recommended; transferred credits normally may be counted toward the major
4. Minimum of 6 credits of work must be completed at Swarthmore
5. Up to 3 credits can be earned from other departments on China-related subjects with the approval of the Chinese section
6. Culminating exercise

Course Minor

1. A minimum of 5 credits of work in courses numbered 004B and above
2. At least one course in classical or modern literature/culture/film in translation
3. A minimum of 3 credits of work must be completed at Swarthmore
4. Study abroad in a program approved by the section is strongly recommended; transferred credits normally may be counted toward the minor
5. One credit can be earned from another department on a China-related subject with the approval of the Chinese Section

Honors Major

Requirements for the honors major in Chinese essentially are the same as those for the Course major, excepting the culminating exercise. A special major in Chinese will consist of exams in Chinese language, literature, and culture. Work done abroad may be incorporated where appropriate. Honors preparations in Chinese consist of 2-credit seminars, designated pairs of courses (or 1-credit attachments to designated 1-credit courses); 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 1 credit for completion of the work. Honors exams normally will consist of three three-hour written exams and a 30-minute oral for each exam.

Students of Chinese may also consider an honors major in Asian studies (see under Asian studies).

Honors Minor

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 one-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 exam normally will consist of one three-hour written exam and a 30-minute oral.

Students of Chinese may also consider an honors minor in Asian studies (see under Asian studies).

COURSES

CHIN 001B-002B. Introduction to Mandarin Chinese

Students who start in the 001B-002B sequence must complete 002B to receive credit for 001B.

An intensive introduction to spoken and written Mandarin Chinese, with emphasis on oral practice. Designed to impart an active command of basic grammar. Introduces 350 to 400 characters and develops the ability to read and write in simple modern Chinese.

1.5 credits.

CHIN 001B, *fall 2002.* Wu, Speidel.

CHIN 002B, *spring 2003.* Wu, Speidel.

CHIN 003B, 004B. Second-Year Mandarin Chinese

Designed for students who have mastered basic grammar and 350 to 400 characters. Combines intensive oral practice with writing and reading in the modern language. Emphasis is on rapid expansion of vocabulary, idiomatic expressions, and thorough understanding of grammatical patterns. Prepares students for advanced study at the College and in China.

CHIN 004B is a primary distribution course.

1.5 credits.

CHIN 003B, *fall 2002.* Kong, Kang.

CHIN 004B, *spring 2003.* Kong, Kang.

CHIN 005. Chinese for Advanced Beginners

Designed for heritage students who are able to communicate in Chinese on simple daily life topics and perhaps read Chinese with a limited vocabulary (about 100 characters). An intensive introduction to spoken and written Mandarin Chinese, with emphasis on the development of reading and writing ability. Prepares students for advanced studies at the College and in China.

Prerequisite: Permission of the instructor.

1 credit.

Not offered 2002-2003.

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 conducted in Chinese, with precise translation also a component. To be taken in conjunction with CHIN 011A.

Prerequisite: CHIN 004B or equivalent language skills.

Primary distribution course. 1 credit.

Fall 2002. Wu.

CHIN 011A. Third-Year Chinese Conversation

A 0.5-credit course that meets once a week for 75 minutes. The course concentrates on the further development of skills in speaking and listening through multimedia materials (including selected movies/clips). Students are required to read chosen texts (including Internet materials and short stories) and prepare assignments all for the purpose of generating discussion in class. Moreover, students have to write out skits or reports for oral presentation in Chinese before they present them in class. The class is conducted entirely in Chinese.

Prerequisite: CHIN 004B or equivalent language skills.

0.5 credit.

Fall 2002. Kang.

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.

Primary distribution course. 1 credit.

Spring 2003. Kang.

CHIN 012A. Advanced Chinese Conversation

A 0.5-credit course that meets once a week for 75 minutes. The course concentrates on the further development of skills in speaking and listening through multimedia materials (including movies/clips). Students are required to read chosen texts (including Internet materials and short stories) and prepare assignments all for the purpose of generating discussion in class. Moreover, students have to write out skits or reports for oral presentation in Chinese before they present them in class. The class is conducted entirely in Chinese.

Prerequisite: CHIN 011 and/or 011A, or equivalent language skills.

0.5 credit.

Spring 2003. Kang.

CHIN 016. Substance, Shadow, and Spirit in Chinese Literature and Culture

(Cross-listed as LITR 016CH)

This course will explore the literary and intellectual world of traditional Chinese culture, through original writings in English translation, including both poetry and prose. Topics to be discussed include Taoism, Confucianism, and the contouring of Chinese culture; immortality, wine, and allaying the mundane; the religious dimension, disengagement, and the appreciation of the natural world. The course also will address cultural and literary formulations of conduct and persona, and the expression of individualism in an authoritarian society.

No prerequisites.

Primary distribution course. 1 credit.

Fall 2002. Berkowitz.

CHIN 017. The Legacy of Chinese Narrative Literature: The Story in Dynastic China

(Cross-listed as LITR 017CH)

This course explores the development of diverse genres of Chinese narrative literature through readings of original writings in translation. Readings include tales of the strange, biographies and hagiographies, moral tales, detective stories, literary jottings, drama, novellas and novels, and masterworks of the Chinese literary tradition throughout the centuries of imperial China.

1 credit.

Spring 2003. Berkowitz.

CHIN 018. The Classical Tradition in Chinese Literature

(Cross-listed as LITR 018CH)

Exploration of major themes, ideas, writings, and literary forms that have contributed to the development of traditional Chinese civilization through directed readings and discussions of English translations of original sources from early through medieval times.

No prerequisites and no knowledge of Chinese or of China required.

Primary distribution course. 1 credit.

Not offered 2002-2003.

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.

Prerequisite: Three years of Chinese or its equivalent.

1 credit.

Fall 2002. 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, writing, and discussion in Chinese.

1 credit.

Spring 2003. 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. No previous preparation in Chinese is required.

1 credit.

Not offered 2002-2003.

CHIN 025. Contemporary Chinese Fiction: Mirror of Social Change

(Cross-listed as LITR 025CH)

Literary narratives of post–Mao China in translation. The selected stories and novellas articulate the historical specificity of ideological dilemmas and cultural dynamics, in the imaginary process of dealing with love, politics, sex, morality, economic reform, and feminist issues. All the readings are in English translation.

1 credit.

Not offered 2002-2003.

CHIN 027. Women Writers in Twentieth-century China

(Cross-listed as LITR 027CH)

This course will be a close study of the literature written by Chinese women, particularly focusing on social, moral, political, cultural, psychological, and gender-related issues through their texts as well as on their writing styles and literary contributions to modern Chinese literature. The chosen women writers will include those from Mainland, Taiwan, Hong Kong, and overseas expatriate Chinese writers as well as from different social and political groups. All the readings are in English translation.

1 credit.

Not offered 2002-2003.

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. The course is open to all interested students and has no prerequisites; no previous preparation in Chinese is required. 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 two millennia until earlier this century. Complemented with readings in English about Chinese characters and about 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. The course is conducted in English. 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.

1 credit.

Spring 2003. Berkowitz.

CHIN 055. Contemporary Chinese Cinema: Mirror of Social Change (1984-2000)

(Cross-listed as LITR 055CH)

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.

1 credit.

Spring 2003. Kong.

CHIN 056. History of Chinese Cinema (1905-1995)

(Cross-listed as LITR 056CH)

This course investigates Chinese cinema in its 90-year development throughout different

political regimes and cultural milieus. Cinema in China, as a 20th-century cultural hybrid of West and East, reflects social change and intellectual reaction, both collectively and individually, in a changing era.

1 credit.

Not offered 2002-2003.

CHIN 063. Comparative Perspectives: China in the Ancient World

(Cross-listed as LITR 063CH)

Topics to be explored include obligation to self and society, individualism and the role of withdrawal, the heroic ethos, the individual and the cosmos, and the individual and gender roles.

No prerequisites; no knowledge of Chinese required.

1 credit.

Not offered 2002-2003.

CHIN 066. Chinese Poetry

(Cross-listed as LITR 066CH)

This course explores Chinese poetry and Chinese poetic culture, from early times to the present. Although readings and discussion will be in English, and no knowledge of Chinese will be expected, an integral component of the class will be learning how to read a Chinese poem and learning a number of poems in the original.

1 credit.

Not offered 2002-2003.

CHIN 081. Transcending the Mundane: Taoism in Chinese Literature and Culture

(Cross-listed as LITR 081CH)

Chinese civilization has been imbued with Taoism and Taoist topoi for some two-and-one-half millennia, from popular belief and custom to intellectual and literary culture. In addition to consideration of the texts and contexts of both philosophical and religious Taoism, the class will examine the articulation and role of Taoism in Chinese literature and culture, and the enduring implications of the Taoist ethos. All readings will be in English.

Prerequisite: One introductory course on Chinese culture or religion or permission of the instructor.

1 credit.

Not offered 2002-2003.

CHIN 091. Special Topics in Chinese Literature and Culture in Translation

(Cross-listed as LITR 091CH)

1 credit.

Not offered 2002-2003.

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 in Chinese.

Prerequisite: Four years of Chinese or its equivalent.

1 credit.

Not offered 2002-2003.

CHIN 093. Directed Reading

SEMINARS

CHIN 104. Lu Xun and Modern Chinese Literature

CHIN 105. Topics in Traditional Chinese Literature

French

The purpose of the major is to acquaint students (1) with important periods and principal figures of literatures written in French and (2) with the diversity of French-speaking cultures. It is intended to develop an appreciation of literary and cultural values, to provide training in critical analysis, and to foster an understanding of the sociohistorical forces underlying these various literatures and cultures.

Current Course and Honors Program

French may be offered as a major or minor in the Course Program or as a major or minor in the Honors Program: a minor in French consists of two external examinations. (See later for Honors Program.) Prerequisites for both course and honors students are as follows: 004, any course in the 012 sequence, the equivalent, or evidence of special competence.

Recommended supporting subjects: See the introductory departmental statement.

All majors including students preparing a secondary school certificate are expected to spend

at least one semester abroad in the Grenoble Program. Programs of study in other French-speaking countries may be substituted on request and with the approval of the French section.

Majors in the course and Honors programs, as well as minors in the Honors Program, are expected to be sufficiently proficient in spoken and written French to do all of their work in French (i.e., discussions and papers in courses and seminars, and all oral and written examinations, including oral defense of senior paper and honors examinations).

Course majors are required to (1) take eight advanced courses numbered 003B or above; (2) study abroad; (3) take at least one advanced course in literature before 1800; (4) take one advanced Francophone course with a Francophone component; (5) take one advanced course in civilization or culture; (6) take Special Topics in the fall of senior year; (7) write a senior research paper, at least 30 to 40 pages long, on an area of concentration chosen in conjunction with the section (this area can be defined broadly in terms of a genre or theme as well as narrowly in terms of one author or text). This paper will form the basis of an oral examination given in the spring. The senior paper deadlines are as follows: Initial proposal and bibliography are due immediately after the fall break. The first draft is due to the director immediately after Thanksgiving break. The last draft is due to all French faculty by the end of spring break. The completed paper is due mid-April. The defense will take place in May. Students will be granted 1 credit for this work.

Courses and seminars in literature before 1800 are marked with a *, those with a Francophone component are marked with a #, and those in culture/civilization are marked with a +.

The department also offers courses in French literature in translation, but no more than one such course may count to satisfy the requirements in the major. The French section is also offering a concentration in Francophone studies in cooperation with other departments and programs abroad. See the "Francophone Studies" section for description of program and requirements.

Minor in Course

Requirements

1. Complete 5 credits in courses or seminars numbered 004 or above. Four of these credits must be completed on the Swarthmore campus. Note that AP credits won't count toward the minor.
2. Complete at least a six-week program of study in a French-speaking country. It is strongly recommended that minors spend at least one semester abroad in the Grenoble program. In any case, only 1 credit from this study abroad may count toward the minor.
3. Complete "Special Topics" (FREN 091) in the fall semester of the senior year.

Honors Program

Requirements

Majors and minors in the Honors Program are expected to be sufficiently proficient in spoken and written French to complete all their work in French (i.e., discussions and papers, and all oral and written assignments). All majors in honors must complete at least one semester of study abroad in a French-speaking country. Minors must complete at least a six-week program of study in a French-speaking country. It is strongly recommended that they spend at least one semester abroad in Grenoble.

Candidates are expected to have a B average in course work both in the department and at the College and to have demonstrated interest in and aptitude for the study of literature or culture in the original language.

Prerequisites

To demonstrate the linguistic and analytical abilities necessary for seminar work, students must take the following before taking a seminar:

1. *Major*. At least one advanced course in literature or culture (above FREN 012C or FREN 012L).
2. *Minor*. At least two advanced courses in literature or culture (above FREN 012C or FREN 012L).

Preparations

Majors in the Honors Program must do three preparations (consisting of 6 units of credit). Two of the preparations must be done through seminars. The third preparation may be a seminar, a 2-credit thesis, or two paired courses chosen from a list available from the department. Minors must do a single, 2-credit seminar.

Senior Honors Study (SHS) (FREN 199: SHS is optional.)

1. *Seminar preparation.* At the end of the fall term, students will be given a list of questions related to the seminar. They will chose one question for each seminar and prepare a 2,500- to 4,000-word paper in French in response to that question. The preparation of this essay will not be supervised by members of the faculty. Conversation among students preparing these essays is encouraged, but each student must produce an independent, original essay of his or her own. The essays must be submitted to the department the first day of the written exam period, to be forwarded to the examiner.

   The paper will form part of the student's portfolio.
2. *Paired course preparation.* A one-page prospectus on a topic that addresses and integrates the two courses in a meaningful way must be approved by the instructor of each of the courses by the end of the fall semester. Once the prospectus has been approved, the essay will not be supervised by members of the faculty. Conversation among students preparing these essays is encouraged, but each student must produce an independent, original essay of his or her own. The essays must be submitted to the department the first day of the written exam period, to be forwarded to the examiner. The paper will form part of the student's portfolio.

Mode of Examination

A three-hour written examination and a one-half-hour oral examination, both in French, will be required for each preparation.

Portfolio

1. The syllabus of the seminar or paired courses
2. The SHS paper if student chooses to complete SHS.

COURSES

Not all advanced courses are offered every year. Students wishing to major or minor in French should plan their program in consultation with the department.

* = Pre-1800

\# = Francophone

\+ = Culture/civilization

FREN 001B-002B, 003B Intensive French

Students who start in the 001B-002B sequence must complete 002B to receive credit for 001B.

For students who begin French in college. Designed to impart an active command of the language. Combines the study of grammar with intensive oral practice, writing, and readings in literary and expository prose.

1.5 credits.

FREN 001B, *fall 2002.* Netter, Amiry, Lunghi.

FREN 002B, *spring 2003.* Blanchard, Moskos, Lunghi.

FREN 003B, *fall 2002.* Blanchard, Netter, Lunghi.

FREN 004. Advanced French: Nouvelles Voix Françaises

Transformations in French culture, literature, and society will be explored through literary texts as well as films, television programs, and the press. Particular attention will be paid to perfecting analytical skills in written and spoken French.

1 credit.

Fall 2002 and spring 2003. Netter.

FREN 004A. 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.

Prerequisite: For students presently or previously in FREN 004 or the equivalent Placement Test score.

0.5 credit.

Fall 2002 and spring 2003. Lunghi.

FREN 012C. Cultures française et maghrébine+,

Even 50 years after independence, stormy debates mark Franco-North Africa relations over such questions as language, identity, lifestyles, world vision, and the dichotomy between the self and the other as well as historical problems associated with colonialism, neo-colonialism, emigration, and immigration.

Only in the arts (from culinary to literary ones) has the dialogue been really fruitful.

Prerequisite: FREN 004, a score of 675 on the College Entrance Examination or 5 on the Advanced Placement (AP) Exam, or the equivalent with special permission.

Primary distribution course. 1 credit.

Not offered 2002-2003.

FREN 012C. Literature and Culture of Québec#,+

The topics discussed (the 1960s revolution in Montréal; nationalism, language laws, and ethnic minorities; the queer writings of Michel Tremblay and Nicole Brossard) will also allow us to define key concepts for the study of literary texts within a cultural context.

Prerequisite: FREN 004, a score of 675 on the College Entrance Examination or 5 on the AP Exam, or the equivalent with special permission.

Primary distribution course. 1 credit.

Spring 2003. Blanchard.

FREN 012L. Introduction à l'analyse littéraire

Close reading of various texts (poetry, theater, and prose) from and beyond the Hexagon as an introduction to the central concepts and modes of literature and literary analysis in French.

Prerequisite: FREN 004, a score of 675 on the College Entrance Examination or 5 on the AP Exam, or the equivalent with permission.

Primary distribution course. 1 credit.

Fall 2002. Anyinefa.

Spring 2003. Yervasi.

Note: 012L or 012C is required to take any other French literature or culture courses.

FREN 022. Le Cinéma français: Le Cinéma de la ville

The history of French cinema is closely enmeshed with the development of the city. Films use the city to create setting, mood, tone and style but also to represent and re-imagine the changing urban spaces in which actions occur. We will examine a history of the French cinematic representations of the city in the culture of the modern urban. This course will focus on film aesthetics and close analysis of film texts.

1 credit.

Not offered 2002-2003.

FREN 023. Topics in French Civilization #,+

1 credit.

Not offered 2002-2003.

FREN 024. Mysticisme et littérature maghrébine

Not offered 2002-2003.

FREN 025. Introduction to the Francophone World #,+

Introductory course to Francophone studies examines the French-speaking world and the historical relations among francophone countries. Close attention will be paid to Africa, the East, and their encounters with the West.

1 credit.

Fall 2002. Saltani.

FREN 028. Francophone Cinema: Configurations of Space in Postcolonial Cinema

(Cross-listed as LITR 028F)

We will examine historical and social displacement and mobility through narrative technique and themes in West African cinema. Films engage contemporary issues of diasporic cultures, immigration, and politics as they allow us to question the representations of space and mapping; sex and mobility; class and geography; violence, national identity, and desire. Discussions will center on both metaphorical and physical displacement.

1 credit.

Not offered 2002-2003.

FREN 030. Topics in 17th- and 18th-Century Literature: L'invention de la modernité féminine en France *

By reading two plays from the works of Molière, a selection of texts pertaining to controversies on the role of women in society, and then examining three iconic figures of the early modern woman (the mystic, the witch, and the shepherdess), we will first locate the gendered conception of knowledge that prevails at the origins of modernity. We will continue our investigation into the cultural history of women by studying how women writers, notably in novels, conversations, letters, fairy tales, and historical memoirs, defined a literary space that helped them in challenging the status quo. Reading materials will include texts

from Madame de Lafayette, Madame de Sévigné, and Diderot.

1 credit.

Fall 2002. Blanchard.

FREN 033. Le Monde francophone: fictions d'enfance #,+

(Cross-listed with black tudies)

Study of the experiences of French-speaking peoples as reflected in various coming-of-age literary texts by Zobel, Condé, Ferraoun, Lefêvre, Carrier, Oyono,and so forth.

1 credit.

Not offered 2002-2003.

FREN 036. Poésies d'écritures françaises #,*

A thematic study of poetry with an emphasis on both pre-18th-century hexagonal and contemporary African and Caribbean authors.

1 credit.

Not offered 2002-2003.

FREN 037. La Ville occidentale dans la littérature francophone#

1 credit.

Not offered 2002-2003.

FREN 040. French Theatre and Cultural Studies

(Cross-listed with interpretation theory)

The course will explore the works of Corneille, Racine, Molière, and others as well as the ideologies of a spectacle society in the light of postmodern theory.

1 credit.

Not offered 2002-2003.

FREN 060. Le Roman du 19e Siècle

A study of the main themes and technical innovations in narrative fiction as it reflects an age of great sociopolitical change. Based primarily on novels of Stendhal, Balzac, Flaubert, and Zola.

1 credit.

Not offered 2002-2003.

FREN 061. Odd Couplings: Writing and Reading Across Gender Lines

A comparative study of texts by men and women interrogates the role played by gender-identity construction in writing and reading.

1 credit.

Spring 2003. Moskos.

FREN 062. Le Romantisme

The trauma of the Revolution of 1789 gave birth to the individual even as it put the very concept of individual agency into question. We will interrogate the theater, poetry, and prose of this period as imaginary, sometimes almost magical, solutions to cultural, political, and personal dislocations.

1 credit.

Not offered 2002-2003.

FREN 065. Poésie de la modernité de Baudelaire aux Surréalistes

Poetic texts of the 19th/20th centuries will be our guide to analyses of the phenomenon of urban modernity and of poetic vision at key historical moments. The study of poems, historical documents, photography, and film will help establish connections between poetic writing and other arts. Students will improve their written and oral expression in French as they develop a writing practice.

1 credit.

Not offered 2002-2003.

FREN 066. Mode, modernité, littérature

Based on works by 18th- and 19th-century authors (including a novel by Emile Zola, poems by Baudelaire, fashion journalism, and historical documents on costumes), our inquiry will define how French fashions and tastes reveal the relation between texts, economic realities, and gender in the age of the Enlightenment and the industrial revolution.

1 credit.

Not offered 2002-2003.

FREN 067. Twentieth-Century French Theater: Reading and Performance

This course focuses on the study of French theatre and performance. Topics include re-writings of classical models; allegories of war; explorations of sexual, racial, ethnic identities and of such leading philosophies as existentialism and surrealism; and new forms of dramatic expressions and theatrical experience. Readings will include plays and essays by Anouilh, Artaud, Beckett, Cixous, Cocteau, Genet, Ionesco, and Sartre.

1 credit.

Not offered 2002-2003.

FREN 070F. Caribbean and French Civilizations and Cultures #,*

(Cross-listed with Black Studies and as LITR 070F)

Study of the history of the French overseas departments with collateral readings of literary texts.

1 credit.

Not offered 2002-2003.

FREN 071F. French Critical Theory: From Foucault to Baudrillard

(Cross-listed as LITR 071F and with interpretation theory)

An introduction to the major thinkers of post-modernity (Barthes, Lacan, Foucault, Derrida, and Baudrillard). We will read at the crossroads of literature, philosophy, history of science and art to examine how the question of visual perception and representation has informed the critique of traditional conceptions of the textual sign. Taught in English.

1 credit.

Spring 2003. Blanchard.

FREN 072. Le Roman du 20e Siècle: Women in the Literary Field

In this in-depth study of the novel in France, we look at how women's writing in the literary field participates in and reflects the changing cultural and sociopolitical movements throughout the century. Topics will include gender representation, social constructions of femininity, and theories of feminisms. Readings will be drawn from the works of Colette, Simone de Beauvoir, Charlotte Delbo, Assia Djebar, Marguerite Duras, Christiane Rochefort, Françoise Sagan, Nathalie Sarraute, Leila Sebbar, and Monique Wittig.

1 credit.

Not offered 2002-2003.

FREN 073. Roman et cinéma: Revolutionizing Everyday Life

In this course, we will focus on French novels and films as they reflect, reinforce, and critique French society from the early 1950s through the end of the 1960s. We will study fiction and film in relation to modernization, decolonization, and the growing discontent of youth culture in 1960s with theoretical guidance from Henri Lefebvre and the Situationnistes. Close readings of fiction and films will allow us to draw conclusions about the relationship of new cultural movements—consumer culture, radical political movements, youth culture, and the women's movement—to France and French society.

1 credit.

Not offered 2002-2003.

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

(Cross-listed as LITR 075F and with black studies)

Study of literary texts and their rewri[gh]ting of the local colonial history.

1 credit.

Not offered 2002-2003.

FREN 075F. French Language Attachment to Haïti, the French Antilles, and Guyane in Translation

1 credit.

Not offered 2002-2003.

FREN 076. Ecritures au féminin#

(Cross-listed with black studies)

A study of the work of women from Africa, the Caribbean, France, and Québec. Material will be drawn from diverse historical periods and genres.

1 credit.

Not offered 2002-2003.

FREN 077. Prose Francophone: littérature et société#

(Cross-listed with black studies)

Close readings and discussions of works from the first and the new generations of writers from the Francophone world. Topics will include the impact of the oral tradition, aesthetics, politics, and the role of the writer.

1 credit.

Not offered 2002-2003.

FREN 078. Théâtre et société+

(Cross-listed with black studies)

Close examination of plays and their staging from and beyond the Hexagon.

1 credit.

Not offered 2002-2003.

FREN 079. Scandal in the Ink: Queer Traditions in French Literature

(Cross-listed as LITR 079F)

In this course, we will use contemporary lesbian/gay/queer theory to reconsider French literary tradition(s). Writers will include Nicole Brossard, Colette, Michel Foucault, Jean Genet, André Gide, Hervé Guibert, Guy Hocquenghem, Violette Leduc, Marcel Proust, and Monique Wittig. Christiane Rochefort and Renée Vivien, among others.

1 credit.

Not offered 2002-2003.

FREN 091. Special Topics: Histoire/s et fiction#

Study of contemporary authors writing about history, both personal and national. Texts will include works by Assia Djébar, Mohamed Kacimi, Daniel Maximin, Michel Quint, Simone Schwarz-Bart, Gilles Ségal and others as well as theoretical works dealing with such issues.

1 credit.

Fall 2002. Rice-Maximin.

FREN 093. Directed Reading

SEMINARS

FREN 102. Baroque Culture and Literature: The Comic World of Molière*

(Cross-listed with interpretation theory)

The seminar is designed to acquaint students with the major works of Molière and 17th-century French culture. We will investigate his political relationship with Louis XIV at Versailles, the discourse on early modern feminism of the précieuses and femmes savantes; the critique of religious hypocrisy, and the influence of early modern notions of anthropology (most notably medicine) on Molière's representation of identity. These aspects will be brought forward through close attention to the poetics of comedy and court spectacles.

2 credits.

Not offered 2002-2003.

FREN 104. Stendhal et Flaubert

2 credits.

Not offered 2002-2003.

FREN 105. Proust

2 credits.

Not offered 2002-2003.

FREN 106. Poésie symboliste: Autour de Mallarmé

Centering on Mallarmé's poetry, critical essays and society, we will examine the Parisian literary avant-garde in late 19th century. Readings will include the work of other poets within the Parnassian, symbolist, and decadent movements.

2 credits.

Not offered 2002-2003.

FREN 108. Le Roman du 20e siècle: Modern and Contemporary Novels

From realism to the nouveau roman to experimental writing, from Proust to Pennac, this course looks at the interconnections between novels and history, visual culture, and theoretical questions of representation. Discussion will center on thematic developments of these intersections, and readings will be taken from a wide selection of writers from throughout the 20th and 21st centuries.

2 credits.

Not offered Spring 2003.

FREN 109. Le Romantisme

The trauma of the Revolution of 1789 gave birth to the individual even as it put the very concept of individual agency into question. We will interrogate the theater, poetry, and prose of this period as imaginary, sometimes almost magical, solutions to cultural, political, and personal dislocations. Particular attention will be paid to questions of gender and power.

2 credits.

Not offered 2002-2003.

FREN 110. Histoires d'îles+

We will explore the relationships between fiction, history, and the real in a selection of texts from the French overseas departments.

2 credits.

Not offered 2002-2003.

FREN 111. Espaces francophones #,+

2 credits.

Not offered 2002-2003.

FREN 112. Ecritures francophones: fiction et histoire dans le monde francophone#,+

Historical and literary examination of texts from Africa, the Caribbean, and Vietnam.

2 credits.

Not offered 2002-2003.

FREN 113. Voyage et littérature

Through a study of French and Francophone texts, we will examine the relationship between literature and travel in terms of physical and spiritual journeys: whether it is a march toward humanity or one toward inhumanity, the adventure often both involves a loss of self and a search for knowledge.

2 credits.

Fall 2003. Saltani.

FREN 114. Théâtre d'écritures françaises+

A close examination of plays in French, from and beyond the Hexagon. Topics discussed will include representation of collective consciousness, myths and politics in post/neocolonial situations, theater and therapy, rituals and subversion, the different theatrical texts, and staging.

2 credits.

Not offered 2002-2003.

FREN 115. Paroles de femmes#

Close reading of texts of women writers from Africa, France, the French Antilles, and Vietnam. Love relationships being one common theme, we will particularly focus on their cultural, feminist, aesthetical, and literary differences, among others.

2 credits.

Not offered 2002-2003.

FREN 116. La Critique littéraire: Racine, Rousseau, Proust

2 credits.

Not offered 2002-2003.

FREN 180. Thesis

FREN 199. Senior Honors Study

* = Pre-1800

\# = Francophone

\+ = Culture/civilization

German

German may be offered as a major or minor in course or as a major or minor in the Honors Program.

See the introductory departmental statement for recommended supporting subjects, and see also German Studies Program description.

Courses and seminars in literature are conducted in German. Students are expected to be sufficiently proficient in German to do written and oral work in German. To this end, we strongly advise students to spend an academic semester in a German-speaking country before their senior year.

Major in Course

Requirements

1. Completion of a minimum of 8 credits in courses numbered 003B and above.
2. One of the 8 credits may be taken in English from among the courses on German literature listed in the catalog under Literature in Translation (e.g., LITR 037G).
3. Seniors in course are required to (a) take GERM 091: Special Topics; (b) 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 general literary topic agreed to by the section. This paper, due before the date for the comprehensive examination, is complemented by a discussion of the paper with members of the section, in German.
4. Majors in course are encouraged to enroll for at least one seminar in the junior or senior year. (See the note on enrolling in seminars.)
5. After studying abroad, majors must take two additional German classes.

Minor in Course

Requirements

Students must complete 5 credits in courses and seminars numbered 004 or above. Of these courses, GERM 091: Special Topics, is required.

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 maxi-

mum of 2 credits will count toward the minor.

Honors Program in German

Requirements

Majors and minors in the Honors Program are expected to be sufficiently proficient in spoken and written German to complete all their work in German. 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 course work both in the department and at the College.

Prerequisites

Majors: GERM 013.

Minors: GERM 013 and one course numbered 050 or above.

Preparations

Majors will prepare for exams by taking three seminars. With the approval of the department, it is possible to combine advanced 1-credit courses or attachments, taken either at Swarthmore or elsewhere, to form a preparation.

Minors will prepare for exams by taking one seminar.

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 exam. Students are required to meet with the respective instructor(s) of the seminar(s) being examined by Feb. 15 to discuss their planned bibliography and to meet with the instructor(s) 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 three-hour written exam based on each seminar and its SHS preparation as well as a one-hour oral panel exam based on the three written exams for majors or a 30- to 45-minute oral exam for minors.

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 GERM 013. (See note on enrolling in seminars.)

GERM 001B-002B, 003B. Intensive German

Students who start in the 001B-002B sequence must complete 002B to receive credit for 001B.

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 above. Normally followed by 004, 013, or 014.

1.5 credits.

GERM 001B, *fall 2002.* Werlen, Plaxton.

GERM 002B, *spring 2003.* Faber, Plaxton.

GERM 003B, *fall 2002.* Faber, Plaxton.

GERM 004. Advanced Conversation and Composition

Emphasis is on the development of communicative skills in speaking and writing. Selected readings of general interest, newspaper and magazine articles, radio and TV programs, films as well as some literary texts. Recommended for students who plan to study in a German-speaking country.

May be counted toward the major and minor in German and the concentration in German Studies.

1 credit.

Spring 2003. Werlen.

GERM 005A. German Conversation

A 0.5-credit conversation course, concentrating on the development of the students' speaking skills.

Prerequisite: German 004 in current or a previous semester or the equivalent Placement Test score.

0.5 credit.

Fall 2002. Plaxton.

Spring 2003. Plaxton.

GERM 013. Introduction to German Literature

Survey of German literature from the 18th century to the present, focusing on themes of mystery, deception, and searching, especially in relation to crime. Poetic works and one or two films will be discussed, but our attention will fall mainly on narrative prose and drama. Authors include Kleist, Hoffmann, Büchner, Droste-Hülshoff, Kafka, Brecht, Dürenmatt, and Wolf. Students will develop speaking and writing skills through short assignments intended to familiarize them with the vocabulary of literary analysis in German.

Primary distribution course. 1 credit.

Fall 2002. Butler.

GERM 014. Introduction to German Studies

An introduction to the interdisciplinary field of German studies, this course incorporates historical, political, and philosophical texts as well as music, art, film, and personal memoirs. The course will have a dual focus: after studying cultural constructions of ethnicity, class, and gender in works of the Weimar and Nazi periods, we will then explore the impact of those years, and of World War II in particular, on a reunited Germany and its youth.

Primary distribution course. 1 credit.

Spring 2003. Faber.

GERM 054. Post-War German Cinema

(Cross-listed as LITR 054G)

A study of German Cinema from the "rubble films" of the immediate postwar period through the advent of the New German Cinema in the '60s to the present state of German film in the "postwall" era.

1 credit.

Not offered 2002-2003.

GERM 055. Film and Literature in Weimar Germany

(Cross-listed as LITR 055G)

1 credit.

Not offered 2002-2003.

GERM 066. Gegenwartsliteratur

(Cross-listed as GERM 091)

In this course, we will read a wide variety of texts representing the literary production of German speaking countries from the mid-'90s until the present. The selected texts are meant as buoys in the vast sea of recent literature, marking thematic and stylistic preoccupations of contemporary authors. We will analyze and discuss texts from various literary genres.

1 credit.

Not offered 2002-2003.

GERM 068. History of German Film

(Cross-listed as LITR 068G)

This course will be a thorough introduction to German film history from its inception in the late 1890s until the present. It will include an examination of early, "primitive" German cinema, expressionist film, the film of the avant-gardes in the '20s and '30s, fascist cinema, post-war "rubble" films, the "young German film of the '60s and its developments into the New German Cinema of the '70s. Also included will be a section on East German film, both before and after the fall of the wall. Taught in English.

1 credit.

Not offered 2002-2003.

GERM 091. Special Topics

Advanced literature and culture course in German required for all German majors and minors. For honors students, this class together with an attachment counts as an honors preparation.

Topics change each year and include (partial list):

- Frauen und Film
- Populärliteratur
- Nietzsche and/in Literature
- The Romantic Tradition
- Die deutsche Postmoderne
- Hören, Lesen, Sehen: die deutsche Medienlandschaft
- Literatur und Kultur der DDR

Topic for spring 2003: Metamorphoses of the Fantastic

This course explores changing conventions of representing twilight states, the supernatural, and the uncanny in literature and film. Topics to be addressed include the Kunstmärchen; the relationship between science, pseudo-science, and art; the Fantastic as a refraction of urbanization and technological change; gender-bending monsters; and markets for consuming images of the unreal. Primary works by

Aichinger, Bachmann, Brod, Ewers, Hauff, Hoffmann, Lang, Meyrink, Murnau, Tieck, Wagner, and Wiene. Secondary readings by Freud, Kittler, Kracauer, Kristeva, Tatar, and Todorov.

1 credit.

Spring 2003. Butler.

GERM 093. Directed Reading

SEMINARS

Five German seminars are normally scheduled on a rotating basis. Preparation of topics for honors may be done by particular courses plus attachments only when seminars are not available.

Note: Students enrolling in a seminar are expected to have done the equivalent of at least one course beyond the GERM 013 level.

GERM 104. Goethe und seine Zeit

A study of Goethe's major works in the context of his life and times.

2 credits.

Not offered 2002-2003.

GERM 105. Die deutsche Romantik

Romanticism as the dominant movement in German literature, thought, and the arts from the 1790s through the first third of the 19th century. Focus on Romantic aesthetics and poetics, including the influence of German Idealism.

2 credits.

Not offered 2002-2003.

GERM 108. Wien und Berlin

(German Studies Seminar)

Between 1871 and 1933, Vienna and Berlin were two cultural magnets drawing such diverse figures as Sigmund Freud, Ludwig Wittgenstein, Gustav Klimt, Gustav Mahler, Leon Trotsky, Gerhard Hauptman, Käthe Kollwitz, Rainer Maria Rilke, Bertolt Brecht, Kurt Tucholsky, Else Lasker-Schüler, Richard Strauss, Arnold Schönberg, and Adolf Hitler. This course will examine the multiple tensions that characterized "fin-de-siècle" Vienna and Berlin, such as the connection between gender and the urban landscape, the pursuit of pleasure and the attempt to scientifically explore human sexuality, and the conflict between avant-garde experimentation and the disintegration of political liberalism.

2 credits.

Fall 2003. Simon.

GERM 110. German Literature After World War II

The aim of the seminar is to acquaint students with literary developments in the German-speaking countries after the end of World War II. The survey of texts will address questions of "Vergangenheitsbewältigung" and social critique in the 1950s, the politicization of literature in the 1960s, the "Neue Innerlichkeit" of the 1970s, and literary postmodernity of the 1980s. We will also study the literature of the German Democratic Republic and texts dealing with post-wall, unified Germany. Authors included are Böll, Eich, Grass, Frisch, Bachmann, Handke, Bernhard, Jelinek, Strauss, Wolf, Delius, Plenzdorf, Süskind, and Menasse.

2 credits.

Not offered 2002-2003.

GERM 111. Genres

This seminar will explore in depth a particular genre of literary and media production.

Scheduled topics include the following:

- Deutsche Lyrik
- Populärliteratur
- Der deutsche Film
- Das deutsche Drama

Der deutsche Roman

In Swarthmore's German offerings, German 111 is a seminar devoted to exploring the various genres of German literature and cultural production. We will take up the German novel, beginning with examples from the 18th and 19th centuries and concentrating primarily on realist, modernist, and postmodernist examples of the genre. Authors will include Goethe, Fontane, Thomas Mann, Kafka, Ingeborg Bachmann, and Christa Wolf. The final syllabus will take student interest into consideration.

2 credits.

Fall 2002. Faber.

GERM 199. Senior Honors Study

Japanese

Courses in Japanese language, literature, and culture may be combined with courses taken at Haverford and with study abroad toward a special major or a minor in Japanese studies 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.

COURSES

JPNS 001B-002B. Introduction to Japanese

Students who start in the 001B-002B sequence must complete 002B to receive credit for 001B.

An intensive introduction to spoken and written Japanese, with emphasis on oral practice.

1.5 credits.

JPNS 001B, *fall 2002*. Gardner, Jo.

JPNS 002B, *spring 2003*. Gardner, Jo.

JPNS 017. Introduction to Japanese Culture: The Cosmology of Japanese Drama

(Cross-listed as LITR 017J)

This course will provide an introduction to Japanese culture through a study of its three great dramatic traditions: Noh masked drama, Bunraku puppet theater, and Kabuki. These fascinating and distinctive dramatic forms offer a microcosm of Japanese religion, history, literature, and visual aesthetics. In our course, we will explore how the Japanese stage becomes a pathway between human beings and the supernatural, and between present times and the legendary past. The course will proceed through readings of plays, aesthetic treatises, and articles on the cultural and historical contexts of Japanese drama. Screenings of theatrical performances and films based on classic plays will offer a glimpse of the continuing legacy of these dramatic forms. No previous knowledge of Japanese language, history, or culture is required.

1 credit.

Fall 2002. Gardner.

JPNS 018. Topics in Japanese Literary and Visual Culture

(Cross-listed as LITR 018J)

1 credit.

Spring 2003. Gardner.

Russian

Russian may be offered as a major or minor in the Course Program or as a major or minor in the Honors Program. Prerequisites for both course students and honors candidates are RUSS 004B, 011, and 013, or equivalent work.

Recommended supporting subjects: See the introductory department statement.

Russian is the language of instruction in all courses and seminars numbered 003B and above (except courses in the literature program). Course majors are required to take Special Topics (RUSS 091) and are expected to take at least two seminars. One interdisciplinary or cross-departmental course might be offered toward the course major requirements. The Comprehensive Examination is based on work completed in courses and seminars numbered 011 and above.

Minor in Course

Requirements

Five or 5.5 credits, which must include (1) 004B (or placement above 004B); (2) either RUSS 011 or RUSS 013, or an equivalent course in Russia; (3) one of the following: RUSS 013 (if not used to fulfill item 2 above); another course in Russian literature in translation, LITR 015R, or a comparable literature course taken while studying in Russia or at Bryn Mawr; and (4) one seminar in Russian. Only one of these courses may overlap with a second minor or the student's major. Study abroad in Russia is recommended but not required.

Honors Program in Russian Language and Literature

Majors

Prerequisites

1. At least one semester of study in Russia
2. RUSS 004B
3. RUSS 011 (or a comparable course in Russian)

4. RUSS 013 and RUSS 079, or RUSS 080, or another advanced literature course in another language (e.g., ENG 071K, CHIN 066, CLAS 104, FREN 040, GERM 066, SPAN 060)
5. Minimum grade for acceptance into the Honors Program: B-level work in courses taken at Swarthmore in language and in the introductory culture course RUSS 011 or its equivalent.

Minors

Prerequisites

1. At least one semester of study in Russia
2. RUSS 004B
3. RUSS 011 (or a comparable course in Russian
4. RUSS 013 or RUSS 079 or RUSS 080, or another advanced literature course in another language (e.g., ENG 071K,CHIN 066, CLAS 104, FREN 040, GERM 066, SPAN 060
5. Minimum grade for acceptance into the Honors Program: B-level work in courses taken at Swarthmore in language and in the introductory culture course RUSS 011 or its equivalent.

Senior Honors Study

At the beginning of their final semester, seniors will meet with the Russian section head. (1) In consultation with the section head, majors will prepare during the first four weeks of the last semester a bibliography of additional readings related to the content of their three (2-credit) honors preparations. Majors will be expected to write three 2,500- to 3,000-word papers, one for each honors preparation, as expanded on and extended by the spring SHS work, or a 7,500-word paper that integrates the three honors preparations as they have been expanded on and extended by the spring senior honors work. These three papers (or one long paper) will become part of the portfolio that will be presented to the external examiners along with the syllabi of the three (2-credit) honors preparations and any other relevant material. (2) In consultation with the section head, minors will prepare during the first four weeks of the last semester a bibliography of additional readings related to the content of their one (2-credit) honors preparation. Minors will be expected to write one 2,500-word paper that expands on and extends the single honors preparation and integrates it with the major Honors Program, whenever possible. This paper will become part of the portfolio that will be presented to the examiner along with the syllabus of the one (2-credit) honors preparation and any other relevant material. (3) Mode of examination: Majors will be expected to take three three-hour written examinations prepared by the external examiners as well as a half-hour oral for each based on the contents of each written examination and the materials submitted in the portfolio. Minors will be expected to take a three-hour written examination prepared by the external examiner as well as a half-hour oral examination based on the contents of the written examination and the materials submitted in the portfolio.

COURSES

Not all advanced courses or seminars are offered every year. Students wishing to major or minor in Russian should plan their program in consultation with the department. Course majors are required to take Special Topics (RUSS 091).

RUSS 001B-002B, 003B. Intensive Russian

Students who start in the 001B-002B sequence must complete 002B to receive credit for 001B.

For students who begin Russian in college or were merely introduced to Russian in high school. Designed to impart an active command of the language. Combines the study of grammar with intensive oral practice, writing, video and film, and readings in literary or expository prose. See the explanatory note on language courses above. Normally followed by 004B and 011.

1.5 credits..

RUSS 001B, *fall 2002*. Komaromi, Fedchak.

RUSS 002B, *spring 2003*. Komaromi, Fedchak.

RUSS 003B, *fall 2002*. Forrester, Fedchak.

RUSS 004B. Advanced Intensive Russian

For majors and those primarily interested in perfecting their command of language. Ad-

vanced conversation, composition, translation, and stylistics. Considerable attention paid to writing skills and speaking. Readings include short stories, poetry, newspapers, and Web sites. Conducted in Russian.

1.5 credits.

Spring 2003. Forrester, Fedchak.

RUSS 006A. Russian Conversation

A 0.5-credit conversation course that meets once a week for 1.5 hours. Students will read journals, newspapers, and the Internet and watch films and videos to prepare for conversation. Each student will design and complete an individual project based on his or her own interest and goals.

Prerequisite: 004B in current or a previous semester or permission of instructor.

0.5 credit.

Spring 2003. Fedchak.

RUSS 011. Introduction to Russian Culture

An interdisciplinary introduction to contemporary Russian culture and the field of Slavic Studies within a framework of continuing enrichment of vocabulary and developing fluency in speaking and writing Russian. This year, topics will emphasize high culture and history, with occasional guest presentations by faculty in associated disciplines from Swarthmore, Bryn Mawr, and other nearby institutions. Readings, lectures, papers, and discussions in Russian.

Prerequisite: Russian 004B or the equivalent

Primary distribution course. 1 credit.

Fall 2002. Fedchak.

RUSS 013. The Russian Novel

(Cross-listed as LITR 013R)

The Russian novel represents Russia's best-known contribution to world culture, with well-known authors and famously thought-provoking works. We will survey the Russian novelistic tradition in classics from the 19th and 20th centuries to gain a basic understanding of Russian literary history, including the developments of romanticism, realism, symbolism, modernism, the picaresque novel, and post-modernism. We shall explore how the constantly evolving genre took shape in the Russian context from the period of Tsarist empire through restless pre-revolutionary years, the underground classics and émigré writings of the Soviet period, to innovations in the post-Stalin period and beyond.

No prerequisite.

Primary distribution course. 1 credit.

Spring 2003. Komaromi.

RUSS 015. East European Literatures in Translation

(Cross-listed as LITR 015R)

Novels and stories by the most prominent 20th-century writers of this multifaceted and turbulent region. Analysis of individual works and writers with the purpose of appreciating the religious, linguistic, and historical diversity of Eastern Europe in an era of war, revolution, political dissent, and outstanding cultural and intellectual achievement. Readings, lectures, writing, and discussion in English; qualified students may do some readings in the original language(s). Writing-intensive course, enrollment limited to 15.

Primary distribution course. 1 credit.

Fall 2002. Forrester.

RUSS 016. History of the Russian Language

An introductory course, studying the origin of the Russian language and its place among the other modern Indo-European and Slavic languages. The uses of philology and linguistics for the ideological and stylistic analysis of literary texts. Satisfies the linguistics requirement for teacher certification.

1 credit.

Not offered 2002-2003.

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 down to the present day. 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 Russian may read some or all of the works in the original.

1 credit.

Not offered 2002-2003. Komaromi.

RUSS 068. Underground Culture of the Soviet Period

(Cross-listed as LITR 068R)

This course will focus on political and artistic dissent in post-Stalin Soviet Russia from the late 1940s through the end of the 1980s. Russian intellectuals responded variously to the strictures of the Soviet regime: some struggled for human rights while others provocatively violated taboos in life and art. We will survey the development of alternative culture from the idealism of the Post-Stalin Thaws, to the crisis of 1968, throughout the disaffection of the 1970s and up to the end of the Soviet period. Materials will reflect the underground literature of Samizdat and Tamizdat, alternative visual art, bards' songs and Russian rock, and alternative Soviet cinema. We will cover the legacy of Stalinist terror and the camps, issues of cultural memory, and the significance of the underground for the development of late- and post-Soviet Russian cultural values.

1 credit.

Not offered 2002-2003.

RUSS 070. Translation Workshop

(Cross-listed as LING 070 and LITR 070R)

This workshop in literary translation will concentrate on both 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. No prerequisites exist, but excellent knowledge of a language other than English (equivalent to a 004B course at Swarthmore or higher) is highly recommended or, failing that, access to at least one very patient speaker of a foreign language.

1 credit.

Offered 2003-2004. Forrester.

RUSS 079. Russian Women Writers

(Cross-listed as LITR 079R)

This course balances the picture of Russian literature by concentrating on the female authors whose activities and texts were for a long time excluded from the canon. From the memoirs of the first female president of the Russian Academy of Sciences and a female cavalry officer in the Napoleonic Wars, through the rise of the great prose novel and Modernist poets such as Anna Akhmatova and Marina Tsvetaeva, to the stunning frankness of post-Soviet authors and dramatists such as Arbatova, Petrushevskaia, and Vasilenko. Although the course is in translation, students with good Russian skills may do part or all of the readings in the original.

1 credit.

Not offered 2002-2003.

RUSS 080. Literature of Dissent

(Cross-listed as LITR 080R)

This course will address the central place of dissent in Russian literature, its flowering in reaction to Tsarist and Soviet censorship. The theme leads to some of the most important works of 19th- and 20th-century Russian poetry and prose.

1 credit.

Spring 2003. Forrester.

RUSS 091. Special Topics

For senior majors. Study of individual authors, selected themes, or critical problems.

1 credit.

Spring 2003. Komaromi.

RUSS 093. Directed Reading

SEMINARS

RUSS 101. Tolstoy

2 credits.

RUSS 102. Russian Short Story

The counterpoint to the sprawling Russian novel, the short story in Russia possesses a long and distinguished pedigree. Russian writers have used the genre to create polished and brilliant gems demonstrating the possibilities of character development, voice, plot, and the tight exposition of ideas in prose. This seminar will explore a selection of examples from the likes of Pushkin, Chekhov, Zoshchenko, Bulgakov, Nabokov, and others.

2 credits.

Spring 2003. Komaromi.

RUSS 103. Pushkin and Lermontov
2 credits.

RUSS 104. Dostoevsky
2 credits.

RUSS 105. Literature of the Soviet Period
2 credits.

RUSS 106. Russian Drama
2 credits.

RUSS 107. Russian Lyric Poetry
2 credits.

RUSS 108. Russian Modernism
2 credits.

RUSS 109. Chekhov
2 credits.

RUSS 110. Bulgakov
2 credits.

RUSS 111. The Hysterical Poets: Tsvetaeva and Mayakovsky
2 credits.

RUSS 112. The Acmeists
Several of the greatest Russian 20th century poets belonged to a group called "Acmeists" for their emphasis on verbal clarity, specificity of poetic image after the vague fogs of symbolist excess, and attitude of "nostalgia for world culture." The group's main theoretician, Nikolai Gumilev, was shot in 1921 for supposed participation in a monarchist plot. Osip Mandel'shtam spent years in "internal exile" because of his overly honest writing; he died in a labor camp in 1938. Anna Akhmatova, perhaps the most translated Russian poet in the Anglophone world, witnessed all the horrors of Stalinism but survived to mentor a new generation of poets during the post-Stalin "thaw," living until 1966. The course will concentrate on these three poets, with attention to less prominent Acmeists and other writers of the time, particularly gay poet and critic Mikhail Kuzmin, who never joined the movement but hoped to form its tenets.

2 credits.

Fall 2002. Forrester.

RUSS 113. Russian Cinema
2 credits.

RUSS 114. Folklore in Russian Literature
2 credits.

Spanish

The Spanish Program
The Spanish Section of the Department of Modern Languages and Literatures works with students who want to learn the language and familiarize themselves with the cultures of Spain and Latin America, regardless of their intended majors. As Spanish becomes the second language of the United States, the program recognizes the importance of teaching students whose engagement with literature is not the main goal of language study. In addition, the program prepares a group of specialists in Spanish and Latin American literature as majors and minors, in course or honors. Nonspecialists who have completed the four-semester sequence or its equivalent are welcome in literature courses. The program also teaches literary courses in English (listed as LITR in the first part of the description of the Department of Modern Languages and Literatures), recognizing the importance of Spanish and Latin American literary traditions for those who wish to become acquainted with leading world fiction and poetry. In all cases, the program teaches language and literature within their diverse cultural and historical contexts as dynamic worlds.

Major
Requirements

Requirements for the major are the following:

(1) The completion of at least one semester of study in a Spanish-speaking country in a program approved by the Spanish section; (2) the completion of a minimum of 8 credits of work in courses numbered 004B and above; (3) one of these courses must be 011 or 013; (4) a student may not present both 004B and 010 as part of the 8-credit requirement. SPAN 006A will not count toward fulfillment of the major; (5) 1 of the 8 credits of advanced work may be taken in English from among those courses listed in the catalog under Literatures in Translation, provided that it is a course pertinent to the student's major; (6) all majors are strongly encouraged to take at least one seminar offered by the section; (7) a minimum of 4

of the 8 courses must be taken at Swarthmore College; and (8) seminars in the major count as two courses.

Minor

Requirements

Requirements for the minor are the following:

(1) The completion of at least one semester of study in a Spanish-speaking country in a program approved by the Spanish section. Only two of the courses taken abroad that pertain to the curriculum of the section may count toward fulfillment of the minor; (2) all minors must take a total of five course and/or seminar offerings numbered 004B and above. Four of these offerings may not overlap with the student's major or other minor. A student may not present both 004B and 010 as part of the five-course requirement. Only one of these may satisfy the requirement. SPAN 006A and courses in English translation will not count toward fulfillment of the minor; (3) all minors must take either SPAN 011 or 013 unless in special cases the section deems it unnecessary and therefore waives this requirement; (4) all minors are strongly encouraged to take seminars offered by the section; and (5) seminars in the minor count as one of five courses.

Honors Program in Spanish

Candidates for the major or minor in Spanish must meet the following requirements before being accepted for the program in honors: (1) a B average in Spanish course work at the College; (2) the completion at Swarthmore of either Spanish 011 or 013 *and* one course numbered above 013; (3) the completion of at least one semester of study in a Spanish-speaking country in a program approved by the Spanish section; and (4) demonstrated linguistic ability in the language. Students may present fields for external examination based on any of the following: (a) 2-credit seminars offered by the section or (b) the combination of two advanced courses numbered above 013 that form a logical pairing. All majors in the Honors Program must do three preparations for a total of 6 units of credit, whereas all minors must complete one preparation consisting of 2 units of credit.

Mode of Examination

Majors will take three three-hour written examinations prepared by the external examiners as well as three 0.5-hour oral exams based on the contents of *each* field of preparation. Minors will take one three-hour written examination prepared by the external examiner as well as one 0.5-hour oral exam based on the contents of the written examination. All exams will be conducted exclusively in Spanish.

COURSES

Not all advanced courses are offered every year. Students wishing to major in Spanish should plan their program in consultation with the department.

SPAN 001B-002B, 003B. Intensive Spanish

Students who start in the 001B-002B sequence must complete 002B to receive credit for 001B.

For students who begin Spanish in college. Designed to impart an active command of the language. Combines the study of grammar with intensive oral practice, writing, and readings in literary or expository prose. See the explanatory note on language courses above. Normally followed by 004B, 010, 011, or 013.

1.5 credits.

SPAN 002B-2. Intensive Spanish

Offered in the fall semester to students who have had at least a year of Spanish, but require a review of basic concepts before moving forward.

1.5 credits.

SPAN 004B. Intensive Spanish

For majors and others who wish an advanced language course. Much attention paid to pronunciation, writing skills, speaking, and the most complex concepts of Spanish grammar. An ideal course before study abroad.

1.5 credits.

Each semester.

SPAN 006A. Spanish Conversation

A 0.5-credit conversation course that meets once a week for 1.5 hours. The class will be divided into small groups to facilitate discussion. Students are required to read newspapers and other contemporary journals, see movies, read plays that might be performed for and by

the class, and prepare assignments that will generate conversation among the group. Not an appropriate course for native speakers.

Prerequisite: 004B or its equivalent, or permission of instructor.

0.5 credit.

Each semester. Friedman and Vargas.

SPAN 010S. La España actual

Embark on a journey through contemporary Spain! Focusing primarily on a linguistic and cultural perspective, we will explore various topics pertaining to contemporary society, culture, literature, history, politics, art, architecture, music, cinematography, and the press. We will study these aspects in relation to different regions (Cataluña, Andalucía, Galicia, País Vasco, Castilla) and particular cities (Madrid, Barcelona, Sevilla). We will examine how the medieval description of Spain, "las Españas," may still apply today with respect to the linguistic and cultural diversity within Spain. As a point of departure, we will incorporate discussions on the similar concept "las Américas." The student will develop fluency and accuracy in speaking, writing, and reading in Spanish.

Prerequisite: 004B or its equivalent, or permission of instructor.

1 credit.

Fall 2002. Chiong Rivero.

SPAN 010SA. En busca de América Latina

Is there a Latin America? Is it a geographical, cultural or political entity? How has it constructed itself through literature, films, music, popular and fine arts, photography, cuisine? How does it reconcile its deep roots in Europe, Africa, and the Americas? This course explores how Latin Americans see themselves and their vibrant cultures. Emphasis is not literary but linguistic and cultural. Students develop fluency in speaking, writing and reading in Spanish.

Prerequisite: 004B or its equivalent, or permission of instructor.

1 credit.

Spring 2003. Staff.

SPAN 011. Introducción a la literatura española

This course covers representative Spanish literary works from the 18th century to the present. We will read about times of political and civil upheaval, of soaring ideologies and crushing defeats that depict the changing social, economic, and political conditions in Spain during the last three centuries. Each reading represents a particular literary period; neoclassicism, romanticism, realism, naturalism, the generation of 98, vanguardism, surrealism, the postwar, and postmodernism. The emphasis of this course is to introduce students to literary analysis to build a base for further study of Spain's literature.

Prerequisite: SPAN 004B or 010 or their equivalent or permission of instructor.

Primary distribution course. 1 credit.

Fall 2002. Guardiola.

SPAN 013. Introducción a la literatura hispanoamericana

This course presents a selection of texts from the mid-19th century until today. Students develop skills in literary analysis, increase their power to speak and write Spanish, and acquire a foundation for the future exploration of Latin America's literary production. Readings include narrative, essays, and poetry representing the romantic, naturalist, realist, modernist, vanguardist, and other contemporary trends, studied in their historical context.

Prerequisite: SPAN 004B or 010 or their equivalent or permission of instructor.

Primary distribution course. 1 credit.

Spring 2003. Camacho de Schmidt.

Note: SPAN 011 or 013, or the equivalent, or consent of instructor is prerequisite for the courses in literature that follow:

SPAN 061. La figura bufonesca del gracioso en la comedia española del Siglo de Oro

The course examines the recurring themes of fools, folly, humor, and satire in the works of 16th- and 17th-century Spanish playwrights. We will explore the issues surrounding the figure of the gracioso, a buffoon of sorts, and his role within the Spanish comedia. What are the social, political, and historical implications behind the gracioso and his apparent folly? How do gender roles play a part in the theatrical dynamics of the gracioso? How is language configured to express the concepts of the carnivalesque and of the world turned upside down? How is the language of folly (full of humor, irony, and satire) used as a vehicle for subversion, inversion, and perversion? We will

study Lope de Rueda's *Pasos*; Lope de Vega's *Fuenteovejuna* and *La dama boba*; Alarcón's *La verdad sospechosa*; Tirso de Molina's *El burlador de Sevilla* and *El vergonzoso en palacio*; and Calderón de la Barca's *La vida es sueño*. We will include literary theory and criticism.

1 credit.

Fall 2003. Chiong Rivero.

SPAN 062. La dialéctica entre historia y ficción : textos historiográficos y literarios de la Edad Media a la epóca colonial

We will study how reputedly reliable histories are "fictionalized" by the literary traditions and genres of the times and, conversely, how works of fiction are "historicized" to reflect historical, social, and political circumstances. From the Middle Ages, we will study selections from the histories of Alfonso X and Pero López de Ayala as well as the historicized fictions of the epic poem El Cid and its fragments in the *Romancero*, and Diego de San Pedro's *Cárcel de amor*. From the Renaissance, we will study the "chronicles" and historical writings on the New World by writers such as Cortés, Cabeza de Vaca, Bernal Díaz, Garcilaso de la Vega el Inca, and others. We will examine fictional works of historical significance, such as selections from Antonio de Guevara's works, from Ercilla's epic poem *La Araucana*, the picaresque novel *Lazarillo de Tormes*, and from Cervantes' *Don Quijote*. Theoretical works on historiography and cultural studies will be included. The course is entirely in Spanish.

1 credit.

Spring 2004. Chiong Rivero.

SPAN 066. Escritoras españolas del siglo 19 y 20

The course will explore the literary production that results from the struggle of 19th-century women such as Gertrudis Gómez de Avellaneda, Carolina Coronado, Rosalía de Castro, Cecilia Böhl de Faber, and Emilia Pardo Bazán to use the pen as a means of self-expression and freedom, to the works of post-war authors such as Carmen Laforet, Ana María Matute, and Mercé Rodoreda; and the contemporary ones: Carmen Martín Gaite, Montserrat Roig; Esther Tusquets, and others.

1 credit.

Fall 2002. Guardiola.

SPAN 069. Ciudad y literatura

The city as a cultural artifact offers writers myriad narrative possibilities: mere location, cultural symbolism, or the link for values and concepts that determine the place of human beings in their own society and historical moment. The Spanish novels we will read use urban space as a reflection of the social and theological rationale in Hispanic culture, where *urbanization* equals *civilization*. Madrid and Barcelona are the most important urban centers in Spanish narrative space since the 19th century. The novels we will read present both cities as part of the author's personal story as well as his or her creative vision. We will see these urban representations in novels by Galdós, Pardo Bazán, Baroja, Laforet, Cela, Rodoreda, Roig, and Mendoza.

1 credit.

Fall 2003. Guardiola.

SPAN 073. Representaciones del amor en la literatura: de la Edad Media al Siglo de Oro

We shall explore the literary representations and images of love in poetry, prose, and theater. Selections from Spanish Medieval literature include the love lyrics of Hispano-Arabic *jarchas* and the Galician-Portuguese *cantigas*; Juan Ruiz' *Libro de buen amor*; the sentimental novel *Cárcel de amor*; the poems of Jorge Manrique; and Rojas' *La Celestina*. From Golden Age literature, we shall study the lyric poetry of Garcilaso de la Vega, San Juan de la Cruz, Cervantes, Lope de Vega, Quevedo, Góngora, and Sor Juana; selections from the prose of Motalvo's *Amadís de Gaula*; *El Abencerraje*; Montemayor's *La Diana*; Sant Teresa's mystical writings; María de Zayas' *Novelas ejemplares y amorosas*; and Cervantes' *Don Quijote*, and plays (comedias) such as Lope de Vega's *La dama boba*, Tirso de Molina's *El burlador de Sevilla*, and Calderón de la Barca's *La vida es sueño*. Topics for discussion include courtly and Neo-Platonic love, chivalric romance, the sacred and the profane, the love of the mystics, social and gender roles, and the lyric voice of subjectivity. Representations of love in painting and sculpture will be incorporated.

1 credit.

Fall 2002. Chiong Rivero.

SPAN 075. La narrativa de Mario Vargas Llosa

A study of the narrative of one of Latin America's most controversial literary and political figures. A representative sample of the author's essays will be included. Great attention given to Vargas Llosa's evolution as a writer and thinker and his impact on the resurgence of Latin American fiction during the second half of this century.

1 credit.

Fall 2003. Hassett.

SPAN 076. Grandes voces de América: la poesía latinoamericana del siglo XX

Latin America gave the world many of the great poets of the 20th century. Reflecting a specific history and geography, the work of these foundational poets also searches for what it means to be human. Texts by Vallejo, Huidobro, Neruda, Guillén, Paz, Borges, Parra, Mistral, Cardenal, and Alegría.

1 credit.

Spring 2004. Staff.

SPAN 078. Movimientos sociales y literatura en México

The 1910 Revolution defined Mexico's 20th century and produced an artistic and literary explosion. The revolutionary pact between government and people was seriously eroded in moments like 1968, with the repression of the student movement; in 1985, with the authorities' failure to respond to the effects of a major earthquake; and in 1994, with the Indigenous Zapatista insurrection. Mexican literature, more than merely reflecting the social movements that accompanied these events, has been part of them. In this course, we read novels, poetry, and essays, looking at how these texts interrogate history and express the aspirations of popular struggles. Authors include Mariano Azuela, Garro, Castellanos, Fuentes, Revueltas, Leñero, Poniatowska, Monsiváis, Pacheco, Arturo Azuela, Volpi, and the Subcomandante Marcos.

1 credit.

Spring 2003. Camacho de Schmidt.

SPAN 079. El cuento hispanoamericano

The short story from mid-19th century to the present, with particular emphasis in the technical innovations of the past 30 years. Authors include Echeverría, Lillo, Quiroga, Borges, Cortázar, García Márquez, Rulfo, Allende, Valenzuela, Ferré, and Giardinelli.

1 credit.

Spring 2004. Hassett.

SPAN 083. El tirano latinoamericano en la literatura

Self-infatuated and grotesque, almighty and naive, manly and insecure... the Latin American dictator may have borrowed from fiction before fiction looked at history for inspiration. This course deals with 20th-century works that explore the incontestable power of a Jefe Maximo as the young republics look for democracy, prosperity, and sovereignty. Complexity, humor, irony and narrative brilliance are the marks of novels by Martin Luis Guzman, Miguel Angel Asturias, Alejo Carpentier, Demetrio Aguilera Malta, Augusto Roa Bastos, Marta Traba, Gabriel García Márquez, and Elizabeth Subercaseaux.

1 credit.

Fall 2002. Camacho de Schmidt.

SPAN 084. Hacia Cervantes: el desarrollo de la novela en España

We shall embark on an exploration of the narrative prose that led the way toward the creation and flourishing of the novel in Spain, exemplified by Cervantes' *Don Quijote*. Among the works studies will be Rojas' *La Celestina*, selections from the chivalric prose of Montalvo's *Amadís de Gaula* , selected passages from Antonio de Guevera's works, readings from reputedly historiographical works such as Cabeza de Vaca's *Naufragios* and Bernal Díaz del Castillos' *Historia Verdadera*, the picaresque novel (*Lazarillo de Tormes* and Mateo Alemán's *Guzmán de Alfarache*), the Moorish novel *El Abencerraje*, and the pastoral novel (Montemayor's *La Diana*). We will culminate our exploration with selected readings from Cervantes' works, *Novelas ejemplares and Don Quijote*. Topics for discussion include the social, historical, and political factors that contributed to the emergence of the various narrative forms in Spain; the intricate relationship between history and fiction; and the narrative voice of dissent, resistance, and marginality.

1 credit.

Spring 2003. Chiong Rivero.

Courses to be offered in subsequent years:

SPAN 067. La guerra civil española en la literatura y el cine.

SPAN 070. Rebeldía y renovación artística: el modernismo y la generación del 98

SPAN 071. Literatura española contemporánea

SPAN 077. La novela hispanoamericana del siglo XX

SPAN 079. El cuento hispanoamericano

SPAN 080. La narrativa chilena desde el golpe militar

SPAN 082. La mujer mirando al hombre: Escritoras hispanoamericanas del siglo XX

SPAN 85. Narrativa Hispánica Contemporánea de los Estados Unidos

SPAN 093. Directed Reading

SEMINARS

Students wishing to take seminars must have completed at least one course in Spanish numbered 030 or above or obtained permission from the instructor.

SPAN 107. Héroes y villanos: el siglo XIX español y la democratización literaria

From the liberal vindication of individualism and the popular spirit, to the depiction of the virtues and evils of the middle class. Nineteenth-century Spanish literature offers a wide array of works: romantic plays such as

El trovador and *Don Juan tenorio*, the poetry of Rosalía de Castro and Bècquer, the critical and nonconformist journalism of Larra, realist novels by Valera and Galdós, and the later works of Clarín and Emilia Pardo Bazán.

2 credits.

Spring 2004. Guardiola.

Seminars to Be Offered in Subsequent Years (all for 2 credits)

SPAN 101. La novela hispanoamericana del siglo XX

SPAN 102. Cervantes

SPAN 103. La guerra civil española

SPAN 104. La narrativa de Mario Vargas Llosa

SPAN 105. Federico García Lorca

SPAN 106. Visiones narrativas de Carlos Fuentes

SPAN 108. La narrativa de Isabel Allende: la excritura como subrevivencia

SPAN 109. Unamuno o el hambre de Dios

SPAN 110. Políticа y poética: los mundos de Pablo Neruda, Octavio Paz y Ernesto Cardenal

SPAN 111. Teatro español de los siglos XIX y XX

SPAN 112. Carmen Martín Gaite

Music and Dance

MUSIC

JAMES D. FREEMAN, Professor of Music
GERALD LEVINSON, Professor of Music
JOHN ALSTON, Associate Professor of Music
MICHAEL MARISSEN, Associate Professor of Music and Chair
THOMAS WHITMAN, Assistant Professor of Music[1]
DOROTHY K. FREEMAN, Associate in Performance (Music)
MICHAEL JOHNS, Associate in Performance (Music)
GWYN ROBERTS, Associate in Performance (Music)
RICHARD STONE, Associate in Performance (Music)
DANIEL A. WACHS, Associate in Performance (Music)
JUDY LORD, Administrative Coordinator

DANCE

SHARON E. FRIEDLER, Professor of Dance, Director of the Dance Program
KIM D. ARROW, Assistant Professor of Dance (part time)
SALLY HESS, Assistant Professor of Dance (part time)
PALLABI CHAKRAVORTY, Assistant Professor of Dance (part time)
LaDEVA DAVIS, Associate in Performance (Dance)
DOLORES LUIS GMITTER, Associate in Performance (Dance)
C. KEMAL NANCE, Associate in Performance (Dance)
JON SHERMAN, Associate in Performance (Dance)
LEAH STEIN, Associate in Performance (Dance)[6]
STEPHEN WELSH, Associate in Performance (Dance)
JENNINE WILLETT, Associate in Performance (Dance)[5]
HANS BOMAN, Dance Accompanist
JUDY LORD, Administrative Coordinator
SASHA WELSH, Arts Administration Intern

1 Absent on leave, fall 2002.
5 Fall 2002.
6 Spring 2003.

MUSIC

The study of music as a liberal art requires an integrated approach to theory, history, and performance, experience in all three fields being essential to the understanding of music as an artistic and intellectual achievement. Theory courses train the student to work with musical material, to understand modes of organization in composition, and to evolve methods of musical analysis. 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, baroque ensemble, gamelan, jazz ensemble, orchestra, wind ensemble, and Chamber Music Coaching Program, which it staffs and administers.

The department also assists instrumentalists or singers to finance the cost of private instruction. Up to 16 half-credits may be granted toward graduation.

Music majors in their junior and senior years who enroll in MUSI 048 receive 100 percent subsidy for the cost of 10, one-hour private lessons each semester; junior or senior music majors and Garrigues or Fetter scholarship

holders who do not wish to receive academic credit for private instruction may take up to 10 one-hour lessons per semester with a 100 percent subsidy. All support for private lessons is determined on the basis of performing before a jury. See the department Web site or bulletin board for dates and times.

Major in the Course Program. Two semester courses in theory, one semester course in history, and the successful completion of one repertory exam are prerequisite for acceptance as a major. Majors will normally take five semester courses in theory , four semester courses in history (including MUSI 020 and either 021 or 022), meet the basic piano requirement, pass five repertory exams, and pass the comprehensive exam. Majors normally participate in at least one of the department's performing organizations.

Major in the Honors Program. A student intending to major in the Honors Program will fulfill the same prerequisites as listed earlier, will pass five repertory exams, will meet the basic piano requirement, and will normally submit three preparations (including at least one preparation in theory and one in history), subject to departmental approval. Any theory/composition course numbered 015 or higher, or any history course, can (with permission of the instructor) be used as the basis of a paper when augmented by a concurrent or subsequent attached unit of additional research, or by directed reading, or by a tutorial.

Minor in the Honors Program. A student intending to minor in the Honors Program will fulfill the same prerequisites as those for a major in course, will meet the basic piano requirement, and will normally submit one preparation in music.

Language requirements for graduate schools. Students are advised that graduate work in historical musicology and voice requires a reading knowledge of French and German.

Proficiency on an instrument. All majors in music will be expected to play a keyboard instrument well enough by their senior year to perform a two-part invention of J.S. Bach or a first movement of an easy late 18th- or early 19th-century sonata. In addition, they must demonstrate skill in score reading. The department recommends that majors take two semesters of MUSI 042 to develop these skills. Score reading is also taught within MUSI 018.

The basic piano program. This program is designed to develop keyboard proficiency to a point where a student can effectively use the piano as a tool for study and also to help students meet the keyboard requirements outlined earlier. It is open to all junior or senior music majors and to any student enrolled in a theory course numbered 011 or higher. No academic credit is given for basic piano.

A unique resource of the department is its ensemble in residence, Orchestra 2001, directed by Professor James Freeman. This nationally renowned ensemble offers an annual concert series at the College, focusing on contemporary music. The series features distinguished soloists and often includes advanced Swarthmore students in its concerts.

Special scholarships and awards in music include the following:

The Edwin B. Garrigues Music Awards: See p. 88.

The Fetter String Quartet Awards: See p. 88.

The Renee Gaddie Award: See p. 88.

Music 048 Special Awards: See p. 90.

Friends of Music and Dance Summer Awards: See p. 88.

The Boyd Barnard Prize: See p. 87.

The Peter Gram Swing Prize: See p. 91.

The Melvin B. Troy Prize: See p. 91.

CREDIT FOR PERFORMANCE

Note: All performance courses are for half-course credit per semester. A total of not more than 8 full credits (16 0.5-credit courses) in music and dance may be counted toward the degrees of bachelor of arts and bachelor of science. *No retroactive credit is given for performance courses.*

Individual Instruction (MUSI 048)

Music majors and members of the wind ensemble, chorus, baroque ensemble, gamelan, jazz ensemble, and orchestra may, if they wish, take lessons for credit. Accomplished pianists may satisfy this ensemble requirement by accompanying instead. For further details, consult the MUSI 048 guidelines on the department Web site.

Students who wish to take MUSI 048 (Individual Instruction) must register for the course by meeting in person with Judy Lord, the department coordinator, to fill out an application to the department at the beginning of each semester. Forms are available in the department office only. Although it is necessary for students in MUSI 048 to be a member in good standing of a department performance group, it is not necessary to be registered for credit in that performing group.

A student applying for individual instruction should be at least at an intermediate level of performance. The student will arrange to work with a teacher of his or her choice, subject to the approval of the department, which will then supervise the course of study and grade it on a credit/no credit basis. Teachers will submit written evaluations, and the student will perform for a jury at the end of the semester and submit to the faculty a short paper on the piece to be performed at the jury. The department will then decide whether the student should receive credit and whether the student may reenroll for the next semester.

For students enrolled in MUSI 048, at least one-third of the cost of 10 one-hour lessons will be paid to the teacher by the department. Section leaders in department ensembles receive subsidies of at least two-thirds of the cost of 10 one-hour lessons. Music majors in their junior and senior years receive 100 percent subsidies of the cost of 10 one-hour lessons each semester. Fetter, Garrigues, and other scholarships may subsidize up to the entire cost of private lessons (i.e., including travel expenses) for the most musically advanced students at the College.

All students enrolled in MUSI 048 are strongly encouraged to perform in student chamber music concerts and to audition for concertos with the orchestra or solos with the chorus.

Orchestra, Chorus, Wind Ensemble, Baroque Ensemble, Gamelan, Chamber Music, Jazz Ensemble

Students may take Performance Chorus (MUSI 044), Performance Orchestra (MUSI 043), Performance Jazz Ensemble (MUSI 041), Performance Wind Ensemble (MUSI 046), Performance Baroque Ensemble (MUSI 045), Chamber Music (MUSI 047), or Gamelan (MUSI 049) 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 taking MUSI 047 (Chamber Music) for credit must submit to the department 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 students who have agreed to work on the repertoire, the names of all coaches who have agreed to work with them, and the proposed date(s) for performance.

A student taking MUSI 047 for credit will rehearse with his or her group(s) at least two hours every week and will meet with a coach 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 assumes that those taking the course for credit will adopt a leadership role in organizing rehearsals and performances.

COURSES AND SEMINARS

MUSI 001. Introduction to Music

This course is designed to teach intelligent listening to music by a conceptual rather than historical approach. Although it draws on examples from popular music and various non-Western repertories, the course focuses primarily on the art music of Europe and the United States. Prior musical training is not required. It is assumed that MUSI 001 students will not know how to read music. This course is taught with little or no use of musical notation.

Open to all students without prerequisite.

1 credit.

Fall 2002. Marissen.

MUSI 002A. How to Read Music

An introduction to the elements of music

notation and theory (clefs, pitch, and rhythmic notation, scales, keys, and chords). Meets once a week.

0.5 credit.

Not offered 2002-2003.

MUSI 002B. How to Read Music—Intensive

Same as MUSI 002A but with an additional weekly class focused on sight singing and general musicianship. Strongly recommended as preparation for all upper-level music courses.

1 credit.

Not offered 2002-2003.

MUSI 003. Jazz History

This course traces the development of jazz from its roots in West Africa to the free styles of the 1960s. The delineation of the various styles and detailed analysis of seminal figures are included. Emphasis is on developing the student's ability to identify both style and significant musicians.

Open to all students without prerequisite.

Primary distribution course. 1 credit.

Not offered 2002-2003.

MUSI 004. Opera

Combine great singing with the vivid colors of an orchestra, with acting and theater, with poetry, dance, painting, spectacle, magic, love, death, history, mythology, and social commentary, and you have opera: an art of endless fascination. This course will survey the history of opera (from Monteverdi through Mozart, Wagner, and Verdi to Gershwin and Stravinsky), with special emphasis on and study of scenes from selected works. A final project will involve informal stagings of some of these scenes, with students acting, singing, directing, and providing technical assistance. No prior musical experience or performance skills are required.

Open to all students without prerequisite.

Primary distribution course.

1 credit.

Spring 2003. J. Freeman.

MUSI 005. Patterns of Asian Dance and Music

(Cross-listed as DANC 005)

The course will examine converging and diverging patterns in Asian dance and music. Our focus will be on dance traditions of Indonesia, India, Sri Lanka, Afghanistan, the Philippines, and Japan and will incorporate musical traditions that are integral to dance. Readings will situate the traditions in their sociocultural, religious, and aesthetic contexts. This is a reading, viewing, listening, and writing intensive course. Open to all students, without prerequisite.

Primary distribution course. 1 credit.

Spring 2003. Chakravorty.

MUSI 006. 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).

Open to all students without prerequisite.

Primary distribution course. 1 credit.

Not offered 2002-2003.

MUSI 007. W.A. Mozart

Study of Mozart's compositions in various genres and of interpretive problems in Mozart biography.

Open to all students without prerequisite.

1 credit.

Spring 2003. Marissen.

MUSI 008. The Music of Asia

An introduction to selected musical traditions from the vast diversity of non-Western cultures. The music will be studied in terms of both its purely sonic qualities and its cultural/philosophical backgrounds.

Open to all students without prerequisite.

Primary distribution course.

1 credit.

This course counts toward a program in Asian studies.

Not offered 2002-2003.

THEORY AND COMPOSITION

Students who anticipate taking further courses in the department or majoring in music are

urged to take MUSI 011 and MUSI 012 as early as possible. Advanced placement is assigned on a case-by-case basis, after consultation with the theory faculty. Majors will normally take MUSI 011 to 015.

MUSI 011. Harmony and Counterpoint 1

Musical exercises include harmonic analysis and four-part choral style composition.

Prerequisite: knowledge of traditional notation, major/minor scales; ability to play or sing at sight simple lines in treble and bass clef.

All MUSI 011 students must register for one section of MUSI 040A, with or without 0.5 credit.

Basic piano is also required for some students.

1 credit.

Fall 2002. Staff.

MUSI 012. Harmony and Counterpoint 2

Written musical exercises include composition of original materials as well as commentary on excerpts from the tonal literature.

All MUSI 012 students must register for one section of MUSI 040B, with or without 0.5 credit.

Basic piano is also required for some students.

1 credit.

Spring 2003. Staff.

MUSI 013. Harmony and Counterpoint 3

Continued work with tonal harmony and counterpoint at an intermediate level. Detailed study of selected works with assignments derived from these works, as well as original compositions.

All MUSI 013 students must register for one section of MUSI 040C, with or without 0.5 credit.

Basic piano is also required for some students.

1 credit.

Fall 2002. Levinson.

MUSI 014. Harmony and Counterpoint 4

Advanced work with chromatic harmony and tonal counterpoint.

All MUSI 014 students must register for one section of MUSI 040D, with or without 0.5 credit.

Basic piano is also required for some students.

Spring 2003. Levinson.

MUSI 015. Harmony and Counterpoint 5

Detailed study of a limited number of works both tonal and non-tonal, with independent work encouraged.

Prerequisite: MUSI 014.

1 credit.

Spring 2003. Staff.

MUSI 018. Conducting and Orchestration

A study of orchestration and instrumentation in selected works of various composers and through written exercises, in combination with practical experience in conducting, score reading at the piano, and preparing a score for rehearsal and performance.

1 credit.

Fall 2002. Freeman.

MUSI 019. Composition

1 credit.

Fall and spring 2002-2003. Levinson.

MUSI 061. Jazz Improvisation

A systematic approach that develops the ability to improvise coherently, emphasizing the Bebop and Hard Bop styles exemplified in the music of Charlie Parker and Clifford Brown.

1 credit.

Not offered 2002-2003.

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 extra-musical contexts will be considered.

Prerequisite: A knowledge of traditional notation.

1 credit.

Not offered 2002-2003.

MUSI 021. Baroque and Classical Music

1 credit.

Not offered 2002-2003.

MUSI 022. Nineteenth-century Music

The music of Johannes Brahms: A performer's perspective. An in-depth study of works in different genres by Brahms and a comparison of

these with similar works by other composers of the same period.

Prerequisite: A knowledge of traditional notation.

1 credit.

Not offered 2002-2003.

MUSI 023. Twentieth-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: A knowledge of traditional notation.

1 credit.

Not offered 2002-2003.

MUSI 032. History of the String Quartet

A history of the string quartet from its origins to its development into one of the most prestigious genres of Western classical music. The course will focus on the quartets of Haydn, Mozart, and Beethoven.

Prerequisite: A knowledge of traditional notation.

1 credit.

Not offered 2002-2003.

MUSI 033. The Art Song

A study of various solutions by various composers to the problems of relating poetry and music. The emergence of the German Lied in the 19th century (Schubert and Schumann); its later development (Brahms, Strauss, Wolf, Mahler, Schoenberg, and Berg); and its adaptation by French (Debussy, Ravel, and Messiaen) and American (Ives, Barber, and Crumb) composers. For students who are either singers or pianists, informal performances may replace papers.

Prerequisite: A knowledge of traditional notation.

1 credit.

Not offered 2002-2003.

MUSI 034. J.S. Bach

Study of Bach's compositions in various genres. For the instrumental music, this involves close consideration of style and signification. For the vocal music, it also involves study of ways Bach's music interprets, not merely expresses, his texts.

This is a lecture and discussion course; see also MUSI 101 (Bach), whose format and content is quite different.

Prerequisite: A knowledge of traditional notation.

1 credit.

Fall 2002. Marissen.

MUSI 035. Women Composers and Choreographers

A survey of women choreographers and composers. Choreographers range from Sallé and Duncan through Graham, Tharp, and Zollar; composers from Hildegard through Zwilich. Topics include form, phrasing, text, and social/political comment. Open to all students.

1 credit.

Not offered 2002-2003.

MUSI 036. Music Since 1945

A study of contemporary concert music, including such composers as Messiaen, Crumb, Boulez, Cage, Babbit, Carter, Lutoslawski, and Ligeti. Electronic music, collage, chance and improvisation, and minimalism will also be examined as well as the current trends toward neoromanticism and stylistic pluralism.

1 credit.

Not offered 2002-2003.

MUSI 037. Contemporary American Composers

A study of the works and thought of six important American composers. The course will stress intensive listening and will include discussion meetings with each of the composers.

1 credit.

Fall 2002. Freeman.

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: A knowledge of traditional musical notation.

1 credit.

Spring 2003. Levinson.

MUSI 092. Independent Study

1 credit.

MUSI 093. Directed Reading

1 credit.

MUSI 095. Tutorial

Special work in composition, theory, or history.

1 or 2 credits.

MUSI 096. Senior Thesis

1 or 2 credits.

MUSI 099. Senior Honors Recital

Honors music majors who wish to present a senior recital as one of their honors preparations must register for MUSI 099, after consultation with the music faculty. See Honors Program guidelines.

SEMINARS

MUSI 100. Harmony and Counterpoint 5

(See MUSI 015.)

Prerequisite: MUSI 014.

1 credit.

Spring 2003. Staff.

MUSI 101. J.S. Bach

(Compare with MUSI 034, which is a different offering with different format, content, and prerequisites.)

Study of Bach's compositions in various genres, examining music both as a reflection of and formative contribution to cultural history.

Prerequisites: MUSI 012 and GERM 001B (higher levels in both strongly recommended; RELG 004 also recommended), or permission of instructor.

1 credit.

Not offered 2002-2003.

MUSI 102. Color and Spirit: Music of Debussy, Stravinsky, and Messiaen

(See MUSI 038.)

Prerequisite: MUSI 013 (concurrent enrollment possible by permission of the instructor).

1-credit seminar.

Spring 2003. Levinson.

MUSI 103. Mahler.

1 credit.

Not offered 2002-2003.

PERFORMANCE

Note: The following performance courses are for 0.5-course credit per semester. See p. 279 for general provisions governing work in performance for credit toward graduation.

MUSI 040A. Elements of Musicianship I

Sight-singing, rhythmic and melodic dictation.

Required for all MUSI 011 students, with or without 0.5 credit. Also open to other students.

0.5 credit.

Fall 2002. Staff.

MUSI 040B. Elements of Musicianship II

Prerequisite: MUSI 040A.

Sight singing, rhythmic and melodic dictation. Required for all MUSI 012 students, with or without 0.5 credit. Also open to other students.

0.5 credit.

Spring 2003. Staff.

MUSI 040C. Elements of Musicianship III

Prerequisite: Music 40B.

Sight singing, rhythmic, and melodic dictation. Required for all MUSI 013 students, with or without 0.5 credit. Also open to other students.

0.5 credit.

Fall 2002. Staff.

MUSI 040D. Elements of Musicianship IV

Prerequisite: MUSI 040C.

Sight singing, rhythmic and melodic dictation. Required for all MUSI 014 students, with or without 0.5 credit. Also open to other students.

0.5 credit.

Spring 2003. Staff.

MUSI 041. Performance (Jazz Ensemble)

0.5 credit.

Fall 2002 and spring 2003. Alston.

MUSI 042. Keyboard Musicianship

0.5 credit.

Spring 2003. Staff.

MUSI 043. Performance (Chorus)

0.5 credit.

Fall 2002 and spring 2003. Alston.

MUSI 044. Performance (Orchestra)

0.5 credit.

Fall 2002 and spring 2003. Wachs.

MUSI 045. Performance (Baroque Ensemble)

0.5 credit.

Fall 2002 and spring 2003. Roberts and Stone.

MUSI 046. Performance (Wind Ensemble)

0.5 credit.

Fall 2002 and spring 2003. Johns.

MUSI 047. Performance (Chamber Music)

(See guidelines for this course on p. 280.)

0.5 credit.

Fall 2002 and spring 2003. Staff.

MUSI 048. Performance (Individual Instruction)

(See the guidelines for this course on p. 279.) Specific and updated guidelines are distributed at the beginning of each semester.

0.5 credit.

Fall 2002 and spring 2003.

MUSI 049. 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 credit.

Fall 2002 and spring 2003. Whitman.

MUSI 071. Rhythmic Analysis and Drumming

(Cross-listed as DANC 071)

0.5 credit.

Spring 2003. Arrow.

MUSIC 078. Dance/Drum Ensemble

(Cross-listed as DANC 078)

This repertory course draws on a variety of dancing and drumming traditions from around the world as well as creating new hybrid forms. In 2002, focus will be on material from Guinea in West Africa, Japanese Taiko, and fusion material created for the ensemble. Guests will include M'Bemba Bangoura and others. Open to all students without prerequisite; students can participate as dancers, drummers, or both.

0.5 credit

Fall 2002. Arrow, Friedler.

MUSI 091. Special Projects (Issues in Music and Dance Education)

(Cross-listed as EDUC 071 and DANC 091)

An introduction to the fields of music and dance education. This course will involve frequent visits to schools, studios, and other educational institutions in the Philadelphia area. We will observe a variety of teaching methods and discuss the guiding principles of music and dance education. We will also address such questions as the place of music and dance in higher education in general and at Swarthmore in particular. In some cases, course work may include practice teaching, depending on student experience and inclination. Open to any student who has taken at least one course in music, dance, or education.

0.5 credits (CR/NCR).

Not offered 2002-2003.

DANCE

Dance, a program within the Music and Dance Department, shares the department philosophy that courses in theory and history should be integrated with performance. By offering a balance of cognitive, creative, and kinesthetic classes in dance, we present a program that stands firmly within the tradition of Swarthmore's liberal arts orientation. Dance instructors strive to create an atmosphere of cooperative learning, one that affirms group process, fosters camaraderie, and both offers and values a wide variety of dance traditions. Information about the dance program in addition to that listed later is available via the World Wide Web at the following address: http://www.swarthmore.edu/humanities/dance/.

REQUIREMENTS FOR THE MAJOR IN COURSE: DANCE

Prerequisites for the Major

- DANC 002, DANC 010 or 071, and DANC 011 with a grade of B or better; and
- A conference with dance faculty to assess familiarity with dance vocabularies and determine additional course work in dance technique(s).

Course Requirements	Credits
Composition	2
DANC 012. Dance Composition II (1 credit) and either DANC 013 Dance Composition Tutorial (0.5 credit) (twice) or	
DANC 014. Special Topics in Dance Composition (1 credit)	
History (two of the following six)	2
DANC 021. History of Dance: Africa and Asia (1 credit)	
DANC 022. History of Dance: Europe's Renaissance Through 1900 (1 credit)	
DANC 023. History of Dance: 20th and 21st Centuries (1 credit)	
DANC 024. Dance as Social History (1 credit)	
DANC 025. Mapping Culture Through Dance (1 credit)	
DANC 028. Special Topics in Dance History (1 credit)	
Theory (two of the following five)	2
DANC 035. Women Choreographers and Composers (1 credit)	
DANC 036. Dancing Identities (1 credit)	
DANC 037. The Politics of Dance Performance (1 credit)	
DANC 038. Dance and the Sacred (1 credit)	
DANC 039. Music and Dance: Criticism and Reviewing (1 credit)	
Technique (two of the following)	1.5-2
DANC 050. Performance Dance: Modern Dance II (0.5 credit)	
DANC 051. Performance Dance: Ballet II (0.5 credit)	
DANC 053. Performance Dance: African Dance II (0.5 credit)	
One or two additional dance technique courses for academic credit or	
DANC 094. Senior Project (1 credit)	
Repertory (once or twice)	0.5-1
DANC 049. Performance Dance: Repertory (0.5 credit)	
Senior Project/Thesis*	1-2
DANC 094. Senior Project (1 credit) or	
DANC 095. and/or 096: Senior Thesis (1 or 2 credits)	
Total credits for the major	9-11

The dance faculty encourages students to pursue a senior project/thesis that incorporates a comparison or integration of dance and some other creative/performing art (creative writing, music, theater, or visual art).

Additional Requirements for the Major

A comprehensive experience including essays on course work, reading/video lists, and the senior project/thesis. The written essays will be set by the faculty and responded to by the students during the first half of the final semester. The oral examination will be held at the end of the term, consisting of questions set by the faculty in response to the written comprehensives previously submitted by the students.

A senior colloquium with monthly meetings will be held during the final semester senior year. These meetings, which will be led by dance faculty, will be linked to concert performances, guest lecturers, and assigned articles.

REQUIREMENTS FOR THE MINOR IN COURSE: DANCE

The goal of the course minor in dance is to expose a student to the broad scope of the field. The distribution of required courses for the minor provides students with an introduction to composition, history, technique, and theory and allows them to direct their final credit in the minor toward a specific area of interest. It is also possible for students to align required courses within the minor to reflect that specific interest, if any. Minors will participate in the senior colloquium and will be encouraged, but not required, to develop an extended paper or a significant dance performance piece as part of the program.

Prerequisites for the Minor

- DANC 010 (Improvisation) *or* 071 (Rhythmic Analysis) *and* DANC 002 (World Dance Forms) *or* Dance 140 (Approaches to Dance) at Bryn Mawr College

Total prerequisite credits 1.5

Course Requirements	Credits
Composition	1
DANC 011. Dance Composition I (1 credit)	
History (one of the following six)	1
DANC 021. History of Dance: Africa and Asia (1 credit)	
DANC 022. History of Dance: Europe's Renaissance Through 1900 (1 credit)	
DANC 023. History of Dance: 20th and 21st Centuries (1 credit)	
DANC 024. Dance as Social History (1 credit)	
DANC 025. Mapping Culture Through Dance (1 credit)	
DANC 028. Special Topics in Dance History (1 credit)	
Theory (one of the following five)	1
DANC 035. Women Choreographers and Composers (1 credit)	
DANC 036. Dancing Identities (1 credit)	
DANC 037. The Politics of Dance Performance (1 credit)	
DANC 038. Dance and the Sacred (1 credit)	
DANC 039. Music and Dance: Criticism and Reviewing (1 credit)	
Technique	1
Two semesters of dance technique for academic credit: one 0.5 course in a Western-based technique and one 0.5 course in a non-Western-based technique.	
Additional Course Work	1
One additional credit will be taken from any single 1-credit course in the dance curriculum or from any two 0.5-credit courses (such as DANC 049 (Repertory), DANC 013 (Dance Composition Tutorial), or additional dance technique classes. This final credit will be selected in consultation with a Dance Program faculty adviser.	
Total credits for dance minor	5
Total of prerequisite and minor credits	6.5

REQUIREMENTS FOR THE SPECIAL COURSE MAJOR IN DANCE AND A SECOND DISCIPLINE

The program for a special major in dance comprises 12 units of course work: six in dance and six in another discipline. The two disciplines in this major may be philosophically linked or may represent separate areas of the student's interest.

Required Dance Courses

The core program (totaling 6 credits) includes the following courses:

1. 2 composition/improvisation (DANC 012 or 014 [1 credit] and DANC 010 [1 credit])
2. 2 history/theory (one from DANC 021-025 or 028 [1 credit] and one from DANC 035-039 [1 credit])
3. 2 in performance technique (DANC 050 [0.5 credit] and one other technique at the 50 level or above [0.5 credit])
4. 1 senior project or thesis (DANC 094, 095, or 096 [1 credit])

These 6 credits from the core program will be joined by 6 credits from (an)other discipline(s). Courses for the program must be approved both by the faculty of the other departments(s) and by the dance faculty. The senior project or thesis must also be approved and monitored by those departments involved.

REQUIREMENTS FOR THE MAJOR IN HONORS: DANCE

The minimum requirement for admission to the major (honors) is at least two courses in dance; normally an introductory history/theory course (DANC 002 or 009) and Dance Composition I (DANC 011). Majors in the Honors Program must also have an overall B grade average before admission. In addition to the guidelines noted later, each honors major will be responsible for the material designated on the reading and video lists for senior honors study (SHS) available from the department office. Honors majors will also be expected to participate in the senior colloquium.

All dance majors in the Honors Program must do three preparations in the department and one outside (in a related or unrelated minor).

Two of the departmental preparations will be based on course combinations (one in history/theory and one in composition). The third will take the form of either a senior project (DANC 094) or a senior thesis (DANC 095, 096). The portfolio submitted by each student will include both written materials and a videotape that provides examples of the student's choreographic/performance work at Swarthmore (a maximum of 20 minutes in length). Each student's program will include the following:

1. *History/theory*. One area of emphasis linking a course from (DANC 021-025 or 028) with a course from (DANC 035-039). Each student will demonstrate this integration via a paper written as an attachment. This paper, along with appropriate papers from each history/theory class submitted for preparation, will be sent to the examiner. The written exam for this preparation will consist of a response to three questions set by the examiner.
2. *Composition*. Each student may submit a combination of Composition I (DANC 011) plus either Composition II (DANC 012), Special Topics in Composition (DANC 014), or two Composition Tutorials (DANC 013). The syllabi (where appropriate), a videotape of the final work, and a paper concerning the choreographic process from each class will be submitted to the examiner.
3. *Senior project/thesis*. These projects/theses will be individually determined. Each student will be assigned a faculty adviser who will assist the student in the creation of an initial bibliography and/or videography as well as an outline for the project or thesis. It will then be the student's responsibility to proceed with the work independently.

REQUIREMENTS FOR THE MINOR IN HONORS: DANCE

Students in the Honors Program who are presenting a major in another discipline and a minor in dance must do one preparation in dance. This preparation will take the form of either No. 1 or 2 described earlier in the text concerning honors majors in dance. The choice regarding focus for a student's minor will be determined in consultation with an adviser from the dance faculty. Honors minors will also be expected to participate in the senior colloquium.

Majors Presenting a Related Minor

Dance majors in the Honors Program who are presenting a related minor in another discipline must follow the preparation guidelines listed earlier. For these students, the third preparation will take the form of either a senior project (DANC 094) or a senior thesis (DANC 095, 096), which, although it follows the guidelines stated in No. 3 earlier, draws on a cross-disciplinary perspective.

Cross-disciplinary project or thesis. These preparations will be individually determined. In each case, the student will present either one dance history/theory or one composition course in combination with one upper-level course outside the department. Then, as an attachment the student will submit a performance (videotape) and/or a paper in which the cross-disciplinary nature of the study is discussed. Each student will be assigned a faculty adviser, who will assist the student in the creation of an initial bibliography and/or videography as well as an outline for the project or thesis. It will then be the student's responsibility to proceed with the work independently.

Majors Presenting an Unrelated Minor

Students in the Honors Program who are presenting a major in dance and a minor in an unrelated discipline will follow the guidelines described earlier for the major.

Additional guidelines concerning the honors major and minor in dance are available from the Department of Music and Dance office or from the director of dance.

ADDITIONAL INFORMATION REGARDING THE DANCE PROGRAM

Performance Dance: Technique Courses

In a typical semester, more than 25 hours of dance technique classes are offered on graded levels presenting a variety of movement styles. Technique courses, numbered 040 through 048, 050 through 058, and 060 or 061, may be taken for academic credit or may be taken to

fulfill physical education requirements. Advanced dancers are encouraged to audition for level III technique classes and for Dance Repertory (DANC 049). 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) and/or to audition for student and faculty works. These auditions take place several times each semester; dates are announced in classes, in postings outside the dance studios, and in the *Weekly News*. 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, which in 2002-2003 will include the African American Dance Ensemble (Chuck Davis, director), Kariamu and Company, Traditions (Kariamu Welsh Asante, director), and Rennie Harris. In addition, the program regularly hosts guest choreographers who work with student ensembles in repertory classes. During 2002-2003, both M'Bemba Bangoura and Jennine Willett will be working in that capacity.

Scholarships and Awards

Scholarships for summer study in dance are available through funds provided by The Friends of Music and Dance. The Halley Jo Stein Award for Dance and The Melvin B. Troy Award for Composition are also awarded annually by the department.

Foreign Study Initiatives

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 tutorials is available. Students participating are able to enroll for the equivalent of a full semester's credit (4 to 5 credits). Interested students should contact the director of the Dance Program as early as possible for advising purposes and for updated information. Please see the programs in Dance and Theater catalog listings for information on the types of academic credit offered.

Poland Program

The programs in Dance and Theater offer a semester-abroad program based at the Silesian Dance Theatre (Slacski Teatr Tanca) in Bytom in conjunction with the Jagiellonian University of Cracow and other institutions in the vicinity. The program provides participating students with a combination of foreign study and the experience of working in various capacities (dance performance, arts administration, scenography, etc.) within the environment of a professional dance theatre company for credit. Participating students are housed in Bytom and attend weekly tutorials in Cracow. Intensive study of Polish while in the country will be required of all participating students. Students participating are able to enroll for the equivalent of a full semester's credit (4 to 5 credits). Participation in the Annual International Dance Conference and Performance Festival hosted by Silesian Dance Theatre in June and July is highly recommended for certain types of credit. Beyond credits in theater, dance, and intensive Polish, a menu of possible tutorials is available in Polish literature and history, environmental studies, film, religion, Jewish and Holocaust studies, and other fields. Interested students should contact Professor Allen Kuharski, chair of theater, as early as possible for advising purposes and updated information on the status of the program. See course listings in both dance and theater for types of academic credit offered.

INTRODUCTORY COURSES

DANC 002. World Dance Forms

A survey course that introduces students to theoretical and practical experiences in dance

forms from various cultures and periods through a combination of lectures, readings, video and film viewings, and workshops with a wide variety of guest artists from the field. The particular forms will vary each semester but may include African, Asian, and Native American forms, flamenco, contemporary social dances, and various forms of concert dance. Open to all students; no prior dance training required.

Primary distribution course. 1 credit.

Fall 2002. Friedler.

DANC 005. Patterns of Asian Dance and Music

(Cross-listed as MUSI 005)

The course will examine converging and diverging patterns in Asian dance and music. Our focus will be on dance traditions of Indonesia, India, Sri Lanka, Afghanistan, the Philippines, and Japan and will incorporate musical traditions that are integral to dance. Readings will situate the traditions in their sociocultural, religious, and aesthetic contexts. This is a reading, viewing, listening, and writing intensive course. Open to all students without prerequisite.

Primary distribution course. 1 credit.

Spring 2003. Chakravorty.

DANC 009. Music and Dance of Africa

An introduction to selected musical and dance traditions of Africa. This course will involve all students in the practice of dancing and drumming as well as in the study of those forms through lectures, reading, listening, and viewing. No prior musical or dance training required.

Not offered 2002-2003.

DANC 010. Dance Improvisation

(Cross-listed as THEA 010)

Designed as a movement laboratory in which to explore the dance elements: space, time, force, and form as well as theatrical elements of focus, breath, psychological and movement motivation, voice, text, and movement as metaphor. Members of the class will investigate improvisation as a performance technique and as a tool for dance composition. Individuals work on a personal vocabulary and on developing a sense of ensemble. A journal and paper are required, and a concurrent course in dance technique is strongly recommended. Three hours per week.

0.5 credit.

Fall 2002. Arrow.

COMPOSITION/HISTORY/THEORY COURSES

DANC 011. Dance Composition I

A study of the basic principles of dance composition through exploration of the elements of time, space, and force, movement invention, and movement themes to understand various choreographic structures. Considerable reading, video and live concert viewing, movement studies, journals, and a final piece for public performance in the Troy dance lab are required. A course in dance technique must be taken concurrently.

Prerequisite: Any dance course or permission of the instructor.

1 credit.

Spring 2003. Staff.

DANC 012. Dance Composition II

An elaboration and extension of the material studied in DANC 011. Stylistically varying approaches to making work are explored in compositions for soloists and groups. Course work emphasizes uSing various approaches and methods (e.g., theme and variation, motif and development, structured improvisation, and others). Reading, video and live concert viewing, movement studies, journals, and a final piece for public performance that may include a production lab component are required. A course in dance technique must be taken concurrently. Students must have previously taken DANC 011 or its equivalent.

1 credit.

Fall 2002. Hess.

DANC 013. Dance Composition: Tutorial

Designed as a tutorial for students who have previously taken DANC 011 or the equivalent. 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 prior to enrollment.

Choreography of a final piece for public performance is required. Weekly meetings with the instructor and directed readings and video and concert viewings. A journal may also be required. A course in dance technique must be taken concurrently.

0.5 credit.

Fall 2002. Friedler. *Spring 2002.* Staff.

DANC 014. Special Topics in Dance Composition

A course that focuses on intensive study of specific compositional techniques and/or subjects. Topics may include autobiography, dance and text, partnering, interdisciplinary collaboration, reconstruction, and technology/videography. Choreography of a final piece for performance is required. Weekly meetings with the instructor, directed readings, video and concert viewing, and a journal will be required. A course in dance technique must be taken concurrently.

Prerequisite: DANC 011.

1 credit.

Spring 2003. Staff.

DANC 021. History of Dance: Africa and Asia

This course will move through an exploration of dance forms from Africa, from African cultures and from Asian cultures, from the perspectives of stylistic characteristics, underlying aesthetics, resonances in general cultural traits, and developmental history. Course work will occasionally focus on one dance style for close examination. Study will be facilitated by guest lecturers, specialists in particular dance forms from these cultures.

Prerequisite: DANC 002. Two lectures and one-hour video viewing per week.

1 credit.

Not offered 2002-2003.

DANC 022. History of Dance: Europe's Renaissance Through 1900

A study of social and theatrical dance forms in the context of various European societies from the Renaissance through the 19th century. Influential choreographers, dancers, and theorists representative of the periods will be discussed.

Prerequisite: DANC 002; DANC 024 strongly recommended. Two lectures and one-hour video viewing per week.

1 credit.

Not offered 2002-2003.

DANC 023. History of Dance: 20th and 21st Centuries

This course is designed to present an overview of 20th and 21st century social and theatrical dance forms in the context of Western societies with an emphasis on North America. Focusing on major stylistic traditions, influential choreographers, dancers, and theorists will be discussed. Through readings, video and concert viewings, research projects, and class discussions, students will develop an understanding of these forms in relation to their own dance practice.

Prerequisite: DANC 002; DANC 021 and 022 strongly recommended. Two lectures and one-hour video viewing per week.

1 credit.

Spring 2003. Friedler.

DANC 024. Dance as Social History

This course focuses on dance as a locus for discussing power relations through gender, race, and class in the period from 1880 to the 1950s in Europe, North America, the Caribbean, and South America. Analysis of a variety of dance forms in their historical/cultural context. Readings, video and concert viewings, research projects, and class discussions are all included.

Prerequisite: DANC 002 or permission of the instructor.

Three hours per week.

1 credit.

Not offered 2002-2003. Staff.

DANC 025. Mapping Culture Through Dance

This course will use anthropological approaches to examine the interrelationship of dance with social relations of culture and power. The course will be shaped as a cross-cultural journey, which will include East Indian, Brazilian, Haitian, African, and other dance styles. Dance will be analyzed in terms of ritual, national/gender identity, and spirituality and as commodities of value and resistance. The overall approach will be to situate dance forms in their historical and contemporary social, political, and economic contexts.

Prerequisite: DANC 002, an introductory course in anthropology, or permission of the instructor.

1 credit.

Spring 2003. Chakravorty.

DANC 028. Special Topics in Dance History: Politics and Aesthetics of Classical Indian Dance

This course will examine classical Indian dance in the context of national and gender identity formation. In the process, it will also examine notions of tradition, modernity, and globality in relation to dance in contemporary India. There will be two major elements: a historical analysis of the nationalist and revivalist movement in India that shaped classical dance, focusing on issues of gender, class, and religion in the formation of ideology; and, second, situating classical Indian dance in the current context of cultural globalization. Anthropological, culture studies, and feminist theories will be used to analyze the changing meaning of classical dance in India.

1 credit.

Not offered 2002-2003.

DANC 035. Women Choreographers and Composers

A survey of women choreographers and composers. Choreographers range from Sallé and Duncan through Graham, Bausch, Tharp, and Zollar, composers from Hildegard through Zwilich. Topics include form, phrasing, text and social/political comment. Open to all students.

1 credit.

Not offered 2002-2003.

DANC 036. Dancing Identities

This course explores ways that age, class, gender, and race have informed dance, particularly performance dance, since 1960. The impact of various cultural and social contexts will be considered. Lectures, readings, and video/concert viewings will all be included. Students will be expected to design and participate in dance/movement studies as well as submit written work.

Prerequisite: DANC 002 or permission of the instructor.

1 credit.

Not offered 2002-2003.

DANC 037. Current Trends in Dance Performance

An investigation of the aesthetic principles of perception, symbolism, abstraction, and creativity in relation to the viewing and interpretation of dance performance. Emphasis will be placed on political interpolation and ramifications of the act of public performance. Topics of discussion will include the "politically correct" paradox, government funding, art as cultural intervention, the evolution of styles, and various historical perspectives. Open to all students without prerequisite.

1 credit.

Fall 2002. Arrow.

DANC 038. Dance and the Sacred

Planned both as a studio and a lecture class. We will explore movement and readings/discussions regarding the presence of the sacred through performance and contemplative practices in several dance traditions from the ancient (India) to the contemporary (American modern dance). Students will be expected to design and participate in dance/movement studies as well as to write. Some dance experience necessary in any technique.

1 credit.

Not offered 2002-2003.

DANC 039. Music and Dance: Criticism and Reviewing

(Cross-listed as MUSI 039)

This course will be team taught by music and dance faculty with supplemental visits by guest lecturers who are prominent in the field of reviewing. It will cover various aspects of writing about the performance of music and dance: previewing, reviewing, the critic's role and responsibilities, and the special problems of relating performance to the written word.

Prerequisite: One previous course in music or dance, concurrent enrollment in a music or dance course, or permission of the instructor.

1 credit.

Not offered 2002-2003.

DANCE TECHNIQUE AND REPERTORY COURSES

Note: Technique courses (040-048, 050-058, 060, and 061) may be taken for 0.5 academic credit or may be taken for physical education credit.

DANC 040. Performance Dance: Modern I

An introduction to basic principles of dance movement: body alignment, coordination, strength and flexibility, and basic locomotion. No previous dance experience necessary. If taken for academic credit, concert attendance and one or two short papers are required.

0.5 credit.

Fall 2002.

Spring 2003. Staff.

DANC 041. Performance Dance: Ballet I

An introduction to fundamentals of classical ballet vocabulary: correct body placement, positions of the feet, head and arms, and basic locomotion in the form. No previous experience necessary. If taken for academic credit, concert attendance and one or two short papers are required.

0.5 credit.

Fall 2002 and spring 2003. Sherman.

DANC 043. Performance Dance: African I

African Dance I introduces students to *Umfundalai.* In a contemporary context, the *Umfundalai* dance tradition surveys dance styles of African people who reside on the continent of Africa and in the Diaspora. Upon completion of the course, students will gain a beginning understanding of how to approach African dance and the aesthetic principles implicit in African-oriented movement. Students enrolled in DANC 043 for academic credit are required to keep a weekly journal and write two short papers.

0.5 credit.

Fall 2002 and spring 2003. Nance.

DANC 044. Performance Dance: 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. If taken for academic credit, concert attendance and one or two short papers are required.

0.5 credit.

Spring 2003. Davis.

DANC 045. Performance Dance: Hatha Yoga

The course will focus on experience/understanding of a variety of asanas (physical postures) from standing poses to deep relaxation. Following the approach developed by B.K.S. Iyengar, its aim is to provide the student with a basis for an ongoing personal practice. If taken for academic credit, required reading and one paper. Open to all students.

0.5 credit.

Fall 2002 and spring 2003. Hess.

DANC 048. Performance Dance: Special Topics in Technique

Intensive study of special topics falling outside the regular dance technique offerings. Topics may include such subjects as Alexander technique, various classical East Indian dance forms, contact improvisation, jazz, pilates, and/or musical theater dance. If taken for academic credit, concert attendance and one or two short papers are required.

0.5 credit.

Fall 2002 and spring 2003: Section 1: Flamenco, Gmitter.

Spring 2003: Section 2: Contact Improvisation, Stein.

Fall 2002 and spring 2003: Section 3: Kathak, Chakravorty.

This course will introduce the basic principles of performance technique in the North Indian classical form Kathak. The focus will be on studying abstract movements and miming/expressive gestures and the rhythmic musical patterns that structure the dance vocabulary. In addition, videos, photographs, paintings, and live performances will be used to provide context. Students who are enrolled for academic credit will be required to write papers and/or create performance texts/choreographies. No previous dance experience necessary.

DANC 049. Performance Dance: Repertory

(Cross-listed as THEA 007)

The study of repertory and performance. Students are required to perform in at least one scheduled dance concert during the semester. Placement by audition or permission of the instructor. Three hours per week. A course in

dance technique must be taken concurrently.

0.5 credit.

Each semester.

Fall 2002: Section 1: Tap, Davis.

Fall 2002: Section 2: Modern, Willett.

This class will offer an orientation to the technique and repertory of Poland's Silesian Dance Theatre. It is particularly recommended for students who are considering participation in the one-semester Study Abroad Program in Poland in conjunction with this dance company. The instructor, a former member of the company, will be reconstructing appropriate sections of company repertoire for participating students.

Several lecture/video screenings will be scheduled outside of class time. Open to all students with some previous dance or theater training.

Fall 2002: Section 3: Kathak, Chakravorty.

The two aspects of Kathak technique *nrtta* (abstract movement) and *nritya* (expressive gestures) will be used to create a dance. Work will include *teen tala* or metrical scales of 16 beats to learn complex rhythmical structures (*bols*). The various patterns of *bols* such as *tukra*, *tehai*, and *paran* will also be explored.

Spring 2003: Section 1: Modern, Staff.

Spring 2003: Section 2: African, Nance.

Spring 2003: Section 3: Le Coq and the Theatre of Gesture, Bauriedel.

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, etc. Taught by Gabriel Quinn Bauriedel of the Pig Iron Theatre Co. 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.

Prerequisites: THEA 001 or 002, any dance course number 040-044, or consent of instructor.

1.0 credit.

Spring 2003. Bauriedel.

DANC 050. Performance Dance: Modern II

An elaboration and extension of the principles addressed in DANC 040 for students who have taken DANC 040 or the equivalent. If taken for academic credit, concert attendance and one or two short papers are required.

0.5 credit.

Fall 2002 and spring 2003. Welsh.

DANC 051. Performance Dance: Ballet II

An elaboration and extension of the principles addressed in Ballet I for students who have taken Ballet I or its equivalent. If taken for academic credit, concert attendance and one or two short papers are required.

0.5 credit.

Fall 2002 and spring 2003. Sherman.

DANC 053.Performance Dance: African II

African Dance for experienced learners gives students an opportunity to strengthen their technique in African Dance. The course will use the Umfundalai technique allied with some traditional West African Dance forms to enhance students' learning. Students who take African Dance II for academic credit should be prepared to explore and access their own choreographic voice through a choreographic project.

0.5 credit.

Fall 2002 and spring 2003. Nance.

DANC 055. Performance Dance: Hatha Yoga II

Open to students who have completed DANC 045 or the equivalent with permission of the instructor. A continuation and deepening of practice of the asanas explored in DANC 045. Work in several of the more advanced asanas, particularly in the backward bending and inverted poses.

If taken for academic credit, required reading and one paper.

0.5 credit.

Fall 2002 and spring 2003. Hess.

DANC 058. Performance Dance: Special Topics in Technique II

An elaboration and extension of principles addressed in DANC 048. If taken for academic credit, concert attendance and one or two short papers are required.

Permission of the instructor required.

0.5 credit.

Not offered 2002-2003.

DANC 060. Performance Dance: Modern III

Continued practice in technical movement skills in the modern idiom, including approaches to various styles. Placement by audition or permission of the instructor.

If taken for academic credit, concert attendance and one or two short papers are required.

0.5 credit.

Fall 2002. Welsh.

Spring 2003. Staff.

DANC 061. Performance Dance: Ballet III

Continued practice in technical movement skills in the ballet idiom with an emphasis on advanced vocabulary and musicality. Placement by audition or with permission of the instructor. If taken for academic credit, concert attendance and one or two short papers are required.

0.5 credit.

Fall 2002 and spring 2003. Sherman.

UPPER-LEVEL CROSS-LISTED COURSES

DANC 070. Theater of Witness

Open to juniors and seniors, Theater of Witness is a model of theater performance that presents the personal and collective life stories of people whose voices are usually not heard in our society. The stories, woven together in spoken word, music, and dance are collaboratively crafted into an original theater piece and performed by the people themselves. The class will focus both on the process of creating original theater from real-life stories as well as exploring the social, political, psychological, and spiritual effects of Theater of Witness as a community building process of healing, education, and transformation. Three hours per week plus internship.

1 credit.

Not offered 2002-2003.

DANC 071. Rhythmic Analysis and Drumming

(Cross-listed as MUSI 071)

A theoretical and practical analysis of rhythmic structure applying techniques of Afro-Cuban drumming and East Indian rhythmic theory. For the general student, emphasis will place the investigation of rhythmic structure within a cultural and contemporary context. For students of dance, additional focus will be provided on the uses of drumming in dance composition, improvisation and as accompaniment in the teaching of dance technique. Open to all students. Three hours per week.

0.5 credit.

Spring 2003. Arrow.

DANC 073. Arts Administration for Performance

(Cross-listed as THEA 073)

Available to students participating in the Poland Program. Will require students to extend their stay in Poland through early July 2003.

By arrangement with Allen Kuharski.

1 credit.

Spring 2003.

DANC 074. Scenography for Dance Theatre Performance

(Cross-listed as THEA 074)

Available to students participating in the Poland Program. Will require students to extend their stay in Poland through early July 2003.

By arrangement with William Marshall.

Prerequisites: THEA 004B and 014.

1 credit.

Spring 2003.

DANC 075. Special Topics in Dance Theatre

Available to students participating in the Ghana or Poland Programs.

By arrangement with Sharon Friedler.

Prerequisites: DANC 002 or 011 or consent of dance program director.

1 credit.

Fall 2002 and spring 2003.

DANCE 078. Dance/Drum Ensemble

(Cross-listed as MUSI 078)

This repertory course draws on a variety of dancing and drumming traditions from around the world as well as creating new hybrid forms. In 2002, focus will be on material from Guinea in West Africa, Japanese Taiko, and fusion

material created for the ensemble. Guests will include M'Bemba Bangoura and others. Open to all students without prerequisite. Students can participate as dancers, drummers, or both.

0.5 credit

Fall 2002. Arrow, Friedler.

Dance 076. Movement and Cognition

(Cross-listed as LING 057 and MATH 007)

English, Scottish, and Italian folk dance are analyzed, using group theory, graph theory, morphological theory, and syntactic theory, in an effort to understand the temporal and spatial symmetries of the dances. One focus will be a comparison of the insights offered by the mathematical and linguistic approaches.

Prerequisites: One course in linguistics, a willingness to move your body and learn some basic math.

1 credit.

Not offered 2002-2003.

DANC 091. Special Projects (Issues in Music and Dance Education)

(Cross-listed as EDUC 071 and MUSI 091)

An introduction to the fields of music and dance education. This course will involve frequent visits to schools, studios, and other educational institutions in the Philadelphia area. We will observe a variety of teaching methods and discuss the guiding principles of music and dance education. We will also address such questions as the place of music and dance in higher education in general and at Swarthmore in particular. In some cases, course work may include practice teaching, depending on student experience and inclination. Open to any student who has taken at least one course in music, dance, or education.

0.5 credits (CR/NCR).

Not offered 2002-2003.

ADVANCED INDEPENDENT WORK

DANC 092. Independent Study

Available on an individual or group basis, this course offers students an opportunity to do special work with performance or compositional emphasis in areas not covered by the regular curriculum. Students will present performances and/or written reports to the faculty supervisor, as appropriate. Permission must be obtained from the program director and from the supervising faculty.

1 credit.

Each semester. Staff.

DANC 093. Directed Reading

Available on an individual or group basis, this course offers the student(s) an opportunity to do special work with theoretical or historical emphasis in areas not covered by the regular curriculum. Students will present written reports to the faculty supervisor. Permission must be obtained from the program director and from the supervising faculty.

1 credit.

Each semester. Staff.

DANC 094. Senior Project

Intended for seniors pursuing the special major or the major in course or honors, this project is designed by the student in consultation with a dance faculty adviser. The major part of the semester is spent conducting independent rehearsals in conjunction with weekly meetings under an adviser's supervision. The project culminates in a public presentation and the student's written documentation of the process and the result. An oral response to the performance and to the documentation follows in which the student, the adviser, and several other members of the faculty participate. In the case of honors majors, this also involves external examiners. Proposals for such projects must be submitted to the dance faculty for approval during the semester preceding enrollment. Previous or concurrent enrollment in an advanced-level technique course or demonstration of advanced-level technique is required.

1 credit.

Each semester. Friedler, Hess, or Arrow.

DANC 095, 096. Senior Thesis

Intended for seniors pursuing the special major or the major in course or honors, the thesis is designed by the student in consultation with a dance faculty adviser. The major part of the semester is spent conducting independent research in conjunction with weekly tutorial meetings under an adviser's supervision. The final paper is read by a committee of faculty or,

in the case of honors majors, by external examiners who then meet with the student for evaluation of its contents. Proposals for a thesis must be submitted to the dance faculty for approval during the semester preceding enrollment.

1 or 2 credits.

Each semester. Friedler, Hess, or Arrow.

DANC 199. Senior Honors Study

A close study of a single dance work, from the multiple points of view of dance history, compositional analysis, and/or performance.

1 credit.

Each semester. Friedler, Hess, or Arrow.

Peace and Conflict Studies

Chair: **AMANDA BAYER** (Economics)
Jenny Gifford (Administrative Assistant)

Committee: **Wendy E. Chmielewski** (Peace Collection)
J. William Frost (Religion)
Raymond F. Hopkins (Political Science)[3]
Jennie Keith (Sociology/Anthropology)
Hugh Lacey (Philosophy)
Andrew Ward (Psychology)

3 Absent on leave, 2002-2003.

The Peace and Conflict Studies Program at Swarthmore College provides students with the opportunity to examine conflict and cooperation within and between nations. The multidisciplinary curriculum explores the causes, practices, and consequences of collective violence and terrorism as well as peaceful or nonviolent methods of conflict management and resolution. The program offers courses in the following areas: (1) alternatives to fighting as a way of settling disputes, including conflict resolution, rituals, nonviolence, mediation, peacekeeping forces, private peace-fostering organizations, arms control, economic sanctions, international law, and international organizations; (2) the causes of collective violence, including aggression and human nature, the state system and international anarchy, systemic injustice, competition for scarce resources, diplomacy, ethnocentrism, ideological and religious differences, insecure boundaries, minorities within states, and arms races; (3) the nature of war and conflict, including civilian and military objectives, the political economy of war, strategy and tactics, deterrence theory, low-intensity conflict, psychology of battle, prisoners of war, neutral rights, draft and conscientious objectors, the experience of war by soldiers and civilians, conventional, nuclear, and guerrilla wars, how to end a war, and the aftereffects of war; and (4) the evaluation of war and violence, including the morality of war and violence, just war theory, pacifism, war mentality, the utility of war, war novels, and the responsibilities of citizens directly or indirectly involved in war and violence.

Students with any major, whether in course or in the Honors Program, may add a course minor in peace and conflict studies. Alternatively, students in the Honors Program may choose an honors minor in peace and conflict studies. Students who intend to minor in peace and conflict studies should submit a copy of their sophomore paper to the chair of the program during the spring of the sophomore year, after consultation with program faculty members. The paper should present a plan of study that satisfies the requirements stated later, specifying the courses to count toward the minor. All applications must be approved by the Peace and Conflict Studies Committee.

REQUIREMENTS AND RECOMMENDATIONS

Minor

A minor in peace and conflict studies consists of 6 credits, of which only 2 may be taken in the student's major. Introduction to Peace Studies (PEAC 015) is the only required course.

Student programs can include an internship or fieldwork component (e.g., in a peace or conflict management organization such as the United Nations or Suburban Dispute Settlement). An internship is highly recommended. Fieldwork and internships normally do not receive credit. However, students can earn up to 1 credit for special projects that are developed with an instructor and approved in advance by the Peace and Conflict Studies Committee.

Honors Minor

Students in the Honors Program who choose an honors minor in peace and conflict studies must complete one preparation for external examination. This 2-credit preparation can be a seminar, a combination of two courses in different departments, a 2-credit thesis, or a combination of a thesis and a course. Any thesis must be multidisciplinary. The proposed preparation must be approved by the Peace and Conflict Studies Committee.

Any student who minors in peace studies must meet the requirement of six units of study, of which no more than 2 credits can come from the major department. Introduction to Peace Studies (PEAC 015) is required and should be taken no later than the junior year. Again, fieldwork or an internship is highly recommended.

Students whose minor in peace studies can be incorporated into the final requirements for senior honors study in the major should do so. The Peace and Conflict Studies Committee will work out the guidelines for the integration exercise with the student and the major department.

COURSES

The following courses constitute the foundation for work in peace and conflict studies. Student programs may, subject to prior approval by the committee, also include independent study; special attachments to courses that are not listed here; and courses offered at Haverford College, Bryn Mawr College, the University of Pennsylvania; and abroad.

PEAC 015. Introduction to Peace Studies

This course begins with an examination of perspectives on the causes of war, using many disciplines (including biology, psychology, history, political science, sociology and anthropology, and economics), then considers various governmental and private organizations and methods supposed to alleviate the causes of war. Topics to be discussed include the United Nations, international law, arms control, disarmament, and the work of nongovernmental organizations for peace.

This course can be counted for distribution as a social science unit, but it is not a primary distribution course. Normally, it may not be used to fulfill any department's major requirements.

1 credit.

Fall 2002. Frost.

PEAC 056. Human Rights, Refugees, and International Law

This course will explore international human rights vis-à-vis the United Nations and related agencies (including the politics leading to their development, their mandate, and their limits). In addition, the course will analyze major human rights treatises and the politics of their enforcement in the international arena. Finally, the course will examine causes and effects of human rights violations, resulting in refugees and their search for asylum.

1 credit.

Spring 2003. Chang-Muy.

PEAC 070. Research Internship/Fieldwork

Credit hours to be arranged with the chair.

PEAC 090. Thesis

Credit hours to be arranged with the chair.

ECON 012. Games and Strategies

ECON 051. The International Economy*

ECON 053. International Political Economy*

ECON 081. Economic Development*

ECON 082. Political Economy of Africa

ECON 151. International Economics: Seminar*

HIST 028. Nations and Nationalism in Eastern Europe: 1848-1998

HIST 037. History and Memory: Perspectives on the Holocaust

HIST 049. Race and Foreign Affairs

HIST 134. U.S. Political and Diplomatic History

POLS 004. International Politics

POLS 045. Defense Policy

POLS 047. Global Policy and International Institutions: Hunger and Environmental Threats

POLS 068. International Political Economy*

POLS 074. International Politics: Special Topics*

POLS 111. International Politics: Seminar

PSYC 047. Applications of Social Psychology*

RELG 006. War and Peace

RELG 026B. Buddhist Social Ethics

RELG 110. Religious Belief and Moral Action

SOAN 003B. Nations and Nationalism

SOAN 022E. Indigenous Resistance and Revolt in Latin America

SOAN 022G. Social Movements in Latin America

SOAN 026C. Power, Authority, and Conflict

SOAN 046B. Social Inequality

SOAN 056B. Standoffs, Breakdowns, and Surrenders

Please consult departmental course listings for descriptions and scheduling.

* Courses marked with an asterisk are eligible for a peace and conflict studies minor on special arrangement with the instructor and the program chair.

Philosophy

RICHARD ELDRIDGE, Professor and Chair
HUGH M. LACEY, Professor
HANS F. OBERDIEK, Professor
CHARLES RAFF, Professor
RICHARD SCHULDENFREI, Professor
GRACE LEDBETTER, Associate Professor
TAMSIN LORRAINE, Associate Professor
DONNA MUCHA, Administrative Assistant

Philosophy analyzes and comments critically on concepts that are presupposed, embodied, and developed 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.

REQUIREMENTS AND RECOMMENDATIONS

Prerequisites

The Philosophy Department offers several kinds of courses designed to engage students in philosophical practices. Courses and seminars are offered to introduce students to the major systematic works of the history of Western philosophy and works by Plato and Aristotle (Ancient Philosophy); Descartes, Hume, and Kant (Modern Philosophy); Hegel and Marx (Nineteenthth-Century Philosophy); Kierkegaard, Nietzsche, Sartre, Heidegger, and de Beauvoir (Existentialism); and Russell and Wittgenstein (Contemporary Philosophy). Some courses and seminars consider arguments and conclusions in specific areas of philosophy: Theory of Knowledge, Logic, Moral Philosophy, Metaphysics, Aesthetics, and Social and Political Philosophy. Other courses and seminars are concerned with the conceptual foundations of various other disciplines: Aesthetics, Philosophy of Science, Philosophy of Language, Philosophy of Law, Philosophy of the Social Sciences, Philosophy of Psychology, Philosophy of Mathematics, and Philosophy of Religion. From time to time, courses and seminars are offered on meaning, freedom, and value in various domains of contemporary life: Values and Ethics in Science and Technology, Feminist Theory, and Biotechnology and Society.

Students majoring in philosophy must complete at least one course or seminar in Logic and either Ancient or Modern Philosophy and earn a total of 8 credits, not counting senior course study or senior honors study. In addition, students majoring in philosophy are urged to take courses and seminars in diverse fields of philosophy. Prospective majors should complete the logic requirement as early as possible. Course majors are encouraged to enroll in seminars. Mastery of at least one foreign language is recommended. All course majors will complete senior course study in philosophy.

Students may complete a minor in philosophy by earning any 5 credits in philosophy courses. No distribution requirement exists for the minor.

Satisfactory completion of either any section of PHIL 001: Introduction to Philosophy or PHIL 012: Logic are prerequisites for taking any further course in philosophy. All sections of Introduction to Philosophy are primary distribution courses in the humanities. Students may not take two different sections of Introduction to Philosophy, with one exception: the section of Introduction to Philosophy that focuses on the philosophy of science may be taken after completing another section of Introduction to 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.

Primary distribution course. 1 credit.

Each semester. Staff.

PHIL 011. Moral Philosophy

Though there will be some attention paid to contemporary thinkers, the focus of this course will be traditional views of substantive ethics. We will discuss and compare views of how one should live, contrasting different views on the relative importance and relationship of, for example, knowledge, freedom, and pleasure. Other values that may be discussed are tranquillity, human relationships, autonomy, and the search for objective good.

1 credit.

Spring 2003. Schuldenfrei.

PHIL 012. Logic

An introduction to the principles of deductive logic with equal emphasis on the syntactic and semantic aspects of logical systems. The place of logic in philosophy will also be examined.

No prerequisite. Required of all philosophy majors.

1 credit.

Fall 2002. Lacey.

PHIL 013. Modern Philosophy

Seventeenth- and 18th-century sources of modernity in philosophical problems of knowledge, freedom, humanity, nature, and God. Readings from Descartes, Spinoza, Leibniz, Locke, Berkeley, Hume, Reid, and Kant.

1 credit.

Spring 2003. Raff.

PHIL 015. Biotechnology and Society: The Case of Agriculture

(Cross-listed as BIOL 005)

An introduction to biotechnology, as it pertains to agricultural (and not biomedical) applications and to issues in the ethics and philosophy of science. Topics including biotechnological methods, ethical problems raised by recent innovations in biotechnology in agricultural practices and associated legal matters, consumer rights, biodiversity and environmental impact, long-term conduct of agricultural practices and the growth of agribusiness, patents/intellectual properties and their effects on the conduct of science, and Third World perspectives will be presented and discussed. Students will be evaluated on presentations, participation in discussions, and written work.

Prerequisites: BIOL 001 or approval of instructors.

1 credit.

Not offered 2002-2003.

PHIL 016. Philosophy of Religion

(See RELG 015B.)

PHIL 017. Aesthetics

On the nature of art and its roles in human life, considering problems of interpretation and evaluation and some specific medium of art: Who should care about art? Why? How?

1 credit.

Spring 2003. Eldridge.

PHIL 018. Science, Values, and Objectivity

The course will examine the nature of both science and values. It will explore ways in which the sciences (particularly the natural sciences) do and may legitimately interact with moral and social values, and ways in which scientific knowledge can contribute to making sound value judgments. The idea that the sciences are, or ought to, value free will be critically discussed, as will questions of objectivity and relativism connected with both science and values. Central readings will include Hugh Lacey, *Is Science Value Free? Values and Scientific Understanding* (1999); Helen E. Longino, *The Fate of Knowledge* (2001); and Philip Kitcher, *Science, Truth, and Democracy* (2001). All of the issues discussed will be illustrated by means of a detailed case study of current conflicts connected with the use of genetically modified organisms in agriculture.

1 credit.

Fall 2002. Lacey.

PHIL 019. Philosophy of Social Science

This course examines the various kinds of explanations, (rational choice, structural, functional, etc.) used in the social sciences, ques-

tions of relativism and the testing of social science proposals, the roles that values play and ought to play in social science, and differences between the natural and the social sciences.

1 credit.

Spring 2003. Lacey.

PHIL 020. Plato

An introduction to the thought of Plato through close readings of some of the major dialogues. Topics will vary from year to year.

1 credit.

Spring 2003. Ledbetter.

PHIL 021. Social and Political Philosophy

(See PHIL 121.)

1 credit.

Fall 2002. Schuldenfrei.

PHIL 023. Contemporary Philosophy

Current topics in metaphysics.

1 credit.

Not offered 2002-2003.

PHIL 024. Theory of Knowledge

Topics include the nature, limits, and varieties of rationality, knowledge, meaning, and understanding. Readings from current and traditional sources.

1 credit.

Fall 2002. Raff.

PHIL 025. Philosophy of Mathematics

Topics will include the nature of mathematical objects and mathematical knowledge, proof and truth, mathematics as discovery or creation, the character of applied mathematics, and the geometry of physical space. A considerable range of 20th-century views on these topics will be investigated including logicism (Frege and Russell), formalism (Hilbet), intuitionism (Brouwer and Dummett), platonism (Gödel), and empiricism (Kitcher). Important mathematical results pertaining to these topics, their proofs, and their philosophical implications will be studied in depth (e.g., the paradoxes of set theory, Gödel's incompleteness theorems, and relative consistency proofs for non-Euclidean geometries).

Prerequisites: Logic, acceptance as a major in mathematics, or approval of instructor.

1 credit.

Not offered 2002-2003.

PHIL 026. Language and Meaning

(See PHIL 116.)

1 credit.

Not offered 2002-2003.

PHIL 029. Philosophy of Modern Music

This course will survey the rise and evolution of so-called absolute music (purely instrumental music, without either text or immediate liturgical function) as a significant form of cultural expression from 1750 to the present. The focus of attention will be various historic-philosophical accounts of the meanings and functions of such musical works in culture, ranging from how they present images of human freedom to how they encode gender oppositions and social antagonisms. An ability to follow a score and some awareness (but not substantial music historical knowledge) of the relative dates of major composers of Western art music (e.g., Beethoven is just before Schubert) is required. 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 Kramer, and Jacques Attali.

1 credit.

Not offered 2002-2003.

PHIL 039. Existentialism

In this course, we will examine existentialist thinkers such as Nietzsche, Kierkegaard, Heidegger, Sartre, Beauvoir, and Camus to explore themes of contemporary European philosophy, including the self, responsibility and authenticity, and the relationships between body and mind, fantasy and reality, and literature and philosophy.

1 credit.

Not offered 2002-2003.

PHIL 040. Semantics

(See LING 040.)

PHIL 044. Torah and Logos: Judaism and Philosophy

(Cross-listed as RELG 045)

This course will compare and contrast two world views: Judaism and philosophy. Among

the topics we will examine are ethics, history and memory, the role of reason, and hermeneutics.

1 credit.

Not offered 2002-2003.

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-to-power (Nietzsche), one's understanding of reality as the effect of class position (Marx), and consciousness as the effect of unconscious forces (Freud) provide an important background to contemporary questions about the nature of reality, human identity, and social power.

1 credit. Writing-intensive course. Limited to 12 students.

Not offered 2002-2003.

PHIL 055. Philosophy of Law

An inquiry into major theories of law, with emphasis on implications for the relation between law and morality, principles of criminal and tort law, civil disobedience, punishment and excuses, and freedom of expression.

1 credit.

Spring 2003. Oberdiek.

PHIL 079. Poststructuralism

This course will examine poststructuralist thinkers such as Foucault, Derrida, Kristeva, and Deleuze in light of contemporary questions about identity, embodiment, the relationship between self and other, and ethics.

1 credit.

Not offered 2002-2003.

PHIL 086. Philosophy of Mind and Psychology

This course will deal with the concept of mind, the relation of the mental and the physical, the nature of consciousness and intentionality, the nature of personhood, and related topics.

1 credit.

Not offered 2002-2003.

PHIL 093. Directed Reading

Each semester. Staff.

PHIL 096. Thesis

Each semester. Staff.

PHIL 099. Senior Course Study

Spring semester. Staff.

SEMINARS

PHIL 101. Moral Philosophy

An examination of the principal theories of value, virtue, and moral obligation, and of their justification. The focus will be primarily on contemporary treatments of moral philosophy. A central question of seminar will be the possibility and desirability of moral theory.

2 credits.

Spring 2003. Oberdiek.

PHIL 102. Ancient Philosophy

A study of the origins of Western philosophical thought in Ancient Greece, from the pre-Socratics through the Hellenistic schools. We will examine the doctrines of the Milesians, Heraclitus, Parmenides, Plato, Aristotle, the Epicureans, the Stoics, and the Skeptics.

2 credits.

Fall 2002. Ledbetter.

PHIL 103. Selected Modern Philosophers

Two or more philosophical systems of Descartes, Spinoza, Leibniz, Locke, Berkeley, Hume, or Kant and their relations.

2 credits.

Spring 2003. Raff.

PHIL 104. Contemporary Philosophy

Twentieth-century classics by Frege, Moore, Russell, and Wittgenstein selected for treatment and as ground for intensive study of one current philosophical issue or a single text.

2 credits.

Not offered 2002-2003.

PHIL 106. Aesthetics and Theory of Criticism

On the nature of art and its roles in human life, considering problems of interpretation and evaluation and some specific medium of art.

2 credits.

Spring 2003. Eldridge.

PHIL 109. Semantics

(See LING 109.)

PHIL 111. Philosophy of Religion

(See Religion Department.)

Preparation by course and attachment.

PHIL 113. Theory of Knowledge

Traditional and current theories of knowledge and their alternatives. Topics include self-deception, dreaming, perception, theorizing, and the nature of knowledge.

2 credits.

Not offered 2002-2003.

PHIL 114. Nineteenth-Century Philosophy

The historical treatment of such topics as knowledge, morality, God's existence, and freedom in Kant, Fichte, Hegel, Feuerbauk, Marx, and Nietzsche.

2 credits.

Fall 2002. Eldridge.

PHIL 116. Language and Meaning

Behaviorist theories of meaning, cognitivist theories of meaning, and conceptions of language as a social practice will be surveyed and criticized.

2 credits.

Not offered 2002-2003.

PHIL 118. Philosophy of Psychology

This course explores the extent to which the categories of explanation of thought and action that come from practical life (reasons and goals) constrain or limit scientific explanations of the kinds put forward in cognitive psychology, behaviorism, and artificial intelligence theory.

2 credits.

Not offered 2002-2003.

PHIL 119. Philosophy of Science

Selected issues, for example, the nature of scientific explanation and evidence, the relationship between theory and observation, the rationality of science, and the alleged value of freedom of science.

2 credits.

Spring 2003. Lacey.

PHIL 121. Social and Political Philosophy

Sources for this seminar will range from ancient to contemporary. Among the theorists who may be considered are Plato, Hobbes, Locke, Rousseau, Rawls, MacIntyre, Taylor, Shklar, Rorty, and Habermas.

2 credits.

Fall 2002. Oberdiek.

PHIL 122. Philosophy of Law

Not offered 2002-2003.

PHIL 139. Phenomenology, Existentialism, and Poststructuralism

In this course, we will examine the themes of reality, truth, alienation, authenticity, death, desire, and human subjectivity as they emerge in contemporary European philosophy. We will consider thinkers such as Nietzsche, Husserl, Heidegger, Derrida, and Irigaray to place contemporary themes of poststructuralist thought in the context of the phenomenological, existential, and structuralist thought out of which they emerge.

2 credits.

Spring 2003. Lorraine.

PHIL 145. Feminist Theory Seminar

If the power of a social critique rests on its ability to make general claims, then how do we account for the particularity of women's various social situations without sacrificing the power of a unified theoretical perspective? In this course, we will explore possibilities opened by poststructuralist theory, postcolonial theory, French feminist theory, and other forms of feminist thought, to examine questions about desire, sexuality, and embodied identities, and various resolutions to this dilemma.

2 credits.

Not offered 2002-2003.

PHIL 180. Thesis

A thesis may be submitted by majors in the department in place of one honors paper, on application by the student and at the discretion of the department.

PHIL 199. Senior Honors Study

Spring semester.

Physical Education and Athletics

ROBERT E. WILLIAMS, Professor and Chair
SUSAN P. DAVIS, Professor
MICHAEL L. MULLAN, Professor
LEE WIMBERLY, Professor
KAREN BORBEE, Associate Professor[1]
ADRIENNE SHIBLES, Associate Professor[1]
ADAM HERTZ, Associate Director of Athletics
AMY L. BRUNNER, Coach/Instructor
PAT GRESS, Coach/Instructor
FRANK AGOVINO, Coach/Instructor
PETER CARROLL, Coach/Instructor
MARK DUZENSKI, Sports Information/Coach/Instructor
MITCH KLINE, Coach/Instructor (part time)
HARLEIGH LEACH, Coach/Instructor
ERIC WAGNER, Coach/Instructor
SHARON GREEN, Administrative Assistant
MARIAN FAHY, Administrative Assistant

1 Absent on leave, fall 2002.

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 these 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 Athletic 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.

Students are encouraged to enjoy the instructional and recreational opportunities offered by the department throughout their college careers. All students not excused for medical reasons are required to complete a four-quarter (two-semester) program in physical education. All students must pass a survival swimming test or take up to one quarter of swimming instruction. The swim test and the two semesters of physical education are requirements for graduation.

REQUIREMENTS AND RECOMMENDATIONS

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 the listed dance courses, which are semester-long courses. To receive credit for any part of the program, students must participate in their chosen activity a minimum of three hours a week. Students are encouraged to complete the requirement by the end of their sophomore year. Independent study for physical education is *not* permitted.

Fall Activities

Aerobics
Aikido I, II
Aquatics I, II, III
*‡ Basketball
**** Cross-Country
‡ Field Hockey
Folk Dance
Improving Cardiovascular Fitness
Med X
Power Yoga
*‡ Soccer
Squash
*‡ Tennis
Vechi Ryu Karate
** Volleyball
Weight Training

Winter Activities

Aerobics
Aikido I, II
** Badminton
*‡ Basketball
Fencing
Folk Dance
**** Indoor Track and Field
Lifeguard Training
Med X
Power Yoga
Squash
**** Swimming
Swiss Ball Training
Tennis
Vechi Ryu Karate
Volleyball
Weight Training

Spring Activities

Aerobics
Aikido I, II
Aquatics Techniques and Fitness
*** Baseball
Folk Dance (continued)
*** Golf
**** Lacrosse
Med X
Power Yoga
‡ Softball
Swiss Ball Training
*‡ Tennis
**** Track and Field
Ultimate Frisbee
Vechi Ryu Karate
Volleyball
Weight Training

‡ Intercollegiate competition for women.
* Intercollegiate competition for men and course instruction for men and women.
** Intercollegiate competition for women and course instruction for men and women.
*** Intercollegiate competition for men.
**** Intercollegiate competition for men and women.

Physics and Astronomy

JOHN R. BOCCIO, Professor[1]
PETER J. COLLINGS, Professor
FRANK A. MOSCATELLI, Professor[3]
MICHAEL R. BROWN, Associate Professor
AMY L.R. BUG, Associate Professor and Chair
CARL H. GROSSMAN, Associate Professor
DAVID H. COHEN, Assistant Professor of Astronomy
ERIC L.N. JENSEN, Assistant Professor of Astronomy
ANDREA L. STOUT, Assistant Professor
CHRISTOPHER BURNS, Visiting Assistant Professor
DARRELL SCHROETER, Visiting Assistant Professor (part time)
MARY ANN KLASSEN, Lecturer
PRUDENCE G. SCHRAN, Lecturer
JAMES HALDEMAN, Instrumentation/Computer Technician
STEVEN PALMER, Machine Shop Supervisor
DEBORAH J. ECONOMIDIS, Administrative Assistant

1 Absent on leave, fall 2002.

3 Absent on leave, 2002-2003.

The program of the Physics and Astronomy Department stresses the concepts and methods that have led to an understanding of the fundamental laws explaining the physical universe.

Throughout the work of the department, emphasis is placed on quantitative, analytical reasoning, as distinct from the mere acquisition of facts and skills. 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, computer simulation, liquid crystals, biophysics, and observational and theoretical astrophysics.

The department maintains the historic Sproul telescope, a 61-cm refractor, equipped with a CCD camera, plus several small telescopes for instructional use. A monthly visitors' night at the observatory is announced in *The Weekly News*.

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 is normally preceded by PHYS 006, PHYS 006H, or ASTR 003, is at a higher level. It is aimed toward students planning to do further work in physics or astronomy and is also appropriate for engineering and chemistry majors. The four-course sequence 006H, 007, 008, and 014 is designed to provide a comprehensive introduction to all major areas of physics.

Additional information is available via the World Wide Web at http://laser.swarthmore.edu/.

REQUIREMENTS AND RECOMMENDATIONS

Major Degree Requirements

The basic Physics Program is intended for students not planning to pursue graduate work. It consists of PHYS 006H (or PHYS 006 or ASTR 003), 007, 008, 014, and 050 in the first

two years followed by PHYS 111, 112, 113, and 114 in the last two years. In addition, the shop course PHYS 063 and the advanced laboratory courses ENGR 072A and PHYS 082 and MATH 005, 006A, 006B, 016, and 018 must be taken.

The basic program in astronomy is intended for students not planning to pursue graduate work. It consists of ASTR 003 (or PHYS 006H or PHYS 006), and PHYS 007, 008, 014, and ASTR 016. In addition, four astronomy seminars and MATH 005, 006A, 006B, and 018 must be taken.

The basic programs listed earlier cover all of the fundamental areas in the discipline. Students preparing for graduate study in physics or astronomy should choose one of the advanced programs listed later.

The advanced program in physics is PHYS 006H (or ASTR 003 or PHYS 006), and PHYS 007, 008, 014, and 050 in the first two years followed by PHYS 111, 112, 113, 114, and 115 in the last two years. In addition, the shop course PHYS 063 and the advanced laboratory courses ENGR 072A and PHYS 082, and MATH 005, 006A, 006B, 016, and 018 must be taken.

The advanced program in astrophysics is ASTR 003 (or PHYS 006H or PHYS 006) and PHYS 007, 008, 014, 050, and ASTR 016, followed by PHYS 111, 112, 113, and 114, plus two astronomy seminars. In addition, MATH 005, 006A, 006B, 016, and 018 must be taken.

Students wishing an even stronger background for graduate work and a deeper look at one or more special fields may take an extended program by adding elective seminars in physics or astronomy and/or a research project/thesis.

Seniors not taking the external examinations must complete a comprehensive exercise in the senior year, which is not only intended to encourage review and synthesis but also requires students to demonstrate mastery of fundamentals studied during all four years.

Criteria for Acceptance as a Major

Students applying to become a physics major should have completed or be completing PHYS 014, PHYS 050, and MATH 018. If applying for an astrophysics or astronomy major, they should also have completed ASTR 016. Applicants must normally have an average grade in all physics and/or astronomy courses as well as in MATH 016 and 018 of C or better.

Because almost all advanced work in physics and astronomy at Swarthmore is taught in seminars, where the pedagogical responsibility is shared by the student participants, 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.

Advanced Laboratory Program

The advanced laboratory courses, namely, ENGR 072A (electronics lab), PHYS 063, and PHYS 082 (each 0.5 credit) require approximately one afternoon a week. Students enrolled in these must arrange their programs so that they can schedule a time for lab each week, free of conflicts with other classes, seminars, extracurricular activities, and sports.

Independent Work

Physics 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). Many opportunities exist for students to work with faculty members on research projects during the summer or semester. In preparation for independent experimental work, prospective physics majors are urged to take the required course PHYS 063: Procedures in Experimental Physics during the fall semester of their sophomore year, which will qualify them to work in the departmental shops.

Teacher Certification

We offer teacher certification in physics through a program approved by the state of Pennsylvania. Because of a change in teacher certification regulations that occurred in November 2000, students completing certification during 2002 to 2003 will need to fulfill somewhat different course requirements from those who complete certification in 2004 and beyond. For further information about the relevant set of requirements, please contact the Educational Studies Department chair, the Physics Department chair, or the Educational Studies Department Web site: www.swarthmore.edu/SocSci/Education/.

Minor Degree Requirements

Our department offers two types of course

minors: one in physics and one in astronomy.

The physics minor consists of PHYS 006H (or PHYS 006 or ASTR 003), PHYS 007,* PHYS 008,* PHYS 014, PHYS 050, and PHYS 111 and PHYS 113.+ Corequisites are MATH 005, 006, and 018. (*In some cases, PHYS 003 and/or PHYS 004 may be substituted for PHYS 007 and/or PHYS 008.) (+Minors should have two advanced seminars, preferably one in "classical" and one in "quantum" physics. PHYS 111 is a prerequisite for the future seminars and fulfills the "classical" requirement. Although we recommend PHYS 113 as the second advanced seminar, a different seminar may be substituted on consultation with the chair.)

The astronomy minor consists of PHYS 006H (or ASTR 003 or PHYS 006), PHYS 007 or PHYS 003, PHYS 008 or PHYS 004, ASTR 016, one astronomy seminar numbered 100 or above, and one semester of ASTR 061 (0.5 credits). Corequisites are MATH 005 and 006.

EXTERNAL EXAMINATION PROGRAM

To be accepted into the External Examination Program in the department, the applicant must normally have an average grade in all physics and/or astronomy courses of B or better.

External examinations are based on the topics covered in the following seminars: Physics: PHYS 111, 112, 113, 114, and 115, plus a research or library thesis; Astrophysics: three of the following (PHYS 111, 112, 113, or 114); two of the following (ASTR 121, 123, 126, or 128), plus a research or library thesis; Astronomy: ASTR 121, 123, 126, and 128, plus a 2-credit research or library thesis.

Minors in physics, astrophysics, and astronomy take an external examination based on two seminars from the previous lists.

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, rigid body rotation, special relativity, and thermodynamics. Includes one laboratory weekly.

Prerequisite: MATH 005 (can be taken concurrently).

1 credit.

Fall 2002. Schroeter.

PHYS 004. General Physics II

Topics include wave phenomena, geometrical and physical optics, electricity and magnetism, direct and alternating-current circuits, and introductory quantum physics. Includes one laboratory weekly.

Prerequisite: MATH 006A (can be taken concurrently). PHYS 003 or permission.

1 credit.

Spring 2003. Stout.

PHYS 006. The Character of Physical Law

An introduction to the concepts of physics and the thought processes inherent to the discipline. The primary emphasis of the course will be on the accepted principles of physics and their application to specific areas. Attention will be given to philosophical aspects of physics, discussions of what kind of problems physicists address, and how they go about addressing them. The course includes a substantial writing component. Three lecture/discussion sections per week and a laboratory.

Primary distribution course. 1 credit.

Fall 2002. Bug.

PHYS 006H. The Character of Physical Law

For first-year students only. Seminar format that covers the material of PHYS 006 but more quickly and in greater detail. Designed for students seeking a more rigorous course as a preparation for further work in physics.

Primary distribution course. 1 credit.

Fall 2002. Collings.

PHYS 007. Introductory Mechanics

An introduction to classical mechanics and special relativity. Includes the study of the kinematics and dynamics of point particles; conservation principles involving energy, momentum, and angular momentum; rotational motion of rigid bodies; oscillatory motion; and relativistic kinematics and dynamics. Includes one laboratory weekly.

Prerequisites: MATH 006A (can also be taken concurrently), PHYS 006H (or PHYS 006 or ASTR 003), or permission.

1 credit.

Spring 2003. Boccio.

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, and Maxwell's equations. Includes one laboratory weekly.

Prerequisites: PHYS 007; MATH 006A or 006C; 016 or 018 (can be taken concurrently).

1 credit.

Fall 2002. Stout.

PHYS 014. Thermodynamics and Quantum Physics

An introduction to thermodynamics and temperature, heat, work, and entropy. Introduction to quantum mechanics using one-dimensional systems. Includes one laboratory weekly.

Prerequisites: PHYS 003 and 004 or PHYS 007 and 008.

1 credit.

Spring 2003. Collings.

PHYS 020. Principles of the Earth Sciences

An analysis of the forces shaping our physical environment, drawing on the fields of geology, geophysics, meteorology, and oceanography. Includes some laboratory and fieldwork.

Primary distribution course. 1 credit.

Not offered 2002-2003.

PHYS 021. Light and Color

The fundamentals of light from the classical and quantum physical viewpoint. Extensive use of examples from art, nature, and technology will be made. Two or three lectures per week plus a special project/laboratory.

1 credit.

Not offered 2002-2003.

PHYS 023. Relativity

A nonmathematical introduction to the special and general theories of relativity as developed by Einstein and others during the 20th century.

Primary distribution course. 1 credit.

Not offered 2002-2003.

PHYS 025. In Search of Reality

By investigating the assumptions, theories, and experiments associated with the study of reality in quantum physics, we will attempt to decide whether the question of the existence of an intelligible external reality has any meaning.

1 credit.

Not offered 2002-2003.

PHYS 029. Seminar on Gender and (Physical) Science

This seminar will take a multifaceted approach to the question: "What are the connections between a person's gender, race, or class and their practice of science?" The history of science, the education of women, and the interplay between technology and society will be addressed. Physical science will be the principal focus. Includes some laboratory work.

1 credit.

Spring 2003. Bug.

PHYS 050. Mathematical Methods of Physics

A survey of analytical and numerical techniques useful in physics, including multivariable calculus, optimization, ordinary differential equations, partial differential equations and Sturm-Liouville systems, orthogonal functions, Fourier series, Fourier and Laplace transforms, and numerical methods.

Prerequisites: MATH 016 and either 006C or 018; a knowledge of some programming language.

1 credit.

Spring 2003. Collings.

PHYS 093. Directed Reading

This course provides an opportunity for an individual student to do special study, with either theoretical or experimental emphasis, in fields not covered by the regular courses and seminars. The student will present oral and written reports to the instructor.

0.5, 1, or 2 credits.

Each semester. Staff.

PHYS 094. Research Project

Initiative for a research project may come from the student, or the work may involve collabo-

ration with ongoing faculty research. The student will present a written and an oral report to the department.

0.5, 1, or 2 credits.

Each semester. Staff.

PHYSICS 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, and normal modes, and wave phenomena.

Prerequisites: PHYS 014 and 050; MATH 018.

1 credit.

Fall 2002. Burns.

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.

Prerequisite: PHYS 014 and 050; MATH 018.

1 credit.

Fall 2002. Brown.

PHYS 113. Quantum Theory

Postulates of quantum mechanics, operators, eigenfunctions, and eigenvalues, function spaces and hermitian operators; bra-ket notation, superposition and observables, fermions and bosons, time development, conservation theorems, and parity; angular momentum, three-dimensional systems, matrix mechanics and spin, coupled angular momenta, time-independent and time-dependent perturbation theory.

Prerequisites: PHYS 111 and MATH 016.

1 credit.

Spring 2003. Schroeter.

PHYS 114. Statistical Physics

The statistical behavior of classical and quantum systems; temperature and entropy; equations of state; engines and refrigerators; statistical basis of thermodynamics; microcanonical, canonical; and grand canonical distributions; phase transitions; statistics of bosons and fermions; black body radiation; electronic and thermal properties of quantum liquids and solids.

Prerequisites: PHYS 111 and MATH 006C or 018.

1 credit.

Spring 2003. Grossman.

PHYS 115. Quantum Applications

Approximately one-third of this seminar is devoted to applications on Quantum Theory as developed in PHYS 113. This will include basic atomic theory, scattering, and electromagnetic interactions. A study of physical optics is for the remaining two-thirds of the seminar and will include wave propagation, interference, diffraction, polarization, and optical instrumentation.

Prerequisites: PHYS 111, 112 (or concurrently with instructor's permission), and 113.

1 credit.

Fall 2002. Grossman.

PHYS 130. General Relativity

Newton's gravitational theory, special relativity, linear field theory, gravitational waves, measurement of space-time, Riemannian geometry, geometrodynamics and Einstein's equations, the Schwarzschild solution, black holes and gravitational collapse, and cosmology.

Prerequisites: PHYS 111 and 112.

1 credit.

Not offered 2002-2003.

PHYS 131. Particle Physics

A study of the ultimate constituents of matter and the nature of the interactions between them. Topics include relativistic wave equations, symmetries and group theory, Feynman calculus, quantum electrodynamics, quarks, gluons, and quantum chromodynamics, weak interactions, gauge theories, the Higgs particle, and some of the ideas behind lattice gauge calculations.

Prerequisites: PHYS 113 and 115.

1 credit.

Not offered 2002-2003.

PHYS 132. Nonlinear Dynamics and Chaos

Nonlinear mappings, stability, bifurcations and catastrophe, conservative and dissipative systems, fractals, and self-similarity in chaos theory.

Prerequisite: PHYS 111.

1 credit.

Not offered 2002-2003.

PHYS 133. Atomic Physics and Spectroscopy

Review of quantum theory, hydrogen atom, multielectron atoms, atoms in external fields, optical transitions and selection rules, hyperfine structure, lasers, atomic spectroscopic techniques: atomic beams methods, Doppler-free spectroscopy, time-resolved spectroscopy, and level crossing spectroscopy.

Prerequisites: PHYS 113 and 115.

1 credit.

Not offered 2002-2003.

PHYS 134. Quantum Mechanics: Mathematical and Physical Foundations

What is measurement? Repeatable, maximal and consecutive tests, Bayesian probability, infinite dimensions, projection operators, Spectral Theory for self-adjoint operators, logical structure of classical physics, rules of Quantum Theory, mixed states and density matrices, time development, uncertainty relations, quantum correlations, Schmidt Decomposition, meaning of probability, reduction of State Vector, quantum entanglement, measurement problem, Kochen-Specker Theorem, logic of Quantum propositions, nonlocality, EPR and Bell Inequalities, nonlocality versus Contextuality, Gleason's Theorem, and logical aspects of inseparability are explored.

Prerequisites: PHYS 113 and 115.

1 credit.

Spring 2003. Boccio.

PHYS 135. Solid-State Physics

Crystal structure and diffraction, the reciprocal lattice and Brillouin zones, lattice vibrations and normal modes, phonon dispersion, Einstein and Debye models for specific heat, free electrons and the Fermi surface, electrons in periodic structures, the Bloch Theorem, band structure, semiclassical electron dynamics, semiconductors, magnetic and optical properties of solids, and superconductivity.

Prerequisites: PHYS 113, 114, and 115.

1 credit.

Not offered 2002-2003.

PHYS 136. Quantum Optics and Lasers

Atom-field interactions, stimulated emission, cavities, transverse and longitudinal mode structure, gain and gain saturation, nonlinear effects, coherent transients and squeezed states, pulsed lasers, and super-radiance.

Prerequisites: PHYS 113 and 115.

1 credit.

Not offered 2002-2003.

PHYS 137. Computational Physics

Computer simulations are a powerful way of solving problems in various fields of physics. Students will learn concepts of robust scientific computing and explore techniques like Monte Carlo, finite-element, FFT, and molecular dynamics. Other topics may include high-performance computing and making the Web a part of one's problem-solving and information-dissemination strategies. As a culmination to the seminar, students will do an extended independent project of their choice.

Prerequisite: PHYS 050 and 111 and, taken previously or concurrently, PHYS 113 and 114.

1 credit.

Not offered 2002-2003.

PHYS 138. Plasma Physics

An introduction to the principles of plasma physics. Treatment will include the kinetic approach (orbits of charged particles in electric and magnetic fields, statistical mechanics of charged particles) and the fluid approach (single fluid magnetohydrodynamics, two fluid theory). Topics may include transport processes in plasmas (conductivity and diffusion), waves and oscillations, controlled nuclear fusion, and plasma astrophysics.

Prerequisite: PHYS 112.

1 credit.

Spring 2003. Brown.

PHYS 139. The Physical Basis of Biomolecular Structure and Function

(Cross-listed as CHEM 110)

Introduction to the interdisciplinary field of biophysics in which biological systems are explored using the quantitative perspective of the physical scientist. Topics will include electrostatics of solvated biomolecules, statistical thermodynamics of polymers, physical methods for studying macromolecules, and biological energy transduction.

Prerequisites: CHEM 010, CHEM 034, or CHEM 038; PHYS 014; or permission of the instructors.

1 credit.

Not offered 2002-2003.

PHYS 180. Honors Thesis

Theoretical or experiment work culminating in a written honors thesis. Also includes an oral presentation to the department.

0.5, 1, or 2 credits.

Each semester. Staff.

PHYS 199. Senior Honors Study

A review of the subject matter covered in PHYS 111, 112, 113, 114, and 115. Open only to students in the External Examination Program.

0.5 credit.

Spring 2003. Grossman.

PHYSICS LABORATORY PROGRAM

PHYS 063. Procedures in Experimental Physics

Techniques, materials, and the design of experimental apparatus; shop practice; printed circuit design and construction. Half-credit course. Open only to majors in physics, astrophysics, or astronomy.

0.5 credit.

Fall 2002. Technical staff.

ENGR 072A. Electronic Circuit Applications

(See Engineering for description.)

PHYS 082. Advanced Laboratory

Experiments in mechanics, electricity and magnetism, waves, thermal and statistical physics, atomic, and nuclear physics.

0.5 credit.

Each semester. Staff.

ASTRONOMY COURSES

ASTR 001. Introductory Astronomy

The scientific investigation of the universe by observation and theory, including the basic notions of physics as needed in astronomical applications. Topics include 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. Includes some evening labs.

Primary distribution course. 1 credit.

Spring 2003. Cohen.

ASTR 003. The Physical Universe

This is an introductory astrophysics course emphasizing three major areas of astronomy and modern physics. These include birth of the universe, the theory of special relativity, and the formation of the solar system. Questions regarding the presence of life beyond the earth are also addressed.

Primary distribution course. 1 credit.

Each semester. Jensen.

ASTR 016. Modern Astrophysics

This is a one-semester introduction to astrophysics as applied to stars, the interstellar medium, galaxies, and the large-scale structure of the universe. The course includes some evening laboratories and observing sessions.

Prerequisites: MATH 005 and 006A and 006B, PHYS 003 and 004, or PHYS 007 and 008. (PHYS 004 or 008 may be taken concurrently.)

1 credit.

Each semester. 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. May be repeated for credit. Credit/no credit only.

Prerequisite: ASTR 016.

0.5 credit.

Each semester. Cohen and Jensen.

ASTR 093. Directed Reading

(See PHYS 093.)

ASTR 094. Research Project

(See PHYS 094.)

ASTRONOMY SEMINARS

ASTR 121. Research Techniques in Observational Astronomy

This course covers many of the research tools used by astronomers. These include instruments used to observe at wavelengths across the electromagnetic spectrum; techniques for photometry, spectroscopy, and interferometry; and various methods by which images are processed and data are analyzed. Students will perform observational and data analysis projects during the semester.

Prerequisite: ASTR 016.

1 credit.

Alternate years.

Spring 2003. Jensen.

ASTR 123. Stars and Stellar Structure

An overview of physics of the stars, both atmospheres and interiors. Topics 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: ASTR 016.

1 credit.

Alternate years.

Fall 2002. Cohen.

ASTR 126. The Interstellar Medium

Study of the material between the stars and radiative processes in space, heating and cooling mechanisms, phyics of interstellar dust, chemistry of interstellar molecules, magnetic fields, emission nebulae, hydrodynamics and shock waves, supernova remnants, star-forming regions, active galactic nuclei, X-ray and gamma-ray sources.

Prerequisite: ASTR 016.

1 credit.

Alternate years.

Not offered 2002-2003.

ASTR 128. Galaxies and Galactic Structure

Study of our own galaxy and other galaxies. Galaxy morphology; observational properties of galaxies; kinematics: stellar motions, galaxy rotation, spiral density waves, and instabilities; galaxy and star formation; starburst galaxies; quasars and active galaxies; galaxy clusters and interactions; and large-scale structure of the universe.

Prerequisite: ASTR 016.

1 credit.

Alternate years.

Not offered 2002-2003.

ASTR 180. Honors Thesis

(See PHYS 180.)

ASTR 199. Senior Honors Study

A review of the subject matter covered in advanced physics and astronomy courses. Open only to students in the External Examination Program.

0.5 credit.

Spring 2003. Staff.

Political Science

RAYMOND F. HOPKINS, Professor[3]
JAMES R. KURTH, Professor
CAROL NACKENOFF, Professor and Chair
RICHARD L. RUBIN, Professor (part time)
KENNETH E. SHARPE, Professor
RICHARD VALELLY, Professor
CYNTHIA PERWIN HALPERN, Associate Professor[3]
KEITH REEVES, Associate Professor
TYRENE WHITE, Associate Professor[3]
BENJAMIN BERGER, Assistant Professor
JEFFREY MURER, Assistant Professor
KATHLEEN KERNS, Administrative Assistant
DEBORAH SLOMAN, Administrative Assistant

3 Absent on leave, 2002-2003.

COURSE OFFERINGS AND PREREQUISITES

Courses and seminars offered by the Political Science Department deal with the place of politics in society and contribute to an understanding of the purposes, organization, and operation of political institutions, domestic and international. The department offers courses in all four of the major subfields of the discipline: American politics, comparative politics, international politics, and political theory. Questions about the causes and consequences of political action and normative concerns regarding freedom and authority, power and justice, human dignity, and social responsibility are addressed throughout the curriculum.

Prerequisites

Students planning to study political science are advised to start with two of the following introductory courses: Political Theory, American Politics, Comparative Politics, and International Politics (POLS 001 to 004). Normally, any two of these courses constitute the prerequisite for further work in the department.

REQUIREMENTS

Major

Prerequisites and general recommendations. Students who intend to major in political science should begin their work in their first year at college if possible. Completion of at least two courses at the introductory level (POLS 001, 002, 003, and 004) is required for admission to the major. Supporting courses strongly recommended for all majors are Statistical Thinking or Statistical Methods (MATH 001 or 002) and Introduction to Economics (ECON 001).

Course requirements for majors. To graduate with a major in political science, a student must complete the equivalent of at least eight courses in the department. The department expects that at least five of these eight courses be taken at Swarthmore.

Distribution requirements. All 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. Completion of any of the following will satisfy the political theory requirement: POLS 011, 012, 100, or 101.

The department recommends that majors plan

course and seminar programs that afford some exposure above the introductory level to at least three of the four major subfields of political science (listed in the introductory paragraph earlier).

Comprehensive requirement. Majors in the course program can fulfill the College comprehensive requirement in one of two ways. The preferred option is the oral thesis. Students are examined orally on a body of literature that best captures their interests and range of preparation within the discipline. Under the second option, the written thesis, students complete a written thesis based on in-depth research into a topic of their choice. To be eligible for this option, students must normally have at least an A– average in their political science courses, demonstrate the merit and rigor of their proposal, and secure the approval of a faculty adviser. Detailed information about these options is available at the beginning of the junior year.

Honors Major

To be accepted into the Honors Program, students should normally have at least an average of B+ *inside the department* (the grade equivalent of an "honors") and B outside the department and should give evidence 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. Political science honors majors must meet all current distributional requirements for majors, including the political theory requirement. They need 10 political science credits. Normally, 6 of these credits will be met with three, two-unit preparations, which will help prepare honors majors for outside examinations, both written and oral. These two-unit preparations will normally be either a 2-credit honors seminar or a "course-plus" option. Of these three two-unit preparations, no more than two may be in a single field in the department. The "course-plus" option will normally consist of two one-unit courses or seminars that have been designated to count as an honors preparation. One example is POLS 013 (Feminist Political Theory) plus either POLS 031 (Difference and Dominance) or POLS 032 (Gender, Politics, and Policy in America). Another example is POLS 068 (International Political Economy) plus either POLS 047 (Global Policy) or POLS 058 (Africa). The department does not normally advise theses, course attachments, or directed readings as a substitute for the honors seminars and "course-plus" options, but, on occasion, some faculty members may direct such work to create a 2-credit honors preparation.

All prospective honors majors should have completed one of their four honors preparations before their senior year.

Senior honors majors are invited to take the Senior Honors Colloquium, a 2-credit colloquium normally offered in the fall term of their senior year. The work done in this colloquium will satisfy the College's senior honors study (SHS) requirement and will be submitted to the external examiners, subject to the department word limit for SHS papers.

Honors majors who do not take the colloquium will register for a 0.5 credit SHS and revise a seminar paper for submission to external examiners.

Honors Minor

Honors minors in political science will be required to have at least 5 credits in political science. Among these 5 credits, minors must normally meet the subfield distribution requirement, that is, at least one course in American politics, in political theory, and in comparative politics/international relations. Minors will be required to take one 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 conducted by the external examiner.

CONCENTRATION IN PUBLIC POLICY

Students have the option of pursuing interdisciplinary work as an adjunct to a major in political science in the public policy concentration. Comprehensive requirements (for course majors) or the external examination requirements (for candidates for honors) will be adjusted to allow students to demonstrate their accomplishments in the concentration. For further information, consult the separate catalog listing for public policy (p. 317).

Robinson Hollister is the coordinator of the concentration in public policy for 2002-2003.

THE DEMOCRACY PROJECT

The purpose of this project is to deepen students' understanding of and commitment to democratic citizenship in a multicultural society through participation in community politics. A central feature of the Democracy Project is community-based learning through public service and community organizing internships as part of the course work. By integrating reflection and experience, the project will enable students to study the ways in which diverse communities define and seek to empower themselves in the United States and to discover the relationship between individual activism, social responsibility, and political change at the grassroots level.

ADVANCED PLACEMENT

The department grants one unit of college credit to students who have achieved a score of 5 on the College Board Advanced Placement (AP) examination in Government and Politics (either United States or Comparative but not both). This credit may be counted toward the major and toward satisfaction of the College distribution requirement in the social sciences. Normally, students awarded AP credit will still be expected to complete two introductory courses at Swarthmore as a prerequisite for more advanced work in the department.

TEACHER CERTIFICATION

Political science majors can complete the requirements for teacher certification through a program approved by the state of Pennsylvania. Because of a change in teacher certification regulations that occurred in November 2000, students completing certification during 2002 and 2003 will fulfill the requirements for social studies certification and those who complete certification in 2004 and beyond will complete the requirements for Citizenship Education. For further information about the relevant set of requirements, please contact the Education Program director, the Political Science Department chair, or the Education Program Web site: www.swarthmore.edu/SocSci/Education/.

POLS 001. Political Theory

This course is an introduction to political theory by way of an introduction to some of its most important themes, problems, and texts. It seeks to elicit understanding of theory as a way of thinking about the world, as related to political practices and institutions, and as a form of politics. Different instructors and sections will emphasize different central issues of politics such as (1) justice, (2) freedom, (3) power and knowledge, and (4) religion and politics.

Primary distribution course. 1 credit.

Fall 2002. Sharpe, Berger.

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 can include presidential leadership; legislative politics; role of the Supreme Court; federalism; parties, groups, and movements; public policy; the politics of class, race, and gender; voting; mass media; and public discontent with government.

Primary distribution course. 1 credit.

Fall 2002. Reeves, Valelly.

POLS 003. Comparative Politics

An introduction to the major themes and methods of comparative political analysis through a study of the history and character of contemporary politics in various states and world regions. Topics include the formation of states, the growth of nationalism and ethnic conflict, patterns of state building and socioeconomic development, the role of institutions and social transformation in promoting political change, the causes of regime change, and pathways to democracy.

Primary distribution course. 1 credit.

Fall 2002 and spring 2003. Murer.

POLS 004. International Politics

An introduction to the analysis of the contemporary international system and its evolution in the 20th century. The course will examine

various approaches to explaining major international wars, ethnic conflicts, and economic problems.

Primary distribution course. 1 credit.

Spring 2003. Hopkins, Kurth.

POLS 011. Ancient Political Theory: Plato Through Machiavelli

Reason, force, and persuasion are major tools of politics considered and used by political philosophers as they seek to legitimate their vision concerning the proper organization of political life. Each tends to reflect particular views about human capacities and differences, and each entails certain difficulties. This course explores these issues and other key concepts of political thought, drawing on major works in the Western tradition, including Plato, Aristotle, Cicero, Augustine, Aquinas, and Machiavelli.

1 credit.

Fall 2002. Nackenoff.

POLS 012. Modern Political Theory

This course will be concerned with the nature of modernity, theory, and politics. We examine the transitions to modernity through the Reformation; the foundational construction of Hobbes, Locke, and Rousseau; and the culmination of modernity in the Enlightenment projects of rationality in the works of Kant, Mill, and Marx. We will then examine the breakdowns of the Enlightenment through Freud and Nietzsche, and the critiques of its rationality by Marcuse and Foucault. In this way, the course will explore the creation of the individual and the related consequences of this project.

1 credit.

Spring 2003. Murer.

POLS 013. Feminist Political Theory

Key contributions and debates in feminist political, philosophical, and legal theory, drawing on feminist psychoanalytic theory, post-structuralist theories, and queer theory to engage the contentious issues at the heart of contemporary theory. The course engages feminists from non-Western cultures on the capacity of Western feminists to speak to different experiences, considers various feminist problematizations of traditional concepts of human nature and the public and the private, and emphasizes the centrality of the body in political theorizing from several perspectives.

1 credit.

Not offered 2002-2003.

POLS 015. Ethics and Public Policy

This course will examine the nature and validity of ethical arguments about moral and political issues in public policy. Specific topics and cases will include ethics and politics, violence and war, public deception, privacy, discrimination and affirmative action, environmental risk, health care, education, abortion, surrogate motherhood, world hunger, and the responsibilities of public officials. This course may be counted toward a concentration in public policy.

1 credit.

Not offered 2002-2003.

POLS 016. Liberal Individualism

This course will explore the conceptions of human nature that underlie liberalism in modern society, with attention to what current research and theory in psychology have to say about these assumptions.

1 credit.

Not offered 2002-2003.

POLS 017. American Political Thought

Explorations in American political thought and political culture. Topics include national identity; struggles of inclusion/exclusion; individualism and community; moral crusades; democratic visions; race, class, ethnicity, and gender; and the role of the state.

1 credit.

Not offered 2002-2003.

POLS 019. Democratic Theory and Practice

What is democracy in theory and practice? What does it mean for the people to rule themselves? What happens if many do not participate, whether as a result of exclusion or apathy? What might be done to make modern democracies more appealing, inclusive, and just? We examine democracy not only as a modern concern but one with roots stretching back over two millennia. This course combines the study of classic texts alongside student engagement with public service internships.

1 credit.

Spring 2003. Berger.

POLS 022. American Elections: Ritual, Myth, and Substance

An examination of the role of policy issues, candidate images, media, marketing, and political parties in the American electoral process.

1 credit.

Not offered 2002-2003.

POLS 023. Presidency, Congress, and Court

How national officials with different responsibilities and constituencies respond to each other and the public.

Prerequisite: POLS 002.

1 credit.

Not offered 2002-2003.

POLS 024. American Constitutional Law

The Supreme Court in American political life, with emphasis on civil rights and civil liberties and on 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. Exploration of judicial review, judicial activism and restraint, and theories of constitutional interpretation.

1 credit.

Spring 2003. Nackenoff.

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, the economy, gun control, foreign policy, and social security reform. This course may be counted toward a concentration in public policy.

Prerequisite: POLS 002 or permission of the instructor.

1 credit.

Not offered 2002-2003.

POLS 031. Difference, Dominance, and the Struggle for Equality

This course examines how unequal power relations are maintained and legitimated and explores different strategies and routes for achieving equality. Struggles involving gender, race, ethnicity, class, and colonial and postcolonial relationships are examined and compared.

1 credit.

Not offered 2002-2003.

POLS 032. Gender, Politics, and Policy in America

Gender issues in contemporary American politics, policy, and law. Policy issues include feminization of poverty, employment discrimination, pornography, surrogate parentage, privacy rights and sexual practices, workplace hazards, and fetal protection.

1 credit.

Not offered 2002- 2003.

POLS 033. Race, Ethnicity, and Public Policy: African Americans

This course investigates the relationship of race, American political institutions, and the making of public policy. Race, class, and ethnic analyses are made with particular focus on how racial policy was made through the electoral system, the courts, the Congress, and the presidency. The separation between black and white is analyzed over time and in contemporary politics and also in comparative perspective with other groups. This course may be counted toward a concentration in public policy.

1 credit.

Fall 2002. Reeves and Rubin.

POLS 034. Race, Ethnicity, Representation, and Redistricting in America

This course will explore the controversial political and public policy questions surrounding the reshaping and redrawing of congressional districts to increase minority black, Latino, and Asian political representation in the United States. Why was stringent and comprehensive voting rights legislation needed

in 1965? What has been the impact of the Voting Rights Act on minority disenfranchisement? How have minority voters and candidates fared in the American electoral process? Has the Voting Rights Act evolved into an "affirmative action tool in the electoral realm"? How will the U.S. Supreme Court's developing jurisprudence of racial redistricting alter the political and racial landscape of this country? What are the public policy implications against the backdrop of the Court's rulings where the decennial census is concerned? This course may be counted toward a concentration in public policy and black studies.

1 credit.

Not offered 2002-2003.

POLS 036. Multicultural Politics in the United States

Is the United States a melting pot; a mosaic; or a battlefield of racial, ethnic, and cultural differences? This course explores past and present multicultural politics, including the efforts of subordinated groups to empower themselves, and such issues as immigration, poverty, affirmative action, and cultural identity.

1 credit.

Not offered 2002-2003.

POLS 038. Public Service, Community Organizing, and Social Change

Through community-based learning, this seminar explores democratic citizenship in a multicultural society. Semester-long public service and community organizing internships, dialogue with local activists, and popular education pedagogy allow students to integrate reflection and experience.

1 credit.

Not offered 2002-2003.

POLS 041. Political Economy and Social Policy in the United States

Considers how government buffers the risks for individuals of a market system and what that means for citizenship. Also treats macroeconomic policy making and how it affects politics. Third major topic is the governance of the labor market.

Prerequisite: POLS 002.

1 credit.

Not offered 2002-2003.

POLS 043. Environmental Policy and Politics

Topics will include environmental politics, policy, and law. In U.S. domestic politics, an emphasis on the role and impact of the environmental movement; regulation and proposals for more flexible responses to achieve environmental goals; collective action and free-rider problems; the role of science in environmental policy making in a democracy; courts and the impact of federalism, commerce clause, and rights on regulation. Because environmental problems cross both state and national boundaries, we will examine the role of not only national but also supranational organizations and institutions in managing environmental problems, with special attention to the European Union and additional attention to developed/developing world environmental controversies. We seek to understand patterns of responses to environmental problems and possible future options in different issues areas.

1 credit.

Fall 2002. Nackenoff.

POLS 044. Social Choice, Game Theory, and Politics

Introduction to formal discovery and description of various paradoxes, limits, and equilibria in different sorts of democratic political processes. Applications may include party competition, legislative agenda control, taxation, group formation, protest, and other topics. No special background of any kind required.

1 credit.

Spring 2003. Valelly.

POLS 045. Defense Policy

Analysis of American defense policy, with particular emphasis on foreign interventions, military strategies, weapons systems, and race and gender issues. This course may be counted toward a concentration in public policy.

Prerequisite: POLS 004.

1 credit.

Fall 2002. Kurth.

POLS 047. Global Policy and International Institutions: Hunger and Environmental Threats

Causes and proposed solutions to major global problems—hunger, poverty, and environmen-

tal loss—are explored. The role of government policy, shaped by international institutions, in food production, distribution and consumption and the effects on the environment are analyzed. Cases include the American experience and its global impact, the special problems of developing countries, the dynamics of trade and aid, the special problems of developing countries, and the role of international institutions. An early final exam and a substantial paper are features of the course. A "laboratory" session replaces a regular class meeting. Students with little work in political science may be admitted with consent of the instructor. This course may be counted toward the concentration in public policy.

1 credit.

Fall 2003. Hopkins.

POLS 048. The Politics of Population

Examines global, regional, and national population issues. Topics include the political impact of demographic trends and contemporary issues, such as population aging, global migration, and the AIDS epidemic. This course may be counted toward a concentration in public policy.

1 credit.

Not offered 2002-2003.

POLS 051. Socialism in Europe

This course traces more than 150 years of socialist political efforts in Europe. Beginning with the revolutions of 1848, we will examine the political circumstances and theories that made revolution possible as well as the conditions that threatened these movements. Students will encounter the Marxist and Christian Socialist movements of the late 19th and early 20th centuries and the many Soviet revolutionary movements after World War I—from Moscow to Munich and from Berlin to Budapest. We will examine the socialist resistance to fascism in Vienna and Spain and trace the development of Western European leftist movements, both communist and social democratic. The last half of the course will compare the socialist welfare systems in Western Europe and attempts to build socialism with a "human face" in Eastern Europe during the 1950s and 1960s. Finally, the course will examine the failures of leftist terrorist organizations and of "realized socialism."

1 credit.

Not offered 2002-2003.

POLS 053. The Politics of Eastern Europe: Polities in Transition

This course will examine the challenges facing the states of Central and Eastern Europe since the end of the Cold War. It will trace the events that brought about the end of "realized socialism" in the region and explore the difficulties these societies have faced since those heady days in 1989 through 1991. Students will examine the processes of political and economic transformation within the context of a global neo-liberal project. Thus, students will explore the meaning of democracy, the tension between collective and individual rights, the place of economic steering initiatives within any society, and the integration of institutions. The course will also explore antiliberal reactions in the region, including the rise of xenophobia, conflicts of ethnic nationalism, and the resurgence of fascist economic and political movements.

1 credit.

Next offered fall 2003. Murer.

POLS 055. China and the World

Explores the rise of China in the late 20th century and its implications for domestic, regional, and international politics. Topics include China's reform and development strategy, the consequences of reform and the prospects for regime liberalization and democratization.

This course may be counted toward a program in Asian studies or a program in public policy.

1 credit.

Not offered 2002-2003.

POLS 056. Patterns of Asian Development

Examines patterns of political and economic development in East Asia, comparing paths with development, the role of authoritarianism and democracy in the development process, and the impact of regional and global forces on domestic politics.

This course may be counted toward a program in Asian studies.

1 credit.

Not offered 2002-2003.

POLS 057. Latin American Politics

A comparative study of the political economy of the region focusing on Mexico, Chile, Guatemala, Nicaragua, Columbia, and Cuba. Topics include the tensions between representative democracy, popular democracy, and market economies; the conditions for democracy and authoritarianism; the sources and impact of revolution; the political impact of neo-liberal economic policies, and the economic impact of state intervention; and the role of the United States in the region.

1 credit.

Spring 2003. Sharpe.

POLS 058. Africa: Politics, Economics and Welfare

An examination of the political economy and welfare of Africa. Special attention will be given to institutions and the policy problems of food security and civil order.

Prerequisite: POLS 068 and permission of the instructor. Available only as an honors attachment.

1 credit.

Not offered 2002-2003.

POLS 059. Contemporary European Politics

Europe today is a microcosm of global politics. This course will explore the effects of globalization, increasingly integrated economies, and new capital flows that alter earlier equilibriums of finance and development, while also examining issues of migrations and the necessity and affordability of state welfare systems. Students will examine new approaches to international cooperation that are challenged by continued ethnic conflicts, xenophobia, and localism. This course will explore the roles of institutions like the European Union (EU) and NATO.

1 credit.

Spring 2003. Murer.

POLS 061. American Foreign Policy

An examination of the making of American foreign policy and of the major problems faced by the United States in the contemporary era. The course will focus on the influence of political, bureaucratic, and economic forces and on the problems of war, intervention, globalization, and human rights.

Prerequisite: POLS 004 or equivalent.

1 credit.

Not offered 2002-2003.

POLS 064. American-East Asian Relations

Examines the historic and contemporary world views of the major Pacific countries and international relations across the Pacific. Topics include the impact of growing Chinese power and the role of culture and perception in cross-Pacific affairs.

This course may be counted toward a program in Asian studies.

1 credit.

Not offered 2002-2003.

POLS 068. International Political Economy

(Cross-listed as ECON 053)

This course uses political and economic perspectives to analyze the international economy. Topics include the rise and decline of hegemonic powers, the controversy over "free" versus "fair" trade under the WTO, foreign debt and default, the role of the state in economic development, international financial markets, the history of the international monetary system. This course may be counted toward a concentration in public policy.

Prerequisite: POLS 004 and ECON 001.

1 credit.

Next offered fall 2003. Hopkins, Golub.

POLS 072. Constitutional Law: Special Topics

An in-depth exploration of 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.

1 credit.

Not offered 2002-2003.

POLS 073. Comparative Politics: Special Topics

1 credit.

Not offered 2002-2003.

POLS 074. International Politics: Special Topics

Each year, this course will study a major topic in international politics, with different topics being studied in different years. The course will examine development of the topic from historical origins to contemporary issues. In 2002 the topic will be the contemporary American empire (i.e., the role of the United States as the sole superpower, the engine of globalization, the leader of the information revolution, and the creator of a new kind of multicultural society). Reactions and resistances will also be examined (e.g., Islamic terrorism).

Prerequisite: POLS 004.

1 credit.

Fall 2002. Kurth.

POLS 076. Theory, Method, and Research Design in the Social Sciences

1 credit.

Not offered 2002-2003.

POLS 077. Practical Wisdom

(Cross-listed as PSYC 029)

What is practical wisdom (what Aristotle called "phronesis")? Is it necessary to enable people to flourish in their friendships, loving relations, education, work, community activities, and political life? What is the relevance of this Aristotelian concept for the choices people make in everyday life, and how does it contrast with contemporary Kantian, utilitarian, and emotivist theories of moral judgment and decision making? What does psychology tell us about the experience and character development necessary for practical wisdom and moral reasoning? And how do contemporary economic and political factors influence the development of practical wisdom?

Prerequisites: Some background in psychology and in philosophy or political theory.

Enrollment limited and by permission of the instructors (applications available from either department).

1 credit.

Spring 2003. Sharpe and Schwartz.

POLS 090. Directed Readings in Political Science

Available on an individual or group basis, subject to the approval of the chairman and the instructor.

1 credit.

POLS 095. Thesis

A 1-credit thesis, normally written in the fall of the senior year. Students need the permission of the department chair and a supervising instructor.

1 credit.

SEMINARS

The following seminars prepare for examination for a degree with honors:

POLS 100. Political Theory: Plato to Hobbes

The development of political thought in the ancient and medieval periods and the emergence of a distinctively modern political outlook. Special attention to the differences between the way the ancients and the moderns thought about ethics, politics, democracy, law, knowledge, power, justice, the individual, and the community. Key philosophers include Plato, Aristotle, Augustine, and Hobbes.

2 credits.

Fall 2002. Sharpe.

POLS 101. Political Theory: Modern

We will study in this seminar 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, Freud, and Foucault. The question of how to read and contextualize texts, and how competing perspectives and theories construct and reconstruct the nature of the real and the political, contribute to an inquiry into the politics of theory and interpretation in the modern era and what doing the work of political theory means and accomplishes.

2 credits.

Next offered 2003-2004.

POLS 102. Senior Honors Colloquium

Pursues theme of refounding and reconstruction in American political evolution through reading classics of American political thought.

2 credits.

Not offered 2002-2003.

POLS 103. American Politics

The relationship between American political thought and political practice. Interpreting the character of American politics with classic authors and texts, accompanied by investigation of political narratives and the impact of popular culture on forms of public discourse.

2 credits.

Not offered 2002-2003.

POLS 104. American Political System

Seminar aims to confound simple views of contemporary American politics and its performance by empirically emphasizing the complexity of American politics. Standard topics are covered, though topical emphasis may vary from year to year.

Prerequisite: POLS 002 or intermediate American politics course.

2 credits.

Spring 2002. Valelly.

POLS 105. Constitutional Law in the American Polity

The Supreme Court in American political life, with emphasis on civil rights, civil liberties, and constitutional development. The seminar 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. Exploration of judicial review, judicial activism and restraint, and theories of constitutional interpretation.

2 credits.

Spring 2003. Nackenoff.

POLS 106. The American Polity and Urban Policy.

The seminar explores controversial empirical, political, normative, and policy questions surrounding democratic participation in the American polity with particular emphasis on minorities residing in inner communities. For example, we will examine the following issues and relationships: the nature and origins of civic and social organization in urban America, economic dislocation and civic participation in the inner city, criminal disenfranchisement laws and policies, and "social capital" as a promising framework for the re-integration of minority ex-felons into society.

2 credits.

Spring 2003. Reeves.

POLS 107. Comparative Politics: Greater Europe

This course traces the development of the concept of Europe. We will examine the array of state forms from the early modern to the contemporary period and engage the historical processes and conceptual orientations that have contributed to the social patternings of difference that have qualified Europe at different moments as East/West, Northern/Southern, socialist/capitalist and so forth. Students will follow the development of liberalism and market capitalism in Europe as well as study the forces that grew to form oppositions. From the fall of autocracy to the rise of fascism and socialism, students will examine the political formation of Europe as a series of conflicts over the power of liberalism that continues today.

2 credits.

Fall 2002. Murer.

POLS 108. Comparative Politics: East Asia

Examines patterns of political and economic development in East Asia, comparing paths with development, the role of authoritarianism and democracy in the development process, and the impact of regional and global forces on domestic politics.

This course may be counted toward a concentration in public policy or a program in Asian studies (Class of '02 or '03) or a minor (Class of '03 or '04).

2 credits.

Fall 2002. White.

POLS 109. Comparative Politics: Latin America

A comparative study of the political economy of the region focusing on Mexico, Chile, Guatemala, Nicaragua, Columbia, El Salvador, and Cuba. Topics include the tensions between representative democracy, popular democracy, and market economies; the conditions for democracy and authoritarianism; the sources and impact of revolution; the political impact of neo-liberal economic policies, and the economic impact of state intervention; and the role of the United States in the region.

2 credits.

Spring 2003.

POLS 110. Comparative Politics: Africa

A review of the historical evolution and current problems in politics of sub-Saharan Africa. Topics will include colonial legacies, nationalism, class, ethnicity, economic development, and the character of the state. Problems of public policy will be given special attention. Readings will focus on selected countries in Southern Africa, East Africa, and West Africa. This course may be counted toward a concentration in public policy.

2 credits.

Next offered fall 2003 . Hopkins.

POLS 111. International Politics

An inquiry into problems in international politics. Topics include major theories of international politics, war and the uses of force, and the management of various global economic issues.

Prerequisite: POLS 004 or equivalent.

2 credits.

Next offered spring 2004. Hopkins.

POLS 180. Thesis

With the permission of the department, honors candidates may write a thesis for double course credit.

POLS 199. Senior Honors Studies

Integrative revisions of earlier work in a seminar or the senior colloquium.

Psychology

ALFRED H. BLOOM, Professor*
KENNETH J. GERGEN, Professor[2]
DEBORAH G. KEMLER NELSON, Professor and Chair (fall 2002)[2]
JEANNE MARECEK, Professor
ALLEN M. SCHNEIDER, Professor
BARRY SCHWARTZ, Professor
FRANK H. DURGIN, Associate Professor and Chair (spring 2003)
JANE E. GILLHAM, Assistant Professor (part time)
WENDY A. HORWITZ, Assistant Professor (part time)
EDWARD T. KAKO, Assistant Professor[3]
MICHELE REIMER, Assistant Professor (part time)
ANDREW H. WARD, Assistant Professor
JULIA L. WELBON, Academic Coordinator
JOANNE M. BRAMLEY, Administrative Coordinator

* President of the College.
2 Absent on leave, spring 2003.
3 Absent on leave, 2002-2003.

The work of the Department of Psychology concerns the systematic study of human behavior and experience. Processes of perception, learning, thinking, and motivation are considered in their relation to the development of the individual. The relations of the individual to other persons are also a topic of study.

The courses and seminars of the department are designed to provide a sound understanding of the principles and methods of inquiry 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.

A special major in psychobiology is offered in cooperation with the Department of Biology. Consult either department chair.

REQUIREMENTS AND RECOMMENDATIONS

PSYC 001: Introduction to Psychology is a prerequisite for further work in the department.

The department does not grant credit or placement for the Advanced Placement examination in psychology.

A course major consists of at least 8 or 8.5 credits for students who meet the comprehensive requirement by completing PSYC 098: Senior Comprehensive Project. The minimum requirement excludes courses cross-listed in psychology that are taught solely by members of other departments. Four should be core courses (with course numbers in the 030s): Physiological Psychology, Learning and Action, Perception, Cognitive Psychology, Psychology of Language, Social Psychology, Concepts of the Person, Abnormal Psychology, and Developmental Psychology.

Students are required to meet a comprehensive requirement in their majors. In psychology, this may be accomplished in one of two ways.

The first way, open to all majors, is to complete the comprehensive project, a substantial paper on a topic of the student's choice in psychology, approved by the faculty. See PSYC 098 and the department brochure. Students who meet the comprehensive requirement in the department with the comprehensive project must meet the eight-course requirement for the psychology major in addition to receiving 0.5 credit for the project.

The second way is to complete a 2-credit senior thesis (1 credit each semester of the senior year). The senior thesis program is open to students who have B+ averages both in psychology and overall. Students must have an acceptable proposal, an adviser, and sufficient

background to undertake the proposed work. See PSYC 096, 097, and the department brochure.

Students should take at least one course that provides them with experience in conducting research, ordinarily PSYC 025: Research Design and Analysis.

Students majoring in psychology who wish to include study abroad are advised to complete the time away before the second semester of the junior year.

Students intending to pursue graduate work in psychology should take either STAT 002 or 002C, offered by the Department of Mathematics and Statistics. In addition, they should take PSYC 025: Research Design and Analysis. If possible, students should complete first Statistics and then Research Design before their senior year.

A course minor consists of at least 5 credits in psychology taken at Swarthmore. These five courses must include PSYC 001: Introduction to Psychology and two core courses.

The Honors Program in Psychology

The Psychology Department offers qualified students the option of study in the Honors Program. Students majoring in psychology in honors must prepare three fields for external examination. Two of these preparations involve a 1-credit seminar and its approved prerequisite. The third is a thesis, completed over the course of the senior year. There is no senior honors study in psychology. Students must also meet the requirement for study in four core areas, as previously described.

The Psychology Department also offers a minor in the Honors Program. Students with honors minors in psychology must take at least 5 credits in psychology at Swarthmore, including two core courses. They must prepare one field for external examination, involving a 1-credit seminar and its approved prerequisite. A detailed description of the program is available in the department brochure.

TEACHER CERTIFICATION

Students who wish to pursue certification at the secondary school level should consult faculty in the Education Program.

Psychology majors can complete the requirements for teacher certification through a program approved by the state of Pennsylvania. Because of a change in teacher certification regulations that occurred in November 2000, students completing certification through 2003 will fulfill the requirements for social studies certification, and those who complete certification in 2004 and beyond will complete the requirements for social science certification. For further information about the relevant set of requirements, please contact the Educational Studies Department chair, the Psychology Department chair, or the Education Program Web site: www.swarthmore.edu/SocSci/Education/.

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 normal and abnormal behaviors are determined by learning, motivation, neural, cognitive, and social processes.

In addition to the course lectures, students are required to participate in a total of four small group discussions during the semester, each meeting for 1 hour and 15 minutes during the Monday and Wednesday (1:15-4 p.m.), or Friday (2:15-5 p.m.) afternoon class periods. Students will be assigned to a group after classes begin but should keep at least one period open.

PSYC 001 is prerequisite to further work in the department.

1 credit.

Each semester. Staff.

PSYC 005. Nature and Nurture

An entry-level course that focuses on how nature and nurture combine to produce human universals as well as human differences. It draws on insights derived from studies of the human infant, language and language acquisition, the perception and experience of emotions, and human intelligence. Consideration is given to the variety of methodologies and approaches that can shed light on nature/nurture issues—including those of evolutionary

psychology and behavior genetics. PSYC 005 does not serve as prerequisite for further work in psychology.

No prerequisite.

Primary distribution course. 1 credit.

Not offered 2002-2003. Spring 2004. Kemler Nelson.

PSYC 006. Writing Psychology

Through discussion, fieldwork, and writing, students explore current and past controversies in psychology, including the nature of emotion and reason, adult development, "objectivity," and gender. The class examines different forms of writing in psychology in preparation for students' own projects.

This writing-intensive course uses a workshop format, with particular attention to the process of writing: How do we begin, sustain, and polish our writing? Students have the opportunity to try different forms, such as field notes, popular article, scholarly paper, and case study. Short (two- to five-page) writing projects, or their revisions will occur approximately every other week. The class is appropriate both for students with background in psychology and for those new to the subject. Though psychology is the focus of the course, and useful experience in psychology will be gained, the analytical and writing skills learned are applicable to work in other areas. Enrollment is limited to 12 students.

No prerequisite.

1 credit.

Fall 2002. Horwitz.

Note: The Education Program offers the following three courses. They do not count toward the minimum required credits for a psychology major.

PSYC 021. Educational Psychology

(See EDUC 021.)

Fall 2002. Renninger.

PSYC 022. Counseling

(See EDUC 025.)

Fall 2002. Brenneman.

PSYC 023. Adolescence

(See EDUC 023.)

Spring 2003. Smulyan.

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 a treatment of statistical inference and the rigorous evaluation of empirical evidence. Emphasis is placed both on issues surrounding the formation of an effective research program and on developing critical skills in the evaluation of theories. Pitfalls and alternative approaches are also discussed.

Workshop format.

Prerequisite: PSYC 001.

1 credit.

Fall 2002. Ward.

PSYC 028. Introduction to Cognitive Science

Formerly offered in the Psychology Department, this course is now COGS 001 in the cognitive science concentration. COGS 001 will count toward the minimum required credits in a psychology major when a member of the Psychology Department teaches this course. When a member of the Linguistics Program teaches this course in spring 2003, it will not count for a psychology major. Professor Kako from the Psychology Department will offer this course in spring 2004.

(See COGS 001.)

PSYC 029. Practical Wisdom

(Cross-listed as POLS 077)

What is practical wisdom (what Aristotle called "phronesis")? Is it necessary to enable people to flourish in their friendships, loving relations, education, work, community activities, and political life? What is the relevance of this Aristotelian concept for the choices people make in everyday life, and how does it contrast with contemporary Kantian, utilitarian, and emotivist theories of moral judgment and decision making? What does psychology tell us about the experience and character development necessary for practical wisdom and moral reasoning? And how do contemporary economic and political factors influence the development of practical wisdom?

Prequisites: Some background in psychology, philosophy, or political theory.

Enrollment limited and by permission of the instructors (applications available from either department).

1 credit.

Spring 2003. Schwartz and Sharpe.

PSYC 030. Physiological Psychology

A survey of the neural and biochemical bases of behavior with special emphasis on sensory processing, motivation, emotion, learning, and memory. Both experimental analyses and clinical implications are considered.

Prerequisite: PSYC 001.

1 credit.

Spring 2003. Schneider.

PSYC 031. Learning and Action

This course explores elementary learning processes and how they combine with complex cognitive, motivational, and social factors to influence what organisms do.

Prerequisite: PSYC 001.

1 credit.

Fall 2002. Schwartz.

PSYC 032. Perception

Is seeing really as simple as opening your eyes? Why don't trees have eyes? Why do unfamiliar languages seem to be spoken so rapidly? Perception is sometimes assumed as the foundation of our knowledge about the world, but how does perception work? This course covers the science of vision and other modes of perception in order to explain how we can avoid assuming that inside our head is a little homunculus watching the world.

Prerequisite: PSYC 001.

1 credit.

Spring 2003. Durgin.

PSYC 033. Cognitive Psychology

An overview of the psychology of knowledge representation, beginning from the foundations of perception, attention, memory, and language to examine concepts, imagery, thinking, decision making, and problem solving.

Prerequisite: PSYC 001.

1 credit.

Fall 2002. Durgin.

PSYC 034. The 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.

1 credit.

Not offered 2002-2003. Kako.

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 the historical context of theory and research. The dynamics of cooperation and conflict, group identity, conformity, social influence, help giving, aggression, persuasion, attribution, and attitudes are discussed.

Prerequisite: PSYC 001.

1 credit.

Spring 2003. Ward.

PSYC 037. Concepts of the Person

An exploration of central conceptions of psychological functioning from historical, cultural, and ideological perspectives. Central attention is given to the developing concept of the person within the discipline of psychology from the turn of the century to the present. Theories of Freud, Jung, and the neo-Freudians receive attention as well as more recent cognitive and trait formulations. Special attention is given to the conception of the person emerging within the postmodern period.

Prerequisite: PSYC 001 or permission of the instructor.

1 credit.

Not offered 2002-2003. Gergen.

PSYC 038. Abnormal Psychology

A consideration of major forms of psychological disorder in adults and children. Biogenetic, sociocultural, and psychological theories of abnormality are examined, along with their corresponding modes of treatment.

Prerequisite: PSYC 001.

1 credit.

Spring 2003. Gillham.

PSYC 039. Developmental Psychology

A selective survey of cognitive and social development from infancy to adolescence. Major theoretical perspectives on the nature of developmental change are examined, including those of Piaget and his critics. Topics include the formation of social attachments; the foundations and growth of perceptual, cognitive, and social skills; gender typing; moral development; and the impact of parents and other social agents on the development of the child.

Prerequisite: PSYC 001.

1 credit.

Fall 2002. Reimer.

PSYC 041. Children at Risk

Chronic illness, divorce, war, homelessness, and chronic poverty form the backdrop of many children's lives. This course considers children's responses to such occurrences from clinical, social, and developmental perspectives. Special emphasis is placed on the contributions of family and the social environment to the child's well-being or distress.

Prerequisite: PSYC 001.

1 credit.

Spring 2003. Horwitz.

PSYC 042. Human Intelligence

This course adopts a broad view of its topic, human intelligence. One major set of subtopics is drawn from the intelligence-testing (IQ) tradition. Other concerns include cognitive theories of intelligence, developmental theories of intelligence, everyday conceptions of intelligence, the relation between infant and adult intelligence, and the relation between human and animal intelligence.

Prerequisite: PSYC 001.

1 credit.

Not offered 2002-2003. Fall 2003. Kemler Nelson.

PSYC 043. Evolutionary Psychology

Psychologists have recently begun to explore human nature through the lens of evolution by natural selection. Just as it has shaped our bodies, natural selection has also shaped our minds, endowing us with abilities and habits of thought that increase the chances we'll pass our genes on to future generations. In this course, we apply the framework of natural selection to six questions about human psychology: Why do we eat the foods we do? How do we decide who our mates will be? What is friendship? Why do we have a sense of justice, of right and wrong? What is the nature of intelligence? Why do we have language? We also explore the limits of this approach as an account of human nature.

Prerequisite: PSYC 001.

1 credit.

Not offered 2002-2003. Kako.

PSYC 044. Psychology and Gender

This course concerns psychological approaches to studying women and gender as well as feminist critiques of psychological theories and methods of inquiry. In addition, we study the ways that gender is represented in research and clinical theories and in popular psychology.

Prerequisite: PSYC 001.

1 credit.

Spring 2003. Marecek.

PSYC 046. Psychology of Self-Control

What are the processes and strategies involved in the control of our own emotions, thoughts, and behaviors? When do these strategies serve us well, and when do they contribute to pathology? This course examines the principle of self-control from a number of perspectives. Topics include delay of gratification, dieting, aggression, emotional regulation (e.g., control of anger and depression) and the disinhibiting effects of alcohol. Emphasis is placed on successes and failures of self-control and their consequences for physical and psychological well-being.

Prerequisite: PSYC 001.

1 credit.

Not offered 2002-2003. Ward.

PSYC 047. Applications of Social Psychology

In what areas have the lessons of more than 50 years of social psychological research been applied, and how have those applications fared? This course examines both the successes and failures of those who have tried to put the theories and findings of social psychology into practice. Domains of inquiry include the application of social psychology to law, education, business, public policy, gender relations, clinical disorders, and peace and conflict.

Prerequisite: PSYC 001.

1 credit.

Not offered 2002-2003. Ward.

PSYC 048. Technology, Self, and Society

This course brings critical attention to the technological transformation of cultural life. Discussions treat issues of personal and cultural identity; conceptions of rationality and the body; and the production of intimacy. The implications for freedom and control, the democratization of pedagogy, and the potentials for community are also discussed.

Prerequisite: PSYC 001 or permission of the instructor.

1 credit.

Not offered 2002-2003. Gergen.

PSYC 049. Thinking, Judgment, and Decision Making

People in the modern world are flooded with decisions, both major and minor, 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.

1 credit.

Spring 2003. Schwartz.

PSYC 050. Abnormal Child Psychology

This course covers several psychological disorders that often first appear in childhood and adolescence, including autism and other developmental disorders, attention deficit disorder, conduct disorder, eating disorders, and emotional disorders. Theories about the causes and treatment are discussed. A heavy emphasis is on current research questions and empirical findings related to each disorder.

Prerequisite: PSYC 001 and either Abnormal (PSYC 038) or Developmental (PSYC 039) Psychology or instructor's permission.

Fall 2002. Gillham.

PSYC 055. Family Systems Theory and Psychological Change

What causes mental illness? What helps people to recover? How can understanding family functioning enlarge our understanding of human interaction in schools, organizations, and communities? This course examines these questions by taking a close look at several systemic perspectives on family functioning. Using theoretical readings and empirical research, we explore how the family system has been considered or ignored in psychological research on human development and psychopathology. Simultaneously, we work at expanding our own understandings of family interaction by viewing and critically analyzing dramatic family encounters, as depicted in popular film, documentaries, and therapeutic case histories. Along the way, we consider concepts of normality, gender and power in family functioning, and ethnicity and sociocultural influences on the family.

Prerequisites: PSYC 001 and instructor's permission.

1 credit.

Spring 2003. Reimer.

PSYC 056. Modes of Psychotherapy

We consider mainstream psychotherapies (such as cognitive-behavior therapy, psychodynamic therapies, and family systems therapies) and therapies informed by social critique (such as narrative, feminist, and multicultural therapies). We also study new community-based interventions for persons with chronic mental illnesses. What works? How do we know? We ask how current developments such as managed care, the burgeoning psychopharmacology industry, and the profusion of self-help groups are reshaping psychotherapy.

Prerequisite: PSYC 001.

1 credit.

Fall 2002. Marecek.

PSYC 057. Psychology of Environmental Problems

Humans face severe environmental crises, including global warming, resource depletion, and a precipitous decline in biodiversity. What are the psychological dimensions of environmental problems, and how can psychology contribute to potential solutions? Readings comprise empirical and theoretical literature in psychology as well as relevant work from philosophy and history.

PSYC 057 fulfills the social sciences/humanities requirement in environmental studies (and counts as a course in a psychology major).

The course is taught in a seminar and workshop format, including the formulation of research projects on psychology and nature.

Prerequisite: PSYC 001 or instructor's permission.

1 credit.

Not offered 2002-2003.

PSYC 058. Gender, Culture, and Mental Health

This courses concerns women, men, and mental health. Many psychological problems are markedly more common for one or the other gender. In asking why this is so, we examine cultural, sociological, psychological, and biological lines of evidence. We also ask which women and which men are at risk. Other emphases include conceptions of normality and abnormality and feminist approaches to diagnosis and treatment.

Prerequisite: PSYC 001 or Introduction to Women's Studies (WMST 001).

1 credit.

Not offered 2002-2003.

PSYC 059. Cultural Psychology

Much of psychology has been concerned with discovering universals of human behavior. However, people in different cultural settings understand themselves and their social worlds in radically different ways. Their ways of being, emotional life, moral and ethical ideas, intimate relationships, and ideals differ radically. This course explores psychological dimensions of culture, focusing on South Asia (especially India and Sri Lanka) and East Asia (especially Japan and China). We take up issues such as the construction of emotion, love and sexuality, idioms of mental well-being and distress as well as cultural-specific modes of healing, and ethnicity and ethnopolitical conflict.

Is culture an external force that determines individuals' behavior, or do people produce culture through their everyday ways of living and habits of language? What research tools can help us study cultural life? What ethical issues emerge when we enter a cultural setting different from our own?

Prerequisites: PSYC 001 and one of the following: Social Psychology (PSYC 035), Concepts of the Person (PSYC 037), Abnormal Psychology (PSYC 038), or Developmental Psychology (PSYC 039).

1 credit.

Not offered 2002-2003.

PSYC 063. Special Topics in Cognitive Psychology

Selected problems from the current literature on human information processing and cognitive psychology are considered in detail. Emphasis is placed on the relationship between theories of cognition and current experimental findings. Also, the development of cognitive skills receives attention.

1 credit.

Not offered 2002-2003.

PSYC 064. Research Issues in Clinical Child Psychology

This course addresses clinical topics (e.g., pervasive developmental disorder, anxiety, depression, chronic illness, and sexual abuse), while considering specific problems of research (e.g., sampling strategies, reliability and validity, cross-sectional vs. longitudinal designs, and qualitative analysis) as they pertain to clinical child psychology. Students learn to locate and evaluate current empirical studies as they discuss childhood problems.

Prerequisite: PSYC 001 and one of the following: Abnormal Psychology (PSYC 038) or Developmental Psychology (PSYC 039), Abnormal Child Psychology (PSYC 050), Research Design and Analysis (PSYC 025), or Children at Risk (PSYC 041).

1 credit.

Not offered 2002-2003.

PSYC 067. Research Issues in Developmental Psychology

Childhood is a period of incredible change and growth. This rapid development makes designing developmental experiments fun and challenging. This course covers basic experimental terminology, design, and psychological procedures and methods while allowing the student to design and perform a research project tailored to her or his interests.

1 credit.

Not offered 2002-2003.

PSYC 068. Reading Culture

A course in seminar format concerned with the values, ideologies, myths, and power dynamics manifest in the ordinary, taken-for-granted world of everyday life. Attention is given to television, news reporting, film, advertising, music, clothing, architecture, and other cultural artifacts, and the ways in which they are shaped by psychological, social, rhetorical, and ideological processes. Also focal is the formation of subcultures, identity politics, and the postmodern cultural transformation.

Prerequisite: PSYC 001 or instructor's permission.

1 credit.

Fall 2002. Gergen.

PSYC 089. Psychology, Economic Rationality, and Decision Making

How *should* people make decisions, and how *do* people make decisions? The theory of rational choice, developed in economics and profoundly important throughout the social sciences, offers powerful answers to both of these questions. This course provides a critical examination of the theory of rational choice. It focuses on the theory's empirical inadequacies as an account of how people *do* choose and on its social and moral inadequacies as an account of how people *should* choose.

Prerequisite: Open by application to advanced students in psychology, economics, or philosophy.

1 credit.

Fall 2002. Schwartz.

PSYC 090. Practicum in Clinical Psychology

An opportunity for advanced psychology students to gain supervised experience in off-campus clinical settings. Requirements include, but are not limited to, 8 hours per week in an off-campus placement, guided readings throughout the semester, and a major term paper. Students are expected to have "face-to-face" contact with clients/patients and to have an on-site supervisor. Students meet regularly with the instructor for discussion of readings and work experience. Students are responsible for arranging a placement, in consultation with the instructor in advance of the semester. Students should select several possible sites, make contact with them, and review the sites with the instructor. The department has a file of previous practicum sites. This helps students identify general categories as well as specific options. Students applying for this course must have at least a B average in psychology. Consult the department for details and an application form.

1 credit.

Fall 2002. Reimer. *Spring 2003.* Gillham.

PSYC 091. Research Practicum in Physiological Psychology

An examination of current issues in physiological psychology with emphasis on how lower animal research is used to understand the physiological basis of normal and abnormal human behavior. Topics include learning and memory, drug addiction and tolerance, obsessive-compulsive disorder, Parkinson's and Alzheimer's diseases, and cerebral lateralization.

Prerequisite: PSYC 001 and PSYC 030 or permission of the instructor.

1 credit.

Fall 2002. Schneider.

PSYC 094. Independent Research

Students conduct independent research projects. They typically study problems with which they are already familiar from their course work. Students must submit a written report of their work. Registration for independent research requires the sponsorship of a faculty member in the Psychology Department who agrees to supervise the work.

Each semester. Staff.

PSYC 095. Tutorial

Any student may, under the supervision of a member of the Psychology Department, work in a tutorial arrangement for a single semester.

The student is thus allowed to select a topic of particular interest and, in consultation with a faculty member, prepare a reading list and work plan. Tutorial work may include field research outside Swarthmore.

Each semester. Staff.

PSYC 096 and 097. Senior Thesis

With the permission of the department, qualified students may conduct a yearlong, 2-credit research project in the senior year as one way to meet the comprehensive requirement. Such theses must be supervised by a member of the Psychology Department. The final product is evaluated by the supervisor and an additional reader. Students should develop a general plan by the end of the junior year and apply for departmental approval. By application.

1 credit each semester.

Both semesters. Staff.

PSYC 098. Senior Comprehensive Project

As one means of meeting the comprehensive requirement, each student selects a topic in psychology with the approval of the psychology faculty. During the fall semester of the senior year, the student writes a substantial paper on the topic based on library research or some original empirical research. In addition to submitting their written reports, all students will make oral presentations on their topics in the middle of the spring semester. One-half credit with a letter grade will be awarded for the written and oral work. See the department brochure for further details.

0.5 credit.

Fall semester. Staff.

SEMINARS

PSYC 130. 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.

Prerequisite: PSYC 001 and PSYC 030. By permission.

1 credit.

Spring 2003. Schneider.

PSYC 132. Perception and Attention

(See description of PSYC 032.)

In this course, we do advanced theoretical and empirical work on psychological aspects of human perception. Emphasis is on individual research projects, exploring forefront issues of visual learning and representation in domains of visual attention and eye movements, space perception, object recognition, and the perception of visual qualities.

Prerequisite: PSYC 001 and 032. By permission.

1 credit.

Not offered 2002-2003. Durgin.

PSYC 133. Cognitive Psychology

(See description of PSYC 033.)

Examination of foundational issues and theories in the empirical study of human cognition with an emphasis on insights from cognitive and biological sciences. Topics include thinking and deciding, memory, language, concepts, and perception.

Prerequisite: PSYC 001 and 033. By permission.

1 credit.

Spring 2003.

PSYC 134. Psycholinguistics

(See description of PSYC 034.)

An advanced study of special topics in the field. A research component is frequently included.

Prerequisite: PSYC 001 and 034. By permission.

1 credit.

Spring 2004. Kako.

PSYC 135. Seminar in Social Psychology

(See description of PSYC 035.)

A critical exploration of substantive topics in social psychology and an interrogation of the field's perspectives and methods.

Prerequisite: PSYC 001 and 035. By permission.

1 credit.

Fall 2002. Ward.

PSYC 137. Personality Theory and Interpretation

An exploration of major theories of human psychological functioning, with special emphasis on the process of exploration itself. Thus, critical inquiry is made into the theories of Freud, Jung, the neo-Freudians, existential the-

ory, and trait methods. At the same time, a variety of readings in literary theory, rhetoric, hermeneutics, and related realms are used to elucidate the process by which views of the human personality are developed and sustained.

Prerequisite: PSYC 001 and one of the following: Concepts of the Person (PSYC 037); Technology, Self, and Society (PSYC 048); Reading Culture (PSYC 068); or by permission.

1 credit.

Fall 2002. Gergen.

PSYC 138. Abnormal Psychology

An advanced study of several psychological conditions and their treatment. These include chronic mental illness, suicide, eating disorders, and depression. We draw on an array of disciplines, including psychology, psychiatry, history of medicine, social anthropology, feminist studies, and cultural studies. We pay critical attention to the differing practices of producing knowledge and the different kinds of knowledge that result.

Prerequisite: PSYC 001 and PSYC 038. By permission.

1 credit.

Fall 2002. Marecek.

PSYC 139. Developmental Psychology

(See description of PSYC 039.)

The seminar considers special topics of interest in the field at an advanced level. An original group research component is included.

Prerequisite: PSYC 039. By permission.

1 credit.

Not offered 2002-2003. Spring 2004.

PSYC 180. Honors Thesis

An honors thesis must be supervised by a member of the department. Must be taken as a two-semester sequence for 1 credit each semester. A thesis is required for an honors major in psychology.

1 credit each semester.

Both semesters. Staff.

Public Policy

Coordinator: **ROBINSON HOLLISTER** (Economics)
Cathy Wareham (Administrative Assistant)

Committee: **John Caskey** (Economics)
Thomas Dee (Economics)[3]
Raymond Hopkins (Political Science)[3]
Arthur McGarity (Engineering)
Carol Nackenoff (Political Science)
Virginia O'Connell (Sociology and Anthropology)
Keith Reeves (Political Science)
Richard Rubin (Political Science)
Eva Travers (Education)[3]
Richard Valelly (Political Science)
Robert Weinberg (History)

3 Absent on leave, 2002-2003.

The public policy concentration enables students to combine work in several departments toward both critical and practical understanding of public policy issues, including those in the realm of social welfare, health, energy, environment, food and agriculture, and national and global security. These issues may be within domestic, foreign, or international governmental domains. Courses in the concentration encompass the development, formulation, implementation, and evaluation of policy.

REQUIREMENTS AND RECOMMENDATIONS

The public policy concentration may be taken together with a course or honors examination major in any field or a minor in the Honors Program. At a minimum, the concentration consists of 6 credits and an internship. The program of each concentrator should be worked out in consultation with the coordinator of the public policy concentration and approved by the coordinator, preferably at the same time as majors in the course and Honors programs are planned.

The public policy concentration consists of 6 credits of work. Basic academic requirements for the concentration cover three areas: (1) economic analysis, (2) political analysis, and (3) quantitative analysis. These may each be met by taking one course or seminar in each of the three categories. Courses that fulfill these requirements are listed later.

In addition to these three foundation courses, 3 credits must be taken from among the substantive policy courses listed later, one of which must be the public policy thesis. These courses deal with substantive sectors and institutional aspects of public policy analysis. The substantive policy requirement may be fulfilled through courses and seminars. Only 1 credit of a 2-credit seminar can be counted toward the public policy requirements. Please note that seminars are limited in size and that most departments give priority to departmental majors and minors, so public policy concentrators might not be admitted. In addition, students should consider course prerequisites when planning the Concentration Program.

INTERNSHIP

Some direct experience or practical responsibility in the field, through work in a public, private, or voluntary agency, is required to graduate with a concentration in public policy. Normally, students will hold internships between their junior and senior years. The internship program is supervised by the coordi-

nator for the concentration. Students should plan for the internship experience six to eight months before it begins. The College has developed a network of contacts in Washington, D.C., and overseas and would like to have qualified students each year to fill positions already identified. Funding for an internship is occasionally provided by the agency in which a person serves. Typically, however, students require support to cover their travel and maintenance costs during the eight to 10 weeks of a summer internship.

The College attempts to provide support for those students with public policy concentrations who are unable to fund themselves, but such support cannot be guaranteed. Other possible sources of support for an internship include the James H. Scheuer Summer Internships in Environmental and Population Studies, the J. Roland Pennock Fellowships in Public Affairs, the Joel Dean Awards, the Sam Hayes III Research Grant, the Lippincott Peace Fellowships, and the David G. Smith Internship in Health and Social Policy. Public policy concentration funding for domestic internships will be limited to $3,000; funding for international internships will be limited to $3,500. Please note that airfare will not be covered for students traveling home for their internship. The total award from all College sources may not exceed $3,500. Information on each of these sources can be obtained in the Public Policy Concentration Office, 105 Trotter Hall.

PUBLIC POLICY THESIS

A senior thesis, which constitutes one of the three units of substantive policy work, is one of the requirements of the concentration. The thesis requirement is designed to provide a structured opportunity to write a substantial paper on a public policy issue. It is especially designed to allow those who have cultivated (through internships and academic work) a well-developed understanding of some policy question to complete research and analysis under the supervision of the coordinator of the public policy concentration and one or more other core faculty. Paper topics may focus on national or international policy issues and may range widely within areas of competence.

Students writing a 1-credit thesis should register for PPOL 097 in the fall of the senior year. Students doing a 2-credit thesis should register for PPOL 097 in the fall and PPOL 098 in the fall or spring of the senior year. Only 1 credit of the 2-credit thesis will count toward the 6 credits required by the concentration.

HONORS PROGRAM

Students sitting for honors may have a minor in public policy in one of three ways. First, they may complete a 2-credit policy thesis and submit it as their minor preparation. Second, they may submit for external examination course or seminar work amounting to 2 credits in the policy concentration. Third, they may combine a 1-credit thesis with a course or seminar. In the second case, they still must do their required concentration thesis.

Two-credit work in policy issues might combine work in two policy courses for which a reasonable examination can be constructed and a suitable visiting examiner recruited. Policy work examined as a minor should meet three criteria: (1) that the policy work fit together in some fashion that is coherent and examinable; (2) that each student should take responsibility for developing the course and/or seminar combination (which will be judged on its practicability by the Public Policy Concentration Committee); and (3) the work must meet the College requirement that the work be outside the student's major department. In those circumstances in which it is essential to include work from the student's major department, a student can offer a three-unit package of courses, two of which must be from outside the student's major department. Two examples of such policy study for a minor in honors are (1) the combination of a course on welfare policy and a course on health policy or (2) the combination of work on economic development and a history or political science class on some region in which development issues are a central theme. Combinations of this sort would be developed through consultation with the coordinator of the concentration, who could then recommend them to the committee for approval.

The requirement that public policy honors work be done, at least in part, outside the student's major department is also relevant to

those students offering a 2-credit thesis for examination. In the case of a 2-credit thesis, the concentration coordinator will determine that at least half of the thesis represents work done outside the student's major department.

The form of external examination (e.g., a three-hour written exam or oral exam alone) will depend on the nature of the student's preparation (e.g., thesis, course, or seminar combination).

AREAS OF POLICY FOCUS

Some students may wish to focus their substantive work in policy heavily in a particular field (e.g., environmental studies, food studies, welfare issues, health, or education). Given the size and interests of the faculty, not every area of public policy is well represented in courses and faculty. Nevertheless, there are a number of policy areas in which a student can take multiple courses, often in a variety of departments. Courses that fulfill the public policy foundation requirements in political analysis, economic analysis, and quantitative analysis as well as other courses that count toward the concentration are listed subsequently. *Note:* These courses may be counted toward a concentration in public policy (Class of '03) or a minor in public policy (Class of '03, '04, and beyond).

Foundation Requirements

Political Analysis Courses

POLS 002. American Politics

Economic Analysis Courses

ECON 011. Intermediate Microeconomics

ECON 041. Public Finance

ECON 141. Public Finance*

Quantitative Analysis Courses

STAT 002. Statistical Methods

STAT 002C. Statistics

STAT 053. Mathematical Statistics

ECON 031. Statistics for Economists

ECON 035. Econometrics

ENGR 057/ECON 032. Operations Research

SOAN 010F. Statistics (Cross-listed as STAT 002C)

Policy Courses and Seminars (Arranged by Department)*

PPOL 097/098. Public Policy Thesis

POLS 015. Ethics and Public Policy

POLS 023. Presidency, Congress, and Court

POLS 029. Polling, Public Opinion, and Public Policy

POLS 033. Race, Ethnicity, Representation, and Redistricting in America

POLS 041. Political Economy and Social Policy in the United States

POLS 043. Environmental Politics and Policy

POLS 045. Defense Policy

POLS 047. Global Policy and International Institutions: Hunger and Environmental Threats

POLS 055. China and the World

POLS 065. Politics of Population

POLS 068. International Political Economy (Cross-listed as ECON 053)

POLS 108. Comparative Politics: East Asia*

POLS 110. Comparative Politics: Latin America*

POLS 111. International Politics*

ECON 005. Savage Inaccuracies: The Facts and Economics of Education in America (Cross-listed as EDUC 069)

ECON 022. Banking and Financial Markets

ECON 041. Public Finance

ECON 042. Law and Economics

ECON 044. Urban Economics

ECON 051. The International Economy

ECON 053. The International Political Economy (Cross-listed as POLS 068)

ECON 061. Industrial Organization

ECON 073. Race, Ethnicity, and Gender in Economics

ECON 075. Health Economics

ECON 076. Economics of the Environment and Natural Resources

ECON 081. Economic Development

ECON 082. Political Economy of Africa

ECON 083. Asian Economies

ECON 101A. Economic Theory: Advanced Microeconomics*

ECON 141. Public Finance*

Public Policy

ECON 151. International Economics*

ECON 161. Industrial Organization and Public Policy*

ECON 171. Labor and Social Economics*

ECON 181. Economic Development*

EDUC 068. Urban Education (Cross-listed as SOAN 020B)

EDUC 069. Savage Inaccuracies: The Facts and Economics of Education in America (Cross-listed as ECON 005)

EDUC 141. Educational Policy

HIST 049. Race and Foreign Affairs

HIST 054. Women, Society, and Politics

LING 018. Language Policy in the United States

SOAN 020B. Urban Education (Cross-listed as EDUC 068)

BIOL 210. Biology and Public Policy (Bryn Mawr)

Descriptions of the courses listed previously can be found in each department's course listings in this catalog.

**Note:* Seminars are limited in size, and most departments give priority to departmental majors and minors, so public policy concentrators might not be admitted.

For more information on the public policy concentration, internships, theses, and related topics, please see our Web site at http:// www.-swarthmore.edu/SocSci/PublicPolicy.

Religion

J. WILLIAM FROST, Professor, Director of the Friends Historical Library
DONALD K. SWEARER, Professor[2]
ELLEN M. ROSS, Associate Professor
MARK I. WALLACE, Associate Professor
YVONNE P. CHIREAU, Associate Professor and Chair
NATHANIEL DEUTSCH, Associate Professor[3]
STEVEN P. HOPKINS, Associate Professor[1]
SCOTT KUGLE, Assistant Professor[1]
SULAK SIVARAKSA, Lang Professor of Social Change[5]
RACHEL HAVRELOCK, Visiting Assistant Professor
EILEEN McELRONE, Administrative Assistant

1 Absent on leave, fall 2002.
2 Absent on leave, spring 2003.
3 Absent on leave, 2002-2003.
5 Fall 2002.

The Religion Department investigates the phenomenon of religion through the study of ritual and symbol, myth and legend, story and poetry, scripture and theology, festival and ceremony, art and music, and moral codes and social values. The department seeks to develop ways of understanding these phenomena in terms of their historical and cultural particularity as well as their common patterns.

Courses offered on a regular cycle present the development of Judaism and Christianity as well as the religions of India, China, Japan, Africa, Europe, and the Americas. Breadth in subject matter is complemented by strong methodological diversity. Questions of historical, theological, philosophical, literary-critical, feminist, sociological, and anthropological interests are raised. *This multifaceted focus makes religious studies an ideal liberal arts major.*

REQUIREMENTS AND RECOMMENDATIONS

Students are encouraged to begin their study of religion with RELG 001 or one of the courses numbered 001 through 013. (Majors are required to take at least one of these courses.) As primary distribution courses, RELG 001 and RELG 008 introduce students to seminal themes and methods in the study of religion. Other courses in this group prepare students in comparative, historical, philosophical, literary, and phenomenological approaches to religion. Successful completion of at least two religion courses is normally required for admission to seminars and is also a prerequisite for admission to a major in course or a major or minor in honors.

The major in religion is planned through consultation with faculty members in the department. To ensure breadth in the program of study, all majors must take at least one course from two curricular groups that include the several religious traditions and the varied modes of analysis represented in the department (see "Majoring in Religion at Swarthmore"). Students in both course and the Honors Program are expected to have taken the background courses required for work in specific seminars. A component of a major's program of study may include study abroad planned in collaboration with the department. In addition to the introductory course and distribution requirements, majors are required to complete the religion capstone, RELG 095: Religion Café: Senior Symposium, a weekly symposium for senior majors on important themes, theories, and methods in the comparative, cross-cultural study of religion.

Majors are required to complete at least 8 credits in religion, including the Senior Symposium, to meet department graduation requirements. Minors are required to complete 5 religion credits but not RELG 095: Religion Café: Senior Symposium.

Major and Minor in the Honors Program (External Examination Program)

The normal method of preparation for the honors major will be done through three seminars, although with the consent of the department, 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 nonseminar-based studies.

The honors 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 a senior honors study (SHS) paper to the external examiner for each preparation. SHS papers will be approximately 4,000 words and will normally be a revision of the final seminar paper or, in the event of a nonseminar mode of preparation, a revised course paper. Honors minors will be examined on one 2-credit seminar preparation. They are required to complete 5 credits in the department but will not take the Senior Symposium required for majors. SHS for honors minors will consist of one revised seminar paper.

Seminars and the written and oral external examination 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 a final paper where appropriate. 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, timely submission of seminar papers, reading of seminar papers, and completion of the assigned readings before 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.

Religion majors enrolled in SHS will revise one paper for each of the three preparations (one preparation for minors), with the exception of a thesis, which has no SHS component. Those will be submitted to the department as part of the students' portfolio for the external examiners. Honors majors and minors will register for a half-credit SHS in the second semester of their senior year. In addition, the department expects students to form their own study groups to prepare for the external examinations. This extension is an important facet of the cooperative and collaborative aspect of honors preparation.

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 self-understanding 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.

Primary distribution course. 1 credit.

Fall 2002. Chireau, Havrelock.

RELG 002B. Religion in America

An introductory survey that explores religion in the United States from a historical perspective.This course will emphasize America's heritage of cultural diversity and religious pluralism, starting with an examination of Native American belief systems on the eve of culture contact and move on to the impact of present-day immigrant traditions. By uncovering hidden and manifest strands in multicultural religiosity, we can begin to understand the mosaic of spiritual life in American society.

1 credit.

Spring 2003. Chireau.

RELG 003. Hebrew Bible and the Ancient Near East

An introduction to the Hebrew Bible and the religion of ancient Israel within the context of

other ancient Near Eastern religious traditions. The Hebrew Bible will be read closely in English translation with special attention to mythological, exegetical, sociological, gender, and body issues. In addition to the Hebrew Bible, literature from Mesopotamia, Egypt, and Canaan will be read, including "The Epic of Gilgamesh," "The Enuma Elish," and "The Theology of Memphis."

1 credit.

Fall 2002. Havrelock.

RELG 004. New Testament and Early Christianity

An introduction to the New Testament and its development with special attention to problems of redaction and literary construction as well as the formation of early Christian orthodoxy and heresy.

1 credit.

Spring 2003. Havrelock.

RELG 005. Problems of Religious Thought

Study of the contemporary global crisis and the resources within different religious traditions for ameliorating the crisis.

1 credit.

Not offered 2002-2003.

Religion 005B. Introduction to Christianity.

This course is a selective introduction to Christian religious beliefs and practices. This course introduces students to the development of and diverse forms of Christianity, drawing on categories from the study of religion including ritual, narrative, art and theology. We will consider historical, cultural, and theological issues including development of institutions, religious life and practice, and understandings of God, self, and the world. Readings include Augustine, Peter Brown, Hildegard of Bingen, Martin Luther, John Calvin, Friedrich Schleiermacher, Paul Tillich, and Sallie McFague.

1 credit.

Spring 2003. Ross.

RELG 006. War and Peace

An examination of religious perspectives and influences on organized violence. The first part concentrates on war and peace in the formative periods of Judaism, Christianity, Islam, and Hinduism. Topics include holy war, just war, and pacifism. The last half deals with the impact of religion on World War I and II, the founding of Israel, the Cold War, Kuwait, and Bosnia/Kosova.

1 credit.

Fall 2002. Frost.

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.

1 credit.

Not offered 2002-2003.

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.

Primary distribution course. 1 credit.

Spring 2003. Hopkins.

RELG 009. The Buddhist Traditions of Asia

This course explores the unity and diversity of the Buddhist tradition within the historical and cultural contexts of South, Central, and East Asia. The course focuses, in particular, on the formation of Buddhism in India, Therevada in Southeast Asia, Vajrayana in Tibet, and Zen in China and Japan.

1 credit.

Fall 2002. Swearer.

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.

1 credit.

Fall 2002. Chireau.

RELG 011B. Religious Symbols and Islamic Experience

What are the basic symbols of Islam, and how are they understood and experienced by Muslims? This course will introduce students to the methodology of religious studies concentrating on symbols, myth, and ritual. We will apply these theoretical concepts to the Muslim experience of religion by exploring textual and historical sources, classical and contemporary, from Africa, Arabia, and Asia.

Primary distribution course. 1 credit.

Spring 2003. Kugle.

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.

1 credit.

Not offered 2002-2003.

RELG 013. History, Religion, and Culture of India II: From Akbar to Gandhi and the Voices of Untouchable Liberation

The religious history of India from the advent of Islam to the present. From the Moghuls to the Hindu nationalist movements and Ambedkar's legacy to the present.

1 credit.

Not offered 2002-2003.

RELG 014B. Christian Life and Thought in the Middle Ages

Survey of Western religious culture and thought from the early to the late Middle Ages. Among other topics, the course will consider debates about the nature of the Divine, the person and work of Jesus Christ, heresy and dissent, bodily devotion, love mysticism, scholasticism, and holy persons. Readings may include Augustine, Anselm, Avicenna, Abelard, Hildegard of Bingen, Francis of Assisi, Catherine of Siena, Thomas Aquinas, Julian of Norwich, and John Wyclif.

1 credit.

Not offered 2002-2003.

RELG 015B. Philosophy of Religion

(Cross-listed as PHIL 016)

This course considers Anglo-American and continental philosophical approaches to religious thought using different disciplinary perspectives. Topics include rationality and belief, proofs for existence of God, problem of evil, interreligious dialogue, feminist revisionism, and postmodernism. Thinkers include Kant, Kierkegaard, Nietzsche, Wittgenstein, Buber, Kristeva, Ricoeur, Levinas, Hegel, Abe, and Wiesel.

1 credit.

Spring 2003. Wallace.

RELG 016B. Rabbinic Thought and Literature

This course will examine the thought, literature, and social context of rabbinic religion from the fall of Jerusalem to the redaction of the Babylonian Talmud.

1 credit.

Not offered 2002-2003.

RELG 018B. Modern Jewish Thought and Literature

A close reading of modern Jewish works. We will examine topics such as Hasidism, Haskalah (Jewish Enlightenment), Zionism, the Holocaust, and 20th-century Jewish philosophy.

1 credit.

Not offered 2002-2003.

RELG 019B. Introduction to Jewish Mysticism

This course will survey the history and literature of Jewish mysticism, beginning with Merkabah mysticism, continuing through the German Pietists and the Kabbalah, and ending with Sabbatianism and Hasidism.

1 credit.

Not offered 2002-2003.

RELG 020B. Prophets and Visionaries: Christian Mysticism Through the Ages

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, Catherine of Siena, George Fox, Simone Weil, Thomas Merton, and Dorothee Soelle.

1 credit.

Fall 2002. Ross.

RELG 022. Religion and Ecology

The challenge of the ecological crisis to contemporary religious thought and practice. Readings will be drawn from M. Heidegger, "Book of Job," Buddhist scriptures, J. Muir, Black Elk, E. Abbey, S. Griffin, B. McKibben, C. Hyun-Kyung, and R. Ruether.

1 credit.

Not offered 2002-2003.

RELG 023B. Quakerism

The history of the distinctive religious and social ideas and practices of Friends from the 1650s to the present. Special emphasis will be placed on changes in worship and theology caused by the enlightenment, evangelicalism, and modernism.

1 credit.

Not offered 2002-2003.

RELG 024B. From Vodun to Voodoo: African Religions in the Old and New Worlds

Is there a kindred spirituality in the ceremonies, music, and movements of African religions? This course explores the dynamics of African religions throughout the Diaspora and the Atlantic world.

1 credit.

Foreign study credit may be available.

Not offered 2002-2003.

RELG 025B. Black Women and Religion in the United States

This course explores how social, cultural, and political forces have intersected to inform black women's personal and collective attempts at the definition of a sacred self.

1 credit.

Not offered 2002-2003.

RELG 026B. Buddhist Social Ethics

A study of the doctrinal foundations of Buddhist social ethics, classical conceptions of individual and social well-being, and contemporary interpretation of Buddhism as a program for social, economic, and political transformation in South and Southeast Asia. Sources include Pali texts, studies by modern scholars, and the work of contemporary Buddhist activists.

1 credit.

Not offered 2002-2003.

RELG 027B. Asian Religions in America

An exploration of various forms of the appropriation, establishment, and transformation of Hinduism, Buddhism, and Islam in America.

1 credit.

Not offered 2002-2003.

RELG 029. Monasticism and the Arts in the Christian Middle Ages

(Cross-listed as ARTH 046)

Survey of Christian monastic contributions to the arts in the Middle Ages.

1 credit.

Not offered 2002-2003.

RELG 030B. The Power of Images: Icons and Iconoclasts

A cross-cultural, comparative study of the use and critique of sacred images in Biblical Judaism, Eastern Christianity, Hindu, Buddhist, and Jain traditions of India.

1 credit.

Not offered 2002-2003.

RELG 031B. Religion and Literature: From the Song of Songs to the Hindu Saints

A cross-cultural, comparative study of religious literatures in Jewish, Christian, Islamic, and Hindu traditions. How "secular" love poetry and poetics have both influenced and been influenced by devotional poetry in these tradi-

tions, past and present.

1 credit.

Not offered 2002-2003.

RELG 037. Greek and Roman Religion

(See CLAS 037.)

RELG 038B. Religion as a Cultural Institution

(See SOAN 070.)

RELG 045. Torah and Logos: Judaism and Philosophy

(Cross-listed as PHIL 045)

This course will consider the relations between Judaism and philosophy. Among the topics we will examine are ethics, history and memory, the role of reason, and hermeneutics.

1 credit.

Not offered 2002-2003.

RELG 046. Justice and Conscience in Islam

Muslim intellectuals and religious leaders reacted to the political success of Islam with a strong emphasis on justice and conscience to critique this prosperity and power. "Classical Islam" was shaped by the varied movements of jurists, mystics, and philosophers (and revolutionaries) who upheld conflicting visions of justice and conscience.

1 credit.

Not offered 2002-2003.

RELG 047. Islamic Poetry and Prophecy

An investigation of inspiration, metaphor, and interpretation in Islamic discourses. Islam has been characterized as "religion of the word." Whether in scripture or poetry, song or calligraphic art, the word and its adornment are central features of the civilization created by Muslims.

1 credit.

Not offered 2002-2003.

RELG 048. The Summoned Self: Levinas and Ricoeur

This course will ask how Paul Ricoeur and Emmanuel Levinas use philosophical and biblical texts to construe the project of selfhood in terms of being called to take responsibility for one's neighbor. Other topics include Christian-Jewish dialogue, rabbinic exegesis, moral philosophy, political theory, and biblical hermeneutics.

1 credit.

Not offered 2002-2003.

RELG 051. Engaged Buddhism in Asia and the West

This course will be organized around the following topics: (1) the nature of engaged Buddhism, especially its focus on the correlation between personal and social transformation; (2) the development of engaged in Buddhism in Thailand with special reference to the issues that have been at the forefront of S. Sivaraksa's career, work, and thought, namely, structural violence, poverty, the impact of globalization on culture, and consumerism; (3) engaged Buddhism movements in Asia including such movements and figures as Sarvodaya Shramadana in Sri Lanka and the Burmese reformer, Aung San Suu Kyi; (4) finally, the course will conclude with an examination of engaged Buddhism as an international movement including the work of the International Network of engaged Buddhists, the Dalai Lama and Thich Nhat Hanh, and new initiatives in Buddhist-Christian and Buddhist-Muslim dialogue. Enrollment will be limited. Previous knowledge or study of Buddhism preferred.

1 credit.

Fall 2002. Sivaraksa.

RELG 053. Gender and Sexuality in Islamic Societies

This course explores the complexities of gender roles and sexuality norms in Islamic societies. It includes examples from the time of the prophet Muhammad through the medieval era and into the present. The course will focus on the roles of women in Islamic history, law, literature, and scripture. The goal is for students to understand the complex background to contemporary debates on the status of women and to assess movements of Islamic feminism.

1 credit.

Spring 2003. Kugle.

RELG 056. Jewish History and Biblical Interpretation

This course will chart the travels of the Hebrew Bible through centuries of Jewish biblical interpretation. Interpretation has been the primary practice and organizing force in Jewish communities across the world. We will

begin with biblical story itself and discover the way in which biblical narrative invites interpretation. We will then examine the midrashic, the philosophic, the psychological, and the mystical modes of reading the Bible. Readings will include classical Jewish texts in translation as well as contemporary scholarship and current interpretive modes. As a class, we will follow the transmission of the creation story while each student selects a biblical story to chart as we study different periods of interpretation within their historical contexts.

1 credit.

Spring 2003. Havrelock.

RELG 057. Beginning Hebrew for Text Study

(Cross-listed as LING 007)

This course is designed both for students who have no Hebrew experience and for those who are already able to read phonetically without comprehension. In two semesters, students will learn enough grammar and vocabulary to read the Hebrew Bible and some rabbinic material with the help of a Hebrew-English dictionary. In addition to the primary textbook for the course, students will use the BDB Hebrew Lexicon of the Bible and the Hebrew Concordance to investigate the meanings and uses of word roots. Beginning early in the semester, students will be presented with selected passages from the Bible and the rabbinic midrash collections that illustrate the grammatical forms they are studying. Students will work in groups to prepare these passages and will then present their interpretations to the class.

1 credit.

Fall 2002. Plotkin.

RELG 093. Directed Reading

1 credit.

Staff.

RELG 095. Religion Café: Senior Symposium

A weekly symposium for all senior majors on seminal themes, theories, and methods in the comparative, cross-cultural study of religion. Course will argue for the inherently multidisciplinary nature of religious studies by examining various approaches to the phenomenon of religion, from psychoanalysis and poststructuralist theory to anthropology, literature, philosophy, and social history. Themes include religion, violence, and the sacred; ritual, symbol, and pilgrimage; purity and pollution; religious experience, gender, and embodiment; civil religion, orientalism, colonialism, and power. Interpreters may include Mircea Eliade, Victor Turner, René Girard, Mary Douglas, Mikhail Bakhtin, Martin Buber, Jacques Derrida, and Michel Foucault.

1 credit.

Fall 2002. Wallace.

RELG 096. Thesis

1 credit.

Staff.

SEMINARS

RELG 101. Jesus in History, Literature, and Theology

A study of Jesus through history, art, film, fiction, and popular culture.

2 credits.

Not offered 2002-2003.

RELG 102. Folk and Popular Religion in the United States

This seminar investigates the cultural complexity of the American religious experience through the lens of folk and popular traditions. Topics include folk Catholicism in America, local religious celebrations, 19th-century popular movements, and public celebrations in folk religion.

2 credits.

Not offered 2002-2003.

RELG 104. Buddhism and Society in Southeast Asia

A multidisciplinary study of Theravada Buddhism against the historical, political, social, and cultural backdrop of Sri Lanka, Burma, and Thailand. The seminar focuses around three themes: Buddhism, political legitimation, and national integration; the inclusive and syncretic nature of popular Buddhist thought and practice; and the variety of responses of Buddhism to modernity. The seminar will use the resources of Thai and Cambodian monasteries in Philadelphia.

Prerequisite: Religion 008, 009, 012, 026B, or

permission of the instructor.

2 credits.

Fall 2002. Swearer.

RELG 105. Religion and Society

How have religious ideas and institutions shaped or been influenced by American culture? Topics include the varieties of Protestanism from Puritanism to the Christian Right, Roman-Catholicism and Judaism (the impact of American context), encounters with Indians and blacks with Christianity, and contemporary religious practices.

2 credits.

Not offered 2002-2003.

RELG 106. Contemporary Religious Thought

Study of the major theological options in the West since the Enlightenment.

2 credits.

Not offered 2002-2003.

RELG 107. Liberation Theology

A study of the principal themes of liberation theology as it has developed in Latin America during recent decades.

2 credits.

Not offered 2002-2003.

RELG 108. Poets, Saints, and Storytellers: Religious Literatures of India

The major forms of Indian religious culture through the lenses of its varied regional and pan-regional literatures, focusing on gender, the passions, constructions of the body, and religious devotion.

2 credits.

Not offered 2002-2003.

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.

2 credits.

Not offered 2002-2003.

RELG 110. Religious Belief and Moral Action

The seminar will explore the relationship between religion and morality. Basic moral concepts in Buddhism, Christianity, 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. The course includes a consideration of Martin Luther King Jr., Dorothy Day, Mahatma Gandhi, and Thich Nhat Hanh.

2 credits.

Not offered 2002-2003.

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, breakdown of metanarratives, and the question of God beyond Being. Readings include Eckhart, Kierkegaard, Nietzsche, Heidegger, Bataille, Levinas, Nishitani, Irigaray, Ricoeur, Kristeva, Marion, Rorty, Taylor, and Girard.

2 credits.

Fall 2002. Wallace.

RELG 114. Love and Religion

An exploration of the concept of "love" in selected Western, Near-Eastern, and Indian traditions. The uses of love and sexuality, the body and the passions, in religious discourse to describe the relationship between the human and divine. Sources range from Plato and the Troubadours to Angela of Foligno and from Bengali devotional poetry to motions of "love" in a Tamil family. Major theoretical questions—the culture construction of emotions, the erotic life, the body, and religion—will be derived from Nussbaum, Biale, Bynum, Ramanujan, and Trawick.

2 credits.

Spring 2003. Hopkins.

RELG 115. The Gnostic Imagination: Dualism from Antiquity to Harold Bloom

This course examines the problem of dualism and the history of dualistic religious traditions from the Gnostics and Mandeans of Late Antiquity to the recent writings of Harold Bloom.

2 credits.

Not offered 2002-2003.

RELG 116. The Body in Late Antiquity

An examination of different views of the body (human, angelic, and divine) in Late Antiquity, with special emphasis on sexuality, gender, divinity, and mystical transformation.

2 credits.

Not offered 2002-2003.

RELG 117. Hasidism: From Bialystok to Brooklyn

We will examine the origins of Hasidism, read the tales of its legendary founder (in Shivhei Ha-Besht), and discuss the rapid spread of the movement throughout Eastern Europe.

2 credits.

Not offered 2002-2003.

RELG 119. Sufism: Muslim Mystics, Saints and Poets

An exploration of mystical experience, sainthood, and literary expression among Muslims in South Asia. Islam is one of the most active and widespread religious traditions in Asia; Sufi mysticism is the religious practice of most Muslims in Asia. These two often-ignored facts act as the frame for this seminar that focuses on Sufi communities and saints in South Asia. The seminar will cover material from the medieval period through the present, primarily from India, Pakistan, Bangladesh and Afghanistan. Poems, saint's biographies, guides to mystical contemplation, and parables will be presented in translation from Persian, Urdu (Hindi), Punjabi, and Bengali. The seminar is multidisciplinary, involving interpretive strategies from religious studies, history, literature, anthropology, ethnomusicology and gender studies.

2 credits.

Spring 2003. Kugle.

RELG 121. Midrash Tisch

Before deconstructionism there was Midrash, a sophisticated, imaginative, and entertaining method of interpreting the Bible. Open to students with intermediate or advanced knowledge of Hebrew.

2 credits.

Not offered 2002-2003.

RELG 123. Special Topics in Religion: How Religion Reads Sexuality

At times, religion seems like the enemy of sexuality and at others the two seem to be strange bedfellows. This course examines issues of sexuality and the diversity of sexualities represented in the Western Religions of Christianity, Islam, and Judaism. Themes of inquiry include the force of female sexuality within religious contexts, the nature of homo-social relationships in Hellenistic and biblical literature, asceticism, and sexuality. We will also examine the chain of interpretation through which the biblical city of Sodom transformed into the concept of sodomy. Readings are drawn from Plato's "Symposium", Foucault's "History of Sexuality," "Carnal Israel" by Daniel Boyarin, "Love Between Woman" by Bernadette Brooten, "The Invention of Sodomy in Christian Theology" by Mark Jordan, and "Christianity, Social Tolerance and Homosexuality" by John Boswell.

2 credits.

Spring 2003. Havrelock.

RELG 124. Africa/America/Islam

This seminar charts America's complex relationship with Islam, as mediated by Africa, Africans, and African-Americans. It will examine the beliefs and practices of many Muslim groups including Arab, Berber and African Muslims, African slaves in America, Maroon communities, the Moorish Science Temple, the Nation of Islam and its splinter groups, and the "Black" Muslims of the present.

2 credits.

Not offered 2002-2003.

RELG 125. Islamic Society in North Africa and Andalusia

This seminar focuses on what Arabs called "The West" (al-Maghrib: the Mediterranean region from North Africa to Spain). The seminar will trace the foundations of Islamic society in the region, focusing on the complex interplay between Islamic law, mysticism, and rational philosophy through primary Arabic

sources (in translation) as well as secondary scholarly studies.

2 credits.

Not offered 2002-2003.

RELG 199. Senior Honors Study

0.5 credit. Staff.

Sociology and Anthropology

JOY CHARLTON, Professor[4]
JENNIE KEITH, Professor[4]
MICHAEL MULLAN, Professor
BRAULIO MUÑOZ, Professor
STEVEN I. PIKER, Professor
ROBIN E. WAGNER-PACIFICI, Professor
MIGUEL DÍAZ-BARRIGA, Associate Professor and Chair
BRUCE GRANT, Associate Professor[1]
SARAH WILLIE, Associate Professor
FARHA GHANNAM, Assistant Professor
BRIAN AXEL, Visiting Assistant Professor
VIRGINIA O'CONNELL, Visiting Assistant Professor
ROSE MAIO, Administrative Coordinator

1 Absent on leave, fall 2002.

4 Absent on administrative leave, 2002-2003.

The Sociology and Anthropology Department provides students with intellectual tools for understanding contemporary social issues, such as globalization, nationalism, race relations, bioethics, and the complex layering of social inequalities in everyday life. The department attracts students who seek knowledge about societies of the world and the opportunity to conduct independent projects based on primary research and fieldwork.

Courses cover social theory, the microtechnologies of social change, the symbolic aspects of culture, and the historical development of the disciplines. Methodology courses both generate a firm understanding of research design and explore the social dynamics behind the production of texts and visual representations. These intellectual foundations are brought to bear, in turn, in the study of social institutions such as religion and the workplace and geographical areas such as the Middle East, Latin America, Europe, Southeast Asia, the former Soviet Union, and the United States.

Because of its strong cross-cultural and transnational orientations, the department encourages students to study abroad. For many, foreign study provides a basis for their senior thesis project (see the department's Web site at http://www.swarthmore.edu/SocSci/SocAnth/ for a listing of student's 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.

REQUIREMENTS AND RECOMMENDATIONS

Applicants for the major normally have completed at least two courses in the department. Majors complete a minimum of 8 units of work in the department, including a double-credit thesis tutorial normally to be taken during the fall and spring semesters of the senior year. The Research Design course (SOAN 021B) is strongly recommended for majors.

Courses numbered SOAN 001 to 020 serve as points of entry for students wishing to begin work in the department. Enrollment in these courses is unrestricted, and completion of one of them will normally serve as prerequisite to higher-level work in the department (SOAN 021-099). (Some higher courses may, however, with permission of the instructor, be taken without prerequisite.) Seminars are numbered SOAN 100 to 199. For current seminar listings, please consult our Web site at http://www.swarthmore.edu/SocSci/SocAnth/ or contact our department administrative coordinator.

(*Note:* Course labeling within each of the three tiers of offerings—introductory courses [SOAN 001-019], regular courses [SOAN 020-099], and seminars [SOAN 100-199]—reflect internal departmental codes rather than levels of advancement or particular research areas. Please consult the listings for prerequisites particular to each course.)

Honors Major and Minor

Candidates for honors in sociology and anthropology must complete three honors preparations, one of which must be SOAN 180: Thesis. The other two preparations may be a seminar, or, with permission, course plus attachment, paired upper-level courses, or foreign study. Minors in the Honors Program must complete only one preparation, although they must take additional elective work to ensure a proper content for this preparation. See "Majoring in Sociology and Anthropology" for additional information.

AREAS OF SPECIAL CONCENTRATION IN SOCIOLOGY AND ANTHROPOLOGY

Teaching and research interests of members of the department cluster to create a number of subject matter areas. Students who are interested in one of these are encouraged to meet with the indicated department members to plan a program of study.

1. Social Theory and Social Philosophy (Axel, Díaz-Barriga, Grant, Muñoz, Piker, Wagner-Pacifici, and Willie)
2. Human Adaptation, Cultural Ecology, and Human Evolution (Piker)
3. Modern Society (Charlton, Díaz-Barriga, Grant, Mullan, Wagner-Pacifici, and Willie)
4. Cultural and Ethnic Pluralism (Charlton, Díaz-Barriga, Ghannam, Grant, Muñoz, Romberg, and Willie)
5. Religion and Culture (Axel, Charlton, Grant, and Piker)
6. Psychology and Culture (Charlton and Piker)
7. Sociology of Art and Intellectual Life (Grant, Muñoz, and Wagner-Pacifici)
8. Modernization and Development (Díaz-Barriga and Ghannam)
9. Inequality (Charlton, Díaz-Barriga, Wagner-Pacifici, and Willie)
10. Political Behavior and Culture (Axel, Díaz-Barriga, Grant, Wagner-Pacifici, and Willie)

CERTIFICATION FOR SECONDARY SCHOOL TEACHING

Sociology/anthropology majors can complete the requirements for teacher certification through a program approved by the state of Pennsylvania. Because of a change in teacher certification regulations that occurred in November 2000, students completing certification during 2002 to 2003 will fulfill the requirements for social studies certification, and those who complete certification in 2004 and beyond will complete the requirements for social science certification. Students contemplating teacher certification would normally schedule their program in a semester, which does not conflict with their senior thesis. Such programs should be developed in close consultation with advisers in the Department of Educational Studies. For further information about the relevant set of requirements, please contact the Educational Studies chair, the Sociology/Anthropology Department chair, or the Education program Web site: www.swarthmore.edu/SocSci.Education/.

COURSES

SOAN 002B. Cultural Borderlands

This course focuses on the anthropology and sociology of gender, ethnic, and class relations in the United States. The course emphasizes current discussions of inequality and multiculturalism as well as case studies, including Chicano feminism, working-class sexuality, gendered "back talking." The course is designed to introduce the student to the basic concepts of both anthropology and cultural studies for understanding cultural "borderlands" in the United States.

Primary distribution course. 1 credit.

Not offered 2002-2003.

SOAN 002C. Introduction to Latinos in the United States

The course is an introduction to anthropological, sociological, and literary writing on Mexican-American culture. The course focuses on ethnic identity, covering such topics as border ballads and folklore, inner-city life, and Chicana feminism. Authors studied in the course include Cisneros, Garza, Limon, Moraga, Paredes, Rodriguez, and Rosaldo. *This course may be counted toward a concentration in Latin American studies for the Classes of 2002 and 2003 and a minor in this same area for students in the classes of 2003 and 2004.*

1 credit.

Not offered 2002-2003.

SOAN 003B. Nations and Nationalisms

Nationalist movements around the world have risen to the fore in the late 20th and early 21st centuries by drawing on malleable images of culture, patriotism, and belonging. This course examines different kinds of nationalist discourse through recent anthropological and sociological analyses of ethnicity, class, and the use of symbolism in complex societies. *This course may be counted toward a number of concentrations for the Class of 2003 and a minor in these same areas for students in the classes of 2003 and 2004.*

Primary distribution course. 1 credit.

Spring 2003. Grant.

SOAN 004B. Freshman Seminar: Introduction to Contemporary Social Thought

A general introduction to major theoretical developments in the study of social life since the 19th century. Selected readings will be drawn from the work of such modern social theorists as Marx, Weber, Durkheim, Freud, and Simmel. Readings from contemporary authors such as Geertz, Goffman, Adorno, and Arendt will also be included. These developments will be studied against the background of the sociophilosophical climate of the 19th century.

Primary distribution course. 1 credit.

Fall 2002. Muñoz.

SOAN 005B. Freshman Seminar: Religion in Lives and Culture

Religion is universal to human cultures; and, everywhere, religiousness suffuses lives and communities and history. This seminar looks at religion as it is experienced by looking at case materials drawn from several cultures (non-Western, Western, modern America; nonliterate as well as modern) as well as interpretations of religious case materials. The biographical, social, and psychological contexts of religion are emphasized, as are both cultural psychological perspectives on religion. The dynamics of religious change are explored, particularly with reference to contemporary Theravada Buddhist Southeast Asia and the modern United States.

Primary distribution course—status pending.

1 credit.

Spring 2003. Piker.

SOAN 005C. Freshmen Seminar: Learning Cultures

This course enables students to use fieldwork to learn about how cultures work at the most local, human level (i.e., in the context of routine, everyday social encounters and activities) and what these mean to natives. The topical focus of the course will be gender definitions because everywhere these are of fundamental importance to local life. The work of the course will prominently feature the direct study of gender, mainly through observations, in local life situations, toward the production of field reports, which will be reviewed and discussed by the class as a whole. Films will be used as cultural documents.

Primary distribution course. 1 credit.

Fall 2002. Piker.

SOAN 005D. Psychological Anthropology

The relationship between the individual and his or her culture is psychologically mediated. This course explores this relationship through treatment of the following topics or issues: (1) socialization, or the transmission of culture from generation to generation; (2) the psychology of meaningfulness, with special reference to gender definitions and within this—to misogyny; and (3) evolutionary perspectives on human nature and cultural elaboration of the same.

Primary distribution course. 1 credit.

Not offered 2002-2003.

SOAN 006B. Symbols and Society

This course examines the ways in which we orient ourselves in a world of constant and contradictory symbols. National symbols, ideological symbols, status symbols, and others will be analyzed with the approaches of sociologists, semioticians, and anthropologists.

Primary distribution course. 1 credit.

Not offered 2002-2003.

SOAN 007B. Introduction to Race and Ethnicity in the United States

This course uses classic ethnographies, current race theory, and journalistic accounts to examine the experiences of selected ethnic groups in the United States and to investigate theories of racism, the meaning of race and ethnicity in the 20th century, and contemporary racialized public debates over affirmative action, welfare, and English-only policies. *This course may be counted toward a concentration in black studies for the Class of 2003 and a minor in this same area for students in the classes of 2003 and 2004.*

Primary distribution course. 1 credit.

Spring 2003. Willie.

SOAN 007C. Sociology Through African American Women's Writing

Interrogating the explicit and implicit claims that black women writer's make in relation to work by social scientists, we will read texts closely for literary appreciation, sociological significance and personal relevance, examining especially issues that revolve around race, gender, and class. Of special interest will be where authors position their characters vis-à-vis white supremacy, patriarchy, capitalism, and the United States. *This course may count toward a concentration in black studies and women's studies for the Class of 2003 and a minor in these same areas for students in the classes of 2003 and 2004.*

1 credit.

Fall 2002. Willie.

SOAN 008C. Bioethics: A Sociological Perspective

This course will look at the field of bioethics and its impact on medical practice in the United States. What led to the development of the field of bioethics, and what is the ideological base of the bioethical discourse? What issues are discussed by biothicists and hospital committees, and what other issues are not broached? All of these questions will be addressed, employing broader theories of social structure and culture with some cross-cultural comparisons. Why is cloning a hot bioethical issue but not the lack of medical insurance for 44 million Americans?

Primary distribution course. 1 credit.

Fall 2002. O'Connell.

SOAN 009B. Islam in Global Context

A religion that started in Mecca, Saudi Arabia, Islam is currently the religion of millions in the Middle East, Africa, Asia, Europe, and the Americas. This class looks at the origin of Islam, its expansion, and its current articulation in different societies. First, we survey some basic aspects of Islam such as the five pillars, Shari'a, Umma, Jihad, veiling, and Sufisim. Then, we examine how Islam is experienced and practiced in different parts of the world. We look at historically Muslim countries such as Egypt, Saudi Arabia, and Indonesia, and we also trace the recent movement (through migration and conversion) of Islam and Muslims to Western countries (United States and Europe). In exploring Islam and its current articulation in the West, we address questions such as: How is Islam represented in Western media? How do Muslims work to maintain their religious identities in New York, Berlin, and Paris? How is Islam used for political purposes by different groups in and outside the Middle East?

1 credit.

Not offered 2002-2003.

SOAN 009C. Cultures of the Middle East

Looking at ethnographic texts, films, and literature from different parts of the region, this class examines the complexity and richness of culture and life in the Middle East. The topics we will cover include orientalism, colonization, gender, ethnicity, tribalism, nationalism, migration, nomadism, and religious beliefs. We will also analyze the local, national, and global forces that are reshaping daily practices and cultural identities in various Middle Eastern countries.

Primary distribution course. 1 credit.

Fall 2002. Ghannam.

SOAN 009D. Creation and Persistence of Community

Explores the condition under which both feelings and structures of community emerge and persist, especially in the context of modern society. Readings will include case studies of various types of community, including utopian experiments, retirement villages, communes, and religious communities.

1 credit.

Not offered 2002-2003.

SOAN 010C. The Social Development of Sport

The course is designed as an introduction to the subfield of sport sociology. The primary focus of the course will rest on the developmental history of the institution of Western sport and the principal analytical frameworks constructed to explain its origins. Although the historical and theoretical material is centered on European developments, contemporary issues and debates on the relationship of gender, race, and ethnicity to sport will concentrate on American society. Readings will be drawn from the work of sociologists and historians working directly in sport studies.

1 credit.

Not offered 2002-2003.

SOAN 010D. An Introduction to Greek Archaeology

(Cross-listed as CLAS 052)

This course traces the development of Greek civilization as documented by archaeology and includes data ranging from monumental art and architecture to coins and potsherds. Special emphasis is on such important sites as Knossos, Mycenae, Delphi, Olympia, and Athens.

1 credit.

Not offered 2002-2003. Staff.

SOAN 010E. Statistical Methods

(Cross-listed as STAT 002)

Data on one variable are examined through graphical methods and the computations of averages and measures of variation. Relationships between two variables are studied using methods such as chi-square, rank correlations, analysis of variance, and regression analysis. This course is intended for students who want a practical introduction to statistical analysis methods and who intend to do a statistical analysis themselves, mainly in the biological and social sciences. It is not a prerequisite for any other department course except STAT 028, nor can it be counted toward a major in the department. Recommended for students who have not studied calculus (those who know a semester of calculus are advised to take STAT 023 instead).

1 credit.

Fall 2002. Staff.

SOAN 010F. Statistics

(Cross-listed as STAT 002C)

The calculus-based introduction to statistics covers most of the same methods examined in STAT 002, but the course is taught on a higher mathematical level. This course is intended for anyone who wants an introduction to the application of statistical methods.

Prerequisite: MATH 004 or 005.

1 credit.

Spring 2003. Staff.

SOAN 010H. The Tribal Identity of Sport: Nationalism, Ethnicity, and the Rise of Sport in the Modern Era

This course focuses on the development of modern sport at multiple levels of analysis. First, it is a primer on the descriptive facts of sport development in the late 19th and early 20th centuries and the social theory employed to study it. Second, it is more detailed at the connections between nationalism and sport, the nexus of national, communal association with sporting achievement as a social mechanism in the construction of group identity.

1 credit.

Not offered 2002-2003.

SOAN 010J. War, Sport, and the Construction of Masculine Identity

The course will concentrate on the themes of sport and war and the historical construction of male identity. Our culturally endorsed ideals of manhood are related to tests of skill and physical exertion. The influence of the sport/warrior ethic on modern sensibilities will take us to 19th-century England and the United States as these nations grappled with the meaning of sport and war as markers of the adult male. Contemporary works that challenge stock impressions of masculinity will

be read.

1 credit.

Fall 2002. Mullan.

SOAN 010K. Gender and Sexuality

What is gender? How is it related to sexuality? Are masculinity and femininity essential to, or a natural part of, who we are? This class provides an introduction to one particular approach to answering these questions. The approach—"performativity"—suggests that such categories as "male," "female," or "heterosexual" are created, or *performed*, within changing contexts of social interaction. Our readings and discussions will, in other words, consider gender and sexuality as complex cultural formations and look at how this perspective opens possibilities for critiques of the interplay of culture, power, and language.

Primary distribution course—status pending.

1 credit.

Fall 2002. Axel.

SOAN 020B. Urban Education

(Cross-listed as EDUC 068)

This course examines issues of practice and policy, including financing, integration, compensatory education, curricular innovation, parent involvement, bilingual education, high-stakes testing, comprehensive school reform, governance, and multiculturalism. The special challenges faced by urban schools in meeting the needs of individuals and groups in a pluralistic society will be examined using the approaches of education, psychology, sociology, anthropology, political science, and economics. Current issues will also be viewed in historical perspective. Fieldwork is required.

1 credit.

Not offered 2002-2003.

SOAN 020C. School and Society

(Cross-listed as EDUC 063)

This course examines various aspects and perspectives of K12 education in the United Sates. We look at the multiple and contradictory purposes and functions of schools, focusing on the ways in which schools claim to be meritocratic while reproducing the class, racial, gender, and sexual orders of the U.S. society. In the second half of the course, we turn to experiences of teachers and students and ask what role schools can play in challenging different forms of social oppression.

1 credit.

Fall 2002. Staff.

SOAN 021B. Research Design

Introduction to the process of research on social life: creation of research questions, strategies for gathering evidence, techniques of analysis, and generating theory. The roles of theory, ethical issues, and cultural and historical context in the research enterprise will be addressed. Students will get direct hands-on experience with design, data gathering, and analysis and will have professional researchers visit the class.

1 credit.

Spring 2003. Charlton and O'Connell.

SOAN 022B. Cultural Representations

The course looks at models used by anthropologist/sociologists to analyze culture. Readings for the course will focus on symbolic analysis, practice and meaning, experimental ethnography, structuralism, and postmodernism. Most readings center on current debate in theories about culture. *This course may be counted toward a concentration in interpretation theory for the classes of 2002 and 2003 and a minor in this same area for students in the classes of 2003 and 2004.*

1 credit.

Spring 2003. Díaz-Barriga.

SOAN 022C. Visual Anthropology

Visual anthropology looks at visual communication both as a tool for academic work and the object of anthropological study. In this course, we look at the processes and politics of representation, focusing on the use of film and photography both "within" cultures and by anthropologists/sociologists to convey the complexities of cultural practices. Among the issues covered in the class are the relationship of documentary realism to ethnographic film, the emergence of indigenous media, and debate over "postmodern" forms of representation. (*Note:* Unlike SOAN 121, this class does not have a production component.)

1 credit.

Not offered 2002-2003.

SOAN 022D. Latin American Urbanization

This course is designed as an introduction to

problems and issues related to Latin America urbanization. It provides an overview of the processes behind the urbanization of Latin America and explores housing policy options. Members of the class will be introduced to concepts such as dependency, underdevelopment, the informal sector, marginality, the culture of poverty, self-construction, and self-help. The role of the informal sector in urban development, housing, and the dependent economy is a particular focus.

1 credit.

Not offered 2002-2003.

SOAN 022E. Indigenous Resistance and Revolt in Latin America

The course explores ethnic conflict and revolution in Latin America, focusing on Guatemala, Mexico, Peru, and Bolivia. Readings for the course include ethnographies on rural and urban culture as well as more general works on anthropological theory.

1 credit.

Not offered 2002-2003.

SOAN 022G. Social Movements in Latin America

During the last 40 years, a number of social movements have emerged in Latin America, including urban, women's, indigenous, and ecological. These movements have arisen, in some cases, as a result of the emergence of new social and political perspectives, such as liberation theology. In other cases, they have formed as reactions to inequality and crises in development, such as massive urbanization and the impact of neoliberal economic policies. This class explores the range of social movements by focusing on their attempts to articulate new visions of society and culture. The aim of the class is to understand the heterogeneity of social movements in Latin America and understand how Latin Americans have conceptualized their meaning and impact. *This course may be counted toward a concentration in peace and conflict studies for the Class of 2003 and a minor in this same area for students in the classes of 2003 and 2004.*

1 credit.

Fall 2002. Díaz-Barriga.

SOAN 023B. History of the Culture Concept

We traffic in presumptions of culture and society every day, relying on elastic ideas of what constitutes a people, culture, or nation, and yet few of us have the chance to step back and interrogate the intellectual genealogies that inform these central concepts. This course examines a handful of paradigmatic moments in modernist culture theory—evolutionism, functionalism, cultural relativism, structuralism, cultural materialism, and symbolic studies—to study a repertoire of responses to the issue of representation in anthropology and cultural studies more broadly. *This course may be counted toward concentrations in Francophone studies and interpretation theory for the Class of 2003 and a minor in this same area for students in the classes of 2003 and 2004.*

1 credit.

Not offered 2002-2003.

SOAN 023D. Soviet Cinema

The early years of the Soviet state produced some of the world's finest filmmakers, revolutionizing cinematic form through new visions of the political in the aesthetic. This course organizes a critical look at the modernist patriotic statements forged by early Soviet directors, with an emphasis on the work of Sergei Eisenstein. A background in Soviet history or permission of the instructor is required.

1 credit.

Not offered 2002-2003.

SOAN 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.

1 credit.

Not offered 2002-2003.

SOAN 024C. Spanish-American Society Through Its Novel

(Cross-listed as LITR 060SA)

This course will explore the relationship between society and the novel in Spanish America. Selected works by Carlos Fuentes, Mario Vargas Llosa, Gabriel García Márquez, Isabel Allende, Luisa Valenzuela, Elena Paniatowska, and others.

1 credit.

Spring 2003. Hassett and Muñoz.

SOAN 024D. Topics in Social Theory

This course deals with Kant's and Hegel's social philosophy insofar as it influenced the development of modern social theory. Works by Marx, Weber, Durkheim, Freud, and critical theorists, neo-conservatives, and postmodernists will also be discussed.

1 credit.

Not offered 2002-2003.

SOAN 026B. Discourse Analysis

(Cross-listed as LING 024)

We are what we speak—or largely so. This is the premise of "Discourse Analysis." This course will concentrate on language in a variety of social contexts: conversations, media reports, and legal settings. We will analyze these speech and writing interventions via the tools of sociolinguistics, ethnomethodology, critical legal studies, and discourse analysis. The essential issue of the course can be boiled down to the question: Who gets to say what to whom? *This course may be counted toward a concentration in interpretation theory for the Class of 2003 and a minor in this same area for students in the classes of 2003 and 2004.*

1 credit.

Fall 2002. Wagner-Pacifici.

SOAN 026C. Power, Authority, and Conflict

This course analyzes the way in which power emerges, circulates, and is augmented and resisted in diverse political contexts. Historical and contemporary cases are interrogated with the theoretical frameworks of Marx, Weber, Gramsci, Arendt, Parsons, and Foucault. Issues include the question of state autonomy, political legitimacy, and the interpenetration of the personal and the political. *This course may be counted toward concentrations in interpretation theory and peace and conflict studies for the Class of 2003 and a minor in this same area for students in the classes of 2003 and 2004.*

1 credit.

Fall 2002. Wagner-Pacifici.

SOAN 026D. Mapping the Modern

(Cross-listed as ENGL 073A and in interpretation theory)

The course seeks to explore some of the salient issues, achievements, and problems that serve to map Western modernity. Beginning with "prophetic voices" from the mid-19th century, we then concentrate on "urban fables" of early 20th-century high modernism, concluding briefly with late 20th-century "postmodern lenses." Texts will be chosen from among the following writers: Marx, Baudelaire, Nietzsche, and Dostoevsky; Rilke, Kafka, Freud, Joyce, and Woolf; Weber, Simmel, Adorno, Benjamin, and Lukacs; Bakhtin, Arendt, Canetti, and de Certeau; Calvino and Borges; and Berman and Harvey. The central topics under study are the phenomena of the modern subject and the modern city, as expressed in literature, analyzed in sociology and critical theory, and represented in a range of cultural practices.

1 credit.

Not offered 2002-2003.

SOAN 027B. The Constitution of Knowledge in Modern Society

This course takes classic sociology of knowledge texts as a starting place for an interrogation and discussion of how knowledge is constructed in this culture. Additional texts will be drawn from women's studies, black studies, and media studies as we examine the powerful ways that knowledge can be and is differently constructed within our own culture as well as the ways that some kinds of knowledge seem to be categorically intractable across time and space. Prerequisite: A course in theory, sociology/anthropology, literature, or philosophy.

1 credit.

Not offered 2002-2003.

SOAN 027C. Classical Theory

Through the works of Marx, Weber, Durkheim, Simmel, DuBois, and Freud, the recurrent and foundational themes of late 19th- and early 20th-century social theory will be examined: capitalism, class conflict and solidarity, alienation and loneliness, social disorganization and community, secularization, and new forms of religiosity.

1 credit.

Not offered 2002-2003. Willie.

SOAN 029B. Ethnography: Theory and Practice

This class maps anthropological theories and methods through reading and critically analyzing the discipline's flagship genre, ethnography. We work historically by reading classical

texts that exemplify different approaches (such as functionalism, structuralism, symbolic anthropology, and reflexive anthropology) used to analyze culture and social structure. We address questions such as: How did Malinowski understand ethnography? How does this understanding compare to more recent views of anthropologists such as Geertz? How did the meaning of fieldwork change over time? We pay special attention to the politics of representation and the anthropologists' continuous struggle to find new ways to write about culture.

1 credit.

Not offered 2002-2003.

SOAN 030G. Colonialism and Postcoloniality

This course takes up the analysis of colonialism and postcoloniality. It does not, however, provide an exhaustive survey of the literature of this extremely dynamic and expansive field. Rather, the intention of the class, first, is to create a context for a close reading of, and a critical dialogue about, some of the major texts in colonial and postcolonial studies (e.g., Fanon, Cohn, Said, Anderson, Spivak, and Bhabha). Second, the class will re-evaluate these classic texts in light of recent work (e.g., Mbembe, Dirks, Stoler, and Comaroff), which claims to challenge or extend the insights of earlier scholarship. Readings and discussions will address well-worn questions about power, culture, and knowledge (what is "the West"? What is Orientalism? Is colonialism a hegemonic or other form of domination?) as well as more nuanced inquiries into race, sexuality, and desire. Concurrently, considering such issues will clear the ground for rethinking the relationship of anthropology to other disciplines in the humanities and the social sciences.

1 credit.

Spring 2003. Axel.

SOAN 037B. Twentieth-Century Black Political Thought

Engaging the work of a handful of this century's most noted black authors with the understanding that literature transcends the written word, we will examine how black scholars, politicians, lawyers, ministers, hymn writers, and playwrights help us to examine how African Americans have wrestled with the existence of self, understood community, and conceived of citizenship as well as what their ideas reveal about the dominant culture.

Prerequisite: one course in sociology and anthropology, black studies, or philosophy.

1 credit.

Not offered 2002-2003.

SOAN 038B. Healers in Training: The Making of Medical Professionals

The socialization of the medical professional: This course will focus on the structure and culture of medical education in the United States. Although the course will focus on the socialization of medical doctors, other health professionals, including the experience of nurses and other paraprofessionals, will provide comparison. How and why do people chose to become medical professionals? How has the structure and culture of medical education changed in the last 50 years? How will the increasing diversity of the medical school student body effect changes in medical education? The course will analyze both macrolevel forces behind changes in medical education as well as personal accounts of the experience.

1 credit.

Fall 2002. O'Connell.

SOAN 040B. Language, Culture, and Society

(See LING 025 for description.)

An investigation of the influence of cultural context and social variables on verbal communication. Topics covered include dialectal varieties, creoles, languages and gender, and language and education.

Prerequisite: At least one linguistics course.

Primary distribution course. 1 credit.

Not offered 2002-2003.

SOAN 040C. History in/and Anthropology

Although anthropology and history have long been intertwined, in recent years, a proliferation of attempts to study both culture and time or culture through time has occurred. These attempts have been made under the rubric of "historical anthropology." The class considers closely the development, practice, and theoretical innovations of historical anthropology—paying close attention both to its problems of knowledge production and its diverse politics. From this perspective (i.e., by investigating the place of history *in* anthropology), we will

return to some basic anthropological questions: What is ethnography? What is historiography? What is the archive? How has anthropological knowledge changed in relation to the rise and fall of colonialism, transformations in nation-states, and the emerging effects of global capitalism? What are the ethics of doing historical anthropology?

1 credit.

Spring 2003. Axel.

SOAN 043B. Shamanism

From New Age sweat lodges to Soviet Siberia, shamanic spirit mediums have been construed as everything from healers to magistrates to visionaries to political subversives. This course explores anthropological literature on shamanism in the United States, Russia, and South America to ask ourselves how we constitute and appropriate the exotic.

1 credit.

Not offered 2002-2003.

SOAN 044B. Colloquium: Art and Society

The course examines the relationship between art and society from a sociological perspective. This semester, we shall use hermeneutics as a sociological method for the interpretation of literature. Selected works by Borges, Mann, Dostoevski, Neitzsche, and Plato will be examined. *This course may be counted toward a concentration in interpretation theory for the Class of 2003 and a minor in this same area for students in the classes of 2003 and 2004.*

1 credit.

Spring 2003. Muñoz.

SOAN 044C. Colloquium: Contemporary Social Theory

A discussion of contemporary social theory and its antecedents. The first part of the course will be devoted to a discussion of works by Nietzsche, Marx, and Freud. The second part will deal with works by contemporary theorist such as Charles Taylor, Jürgen Habermas, Michael Foucault, Anthony Giddens, Pierre Bourdieu, Jana Sawicki, Luce Irigaray, and Jean Baudrillar.

Prerequisite: Modern Social Theory. Limited enrollment.

1 credit.

Not offered 2002-2003.

SOAN 044D. Colloquium: Critical Social Theory

An overview of major development of critical social theory since the 19th century. Readings from Marx, Freud, Nietszche, Adorno, Horkheimer, Benjamin, Habermas, Foucault, and Freier.

1 credit.

Spring 2003. Muñoz.

SOAN 045B. Culture, Illness, and Health

Everything humans do is culturally constructed. Our experiences of health, illness, and healing are no exception. This course examines the cultural construction of health, illness, and healing by looking at (mainly) anthropological treatments of these issues. Case materials will be drawn from a number of cultures, non-Western as well as Western, and will treat the intersection of non-Western and Western healing systems. We'll wind up with an anthropologically informed, social historical look at the biomedical model that dominates the modern American experience of health, illness, and healing.

1 credit.

Fall 2002. Piker.

SOAN 045C. Religion as a Cultural Institution

(Cross-listed as RELG 030)

The focus is primarily cross-cultural, and religion case materials will be drawn from both preliterate and civilized traditions, including the modern West. The following topics will be emphasized: religious symbolism, religious evolution, religion as a force for both social stability and social change, psychological aspects of religious belief; and religious change in modern America. May be taken without prerequisites with permission of instructor.

1 credit.

Not offered 2002-2003.

SOAN 046B. Social Inequality

This course analyzes conflicting theoretical perspectives on the origins and meaning of social inequality. Empirical studies of both a historical and cross-cultural nature will be examined for the ways in which they engage alternative readings of such issues as the nature and representations of work, property, body, and mind in revealing and reproducing social

inequalities. The approach is phenomenological: How are inequalities made social, and how are they disrupted?

1 credit.

Spring 2003. Wagner-Pacifici.

SOAN 049B. Comparative Perspectives on the Body

This class explores how different societies regulate, discipline, and shape the human body. In the first part, we examine theories of the body and how they have evolved over time. In the second part, we focus on in-depth ethnographic cases and compare diverse cultural practices that range from the seemingly traditional practices, such as circumcision, foot binding, and veiling to the currently fashionable, such as piercing, tattooing, dieting, and plastic surgery. By comparing body modification through space and time, we ask questions such as: Is contemporary anorexia similar to wearing the corset during the 19th century? Is female circumcision different from breast implants? Furthermore, we investigate how embodiment shapes personal and collective identities (especially gender identities) and vice versa.

Spring 2003. Ghannam.

SOAN 049C. Globalization and the Production of Locality: Theoretical Debates and Ethnographic Explorations

This class examines how globalization (i.e., the flows of capital, labor, discourses, images, and commodities) is shaping different parts of the world. It explores debates in social theories and looks at ethnographic cases (texts and films) that reveal the complex articulation between global forces and "local" contexts. Is the economic and political domination of the West translated into global cultural hegemony? How is locality produced? How can we study and conceptualize the relationship between the local and the global? We will address such questions by looking at a wide range of topics such as migration, transnationalism, diaspora, consumption, and cosmopolitanism.

1 credit.

Not offered 2002-2003.

SOAN 049D. Transnational Islam

This class focuses on how globalization (flows of capital, labor, discourses, images, and commodities between different parts of the world) shape the articulation of Islam in various cultural settings. We first take a quick look at the history of Islam and its basic concepts (such as shari'a, umma, jihad, and sufism). Then, we explore how Muslims negotiate their religious beliefs and cultural identities in different societies. We look at historically Muslim countries (such as Egypt, Saudi Arabia, and Indonesia) and trace the recent movement (through migration and conversion) of Islam and Muslims to Western countries (United States and Europe). We use films, printed texts, and Internet material to explore questions such as: How do Muslims work to maintain their religious identities in New York, Berlin, and Paris? How compatible is Islam with modern notions such as nationalism, democracy, feminism, and human rights? How is Islam used to establish and reinforce transnational (including but not limited to political) connections?

1 credit.

Not offered 2002-2003.

SOAN 055B. The Only Good Indian

The arrival of Europeans in the New World a half a millennium (or longer) ago initiated, for Native Americans, a litany of cultural catastrophe that continues to this day. So also did it initiate a complex process of cross-cultural communication and mutual adaptation that repeatedly confounded the intentions and expectations of parties in both cultural camps. From an anthropological perspective, this course treats this process, as it occurred North off the Rio Grande River, attending especially to the issues, tradition, mutual accommodation, resistance, revitalization, and modernity. Case materials will be drawn from among the following cultures: Navaho, Iroquois, Creek, Nez Pierce, Crow, and Ojibwa cultures.

1 credit.

Not offered 2002-2003.

SOAN 056B. Standoffs, Breakdowns, and Surrenders

A central aim of sociology is to track the sometimes mysterious, often disjunctive relationship between order and disorder. Organizations and institutions as small as the family and as large as the State experience manifold moments of breakdown, where the internal and external boundaries of the designated group vibrate. This seminar explores the phases and modes of such breakdowns via an analysis of

accidents, mistakes, negligence, miscommunications, enmity, perfidy, and colloquy.

1 credit.

Spring 2003. Wagner-Pacifici.

SOAN 058B. America by the Numbers: An Introduction to Demography

This course will introduce students to key demographic methods, including life tables, fertility rates, and mortality statistics. Using data from the latest U.S. census, we will explore the changing composition of the American population, including the structure of the family, the face of the workforce, the aging of the population, and the growing representation of minorities. What impact will these changes have on the way we organize our politics, our employment, and our social lives? What major effect will these changes have on American culture? Students will explore the relationship between proportions and human interactions.

1 credit.

Fall 2002. O'Connell.

SOAN 059B. The Life Course

Examines the way human cultures define the passage from birth to death, including the expectations associated with different stages of life, the ritual processes through which transitions are made from one stage to another, age and life stage as a basis of group formation, and generational conflicts. Students will carry out life history interviews with older individuals.

1 credit.

Not offered 2002-2003.

SOAN 090. Research Internship

(See SOAN 090A and 090B.)

Interns receive research experience through placements in professional research settings. The availability of internship in the department varies from year to year.

SOAN 090A

Juniors and seniors with a B average willing to commit six to 12 hours of work per week on a research project with professional researchers are eligible. Credit is normally awarded on a credit/no credit basis, for 0.5 to 1 credit. Because available projects change, interested students should see the instructor before registration. Interested students are also encouraged to take SOAN 011B.

Section 1 is for 1 credit. Section 2 is for 0.5 credit.

Fall 2002 and spring 2003. Charlton.

SOAN 090B

Internships in professional organizations, such as WHYY, Scribe Video Center, Mosaic Media, and other settings provide training in both research and video production skills. Depending on availability, interns might work with visual ethnographers, documentary filmmakers, community-based filmmakers, and/or video editors on projects that require research on sociology and anthropology-related themes. Interns will normally receive 0.5 credit (grade based on credit/no credit) for committing to their projects for six to 12 hours a week.

Students who wish to receive a full credit (and receive a letter grade) must complete a research paper based on their video production project and keep a field journal. Because these internships change, and filmmakers/editors require different levels of skills for the internship, students should see Professor Díaz-Barriga before registration. Students who plan to complete a film/video production internship are advised to take SOAN 121.

Section 1 is for 1 credit. Section 2 is for 0.5 credit.

Fall 2002 and spring 2003. Díaz-Barriga.

SOAN 091B. Practicum in Visual Ethnography

This practicum explores the ethnography of visual communication, including photography and feature file, while giving students the chance to complete a video project. Students will work together in a production crew while sharpening their digital editing skills.

Prerequisites: SOAN 121.

1 credit.

Spring 2003. Díaz-Barriga.

SOAN 093. Directed Reading

Individual or group study in fields of special interest to the students not dealt with in the regular course offerings. Consent of the department chair and of the instructor is required.

0.5 or 1 credit.

Fall 2002 and spring 2003. Staff.

SOAN 096-097. Thesis

Theses will be required of all majors. Seniors will normally take two consecutive semesters

of thesis tutorial. Students are urged to discuss their thesis proposals with faculty during the spring semester of their junior year, especially if they are interested in the possibility of fieldwork.

1 credit each semester.

Fall 2002 and spring 2003. Staff.

SEMINARS

SOAN 100. Modern Social Theory

An analysis of selected works by the main founders of modern social theory. Works by Marx, Weber, Durkheim, and Freud will be discussed. This course may be counted toward a concentration in interpretation theory. This seminar is strongly recommended for those students planning to take SOAN 101: Critical Social Theory.

2 credits.

Fall 2002. Muñoz.

SOAN 101. Critical Social Theory

The development of critical theory from Kant to Habermas. Works by Hegel, Marx, Nietsche, Lukacs, Adorno, Benjamin, Horkeimer, and Foucault will be examined.

Prerequisites: advanced work in sociology/anthropology, philosophy, or political science; or permission of the instructor. Students are advised to take SOAN 100 (Modern Social Theory) as preparation for this seminar. *This seminar may be counted toward a concentration in interpretation theory for the Class of 2003 and a minor in this same area for students in the classes of 2003 and 2004.*

2 credits.

Not offered 2002-2003.

SOAN 103. Gift and Fetish

Can objects lead social lives? This improbable proposition finds currency in some of the most classic works of anthropology and political economy. In the first half of this course, we ground ourselves with a series of foundational texts, from early anthropological theories of gift exchange as proxies for the social (Boas, Malinowski, and Mauss), to their later critiques (Derrida and Bourdieu), to Marx on commodity fetishism and Jean-Joseph Goux on symbolic economies. In the second half of the semester, we examine a handful of recent ethnographies that locate these modern animisms in the contemporary globalized world.

2 credits.

Not offered 2002-2003.

SOAN 104. Culture and Creativity

Evolutionary perspective on the question: How do we creatively make use of cultural resources to construct ourselves and our life ways? Vast diversity of human lifeways argues that such creative construction is a—perhaps the—hallmark of human adaptation. Specific topics: human evolution, foraging band as the basic human pattern, speech, human intelligence, human emotion, gender, biography, and history. Readings include ethnographies, novels, and native narratives.

2 credits.

Not offered 2002-2003.

SOAN 107. Religion as a Cultural Institution

The following specific topics will be treated: religious evolution, religion as a force for both social stability and social change, and the psychological bases for religious belief. Major theories to be considered include those of Max Weber, Emile Durkheim, and Sigmund Freud. A cross-cultural perspective will be emphasized, and attention will be paid to religious change in modern America.

2 credits.

Not offered 2002-2003.

SOAN 109. Standoffs, Breakdowns, and Surrenders

A central aim of sociology is to track the sometimes mysterious, often disjunctive relationship between order and disorder. Organizations and institutions as small as the family and as large as the state experience manifold moments of breakdown, where the internal and external boundaries of the designated group vibrate. This seminar explores the phases and modes of such breakdowns via an analysis of accidents, mistakes, negligence, miscommunications, enmity, perfidy, and colloquy.

2 credits.

Not offered 2002-2003.

SOAN 110. Performance Theory, Gender, and Sexuality

Recently, feminist theory has turned to a framework of "performativity" to analyze norms of gender and sexuality. Most generally, the idea of performativity suggests that—rather than being a part of nature—such categories as "male," "female," or "heterosexual" are created, or *performed*, within changing contexts of social interaction. This framework has helped us to distinguish gender and sexuality as complex cultural formations, and it has opened up new possibilities for critiques of the interplay of culture, power, and language. This course follows the emergence of the idea of performativity very closely, from its introduction within the philosophy of J.L. Austin and the linguistic analysis of Emile Benveniste, to the more recent debates among feminist scholars such as Eve Sedwick, Judith Butler, Catherine MacKinnon, Rosalind Morris, Elizabeth Povinelli.

2 credits.

Fall 2002. Axel.

SOAN 111. Terror

Explaining terror has taken on increasing importance in recent years. Writers, however, have been attempting to trace out the lineaments of this phenomenon for centuries—conceiving it, variously, as an affect, an experience, and an instrument of domination. What this literature, in its diversity, suggests is that terror, however conceived, has to do with not just a perceived threat of foreign or alien others but with ideas about difference; with a fear of the unknown; and, ultimately, with the unknowability of death itself. This seminar will use a selective reading of historically significant texts to frame a study of recent research on terror. From such a perspective, we will inquire into the relationship of terror and death, seeing their meanings as culturally negotiated and contested. We will, likewise, consider how such a framework can help us begin to address such complicated practices as state terror, torture, and human rights abuses.

2 credits.

Spring 2003. Axel.

SOAN 112. Cities, Spaces, and Power

This seminar explores recent interdisciplinary insights to the analysis of spatial practices, power relationships, and urban forms. In addition, we read ethnographies and novels and watch films to explore questions such as: How is space socially constructed? What is the relationship between space and power? How is this relationship embedded in urban forms under projects of modernity and postmodernity? How do the ordinary practitioners of the city resist and transform these forms? Our discussion will pay special attention to issues related to racism and segregation, ethnic enclaves, urban danger, gendered spaces, colonial urbanism, and the "global" city.

2 credits.

Not offered 2002-2003.

SOAN 114. Political Sociology

This seminar analyzes the ways in which power emerges, circulates, is augmented, and resisted in diverse political contexts. Readings include Marx, Weber, Gramsci, Arendt, Parsons, and Foucault. *This course may be counted toward a concentration in interpretation theory for the Class of 2003 and a minor in this same area for students in the classes of 2003 and 2004.*

2 credits.

Not offered 2002-2003.

SOAN 115. Freud and Modern Social Theory

The seminar divides into two parts. The first part is devoted to a close reading of selected items from the Freudian canon. The second part will examine Freud's contribution to current social and cultural analysis. Besides works by Freud, works by Mitchell, Rieff, Habermas, and Foucault will be examined.

Prerequisites: advance work in sociology and anthropology, philosophy, or political science; or permission of the instructor. *This course may be counted toward a concentration in interpretation theory for the Class of 2003 and a minor in this same area for students in the classes of 2003 and 2004.*

2 credits.

Not offered 2002-2003.

SOAN 119. Evolution, Culture, and Creativity

(Cross-listed as LING 119)

Recent major syntheses harvest the fruits of decades of productive scholarship pertaining to evolutionary perspectives on human nature and cultural elaboration of same. To tap into

these resources, this seminar consults the work of Diamond, Sulloway, Gardiner, Gould, and Pinker, with reference to human intelligence, emotion, speech, biography, gender, and history. The human capacity for creativity, and its expression in lives and lifeways, is the focus. The adaptive importance for humans of this capacity is considered in light of ethnographic, historical, and biographical case materials.

2 credits.

Not offered 2002-2003.

SOAN 121. Visual Ethnography and Documentary Film: Theory and Production

This seminar examines the use of film and video by sociologist and anthropologist to convey and communicate aspects of culture that are visible—from rituals, performance, and dance to disputes and violence. The course will look at the history of visual ethnography and explore the major issues within the field, including the relationship between ethnographers and filmmakers, and the appropriateness of the conventions of documentary film, paying special attention to the influences of politics, economics, and technical advances. The course will include readings on visual ethnography and documentary film techniques. The main goals of the seminar are for students to understand the links between anthropological and sociological theory and the production of ethnographic and documentary film and to have the production skills necessary for directing their own work.

2 credits.

Fall 2002. Díaz-Barriga.

SOAN 122. Urban Ethnographies Through Time and Space

As key players in the global economy, cities are becoming the focus of a growing number of studies that show how urban life is shaped by the complex interplay of global, national, and local processes. In this class, we look at urban ethnographies (texts and films) through space and examine how the representation of the city has changed over time. These ethnographies are conducted in Western cities such as New York, London, and Paris as well as cities in other parts of the world such as Cairo, Casablanca, Bombay, São Paolo, and Shanghai. We read these ethnographies to (1) discuss different techniques and approaches used to study urban cultures and identities; (2) examine how the collection of data relates to anthropological theories and methods; (3) explore how research in cities shape the field of cultural anthropology. In our discussions, we also explore important urban problems such as poverty, gangs, violence, and homelessness.

2 credits.

Not offered 2002-2003.

SOAN 123. Culture, Power, Islam

This seminar will be an interdisciplinary investigation into the shifting manners by which Islam is multiply understood as a creatively mystical force, a canonically organized religion, a political platform, a particular approach to economic investment, and a secular but powerful identity put forth in interethnic conflicts, to name only a handful of incarnations. Though wide ranging in our theoretical perspective, a deeply ethnographic approach to the lived experience of Islam in a number of cultural settings guides this study.

2 credits.

Spring 2003. Ghannam.

SOAN 127. Race Theories

Contemporary theories of race and racism by sociologists such as Winant, Gilroy, Williams, Gallagher, Ansell, Omi, and others will be explored. Concepts and controversies explored will include racial identity and social status, the question of social engineering, the social construction of justice, social stasis, and change. The United States are the focus, but other countries will be examined. Without exception, an introductory course on race and/or racism is a prerequisite.

2 credits.

Spring 2003. Willie.

SOAN 130. Social Inequality

This seminar analyzes conflicting theoretical perspectives on the origins and meaning of social inequality. Empirical studies of both a historical and cross-cultural nature will be examined for the ways in which they engage alternative readings of such issues as the nature and representations of work, property, body, and mind in revealing and reproducing social inequalities. The approach is partly phenomenological: How are inequalities made social,

and how are they disrupted?

2 credits.

Not offered 2002-2003.

SOAN 148. Social Construction of Bioethics

Does the bioethical enterprise cross cultural boundaries? Or does the definition of bioethics vary from country to country? Using medical practice and human experimentation as the focus of our analyses, we will look at the four principles of bioethics. To what degree do these principles frame bioethical debates in the United States and abroad? We will take a look at the historical development of the field and examine how culture shapes bioethical issues. How do broader theories of culture and social structure help us understand cross-cultural differences in bioethics and acknowledge the benefits and limitations of bioethical inquiry?

2 credits.

Spring 2003. O'Connell.

SOAN 180. Thesis

Candidates for honors will usually write theses during the senior year. Students are urged to have their thesis proposals approved as early as possible during the junior year.

2 credits.

Fall 2002 and spring 2003. Staff.

Theater

LEE DEVIN, Professor
ALLEN KUHARSKI, Associate Professor, Resident Director, and Chair; Co-Director of Semester Abroad in Poland
WILLIAM MARSHALL, Associate Professor, Resident Designer
URSULA NEUERBURG DENZER, Instructor[3]
ROGER BABB, Visiting Lecturer (part time)
GABRIEL QUINN BAURIEDEL, Visiting Lecturer (part time)[6]
CARLA BELVER, Visiting Lecturer (part time)[6]
LIZZIE OLESKER, Visiting Lecturer (part time)[5]

3 Absent on leave, 2002-2003.
5 Fall 2002.
6 Spring 2003.

The theater major uses the study of all aspects of dramatic art 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 collaborative making; all production for performance in the department is part of course work.

The Department of Theater emphasizes writing as an important aspect of discursive thinking and communication. All courses have a significant writing component, the nature of which varies from course to course.

Because all work in theater eventually issues in a public occasion, classes are usually open to visitors.

REQUIREMENTS AND RECOMMENDATIONS

Planning a Theater Program can be complicated. First- and second-year students thinking about a theater major should read these requirements and recommendations closely and should consult with the chair of the Theater Department early and often. Leave schedules, a wide variety of intern and apprentice programs, and the importance of course sequences make long-range planning essential.

The requirements for majors and minors in the Department of Theater will be significantly revised beginning with the Class of 2005. Students from the classes of 2005 and 2006 are welcome to contact Professor Kuharski regarding the revised requirements as well as to consult the postings on the Theater Department bulletin boards across from 308 Lang Performing Arts Center. *Note*: The following requirements still apply to all classes through 2004.

THEA 001 (Theater and Performance) is a prerequisite for *all* intermediate and advanced classes and seminars.

Courses numbered 001 through 010 are introductory and are prerequisite to intermediate courses.

Courses numbered 011 through 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 professional 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.

The Pig Iron Theatre Company and other alumni guest artists are typically in residence

on campus during the summer. 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

Ten credits of work including THEA 001 (Theater and Performance); THEA 002A (Acting I); 1 credit in scenography (THEA 004A, 004B, or 004C); THEA 015 (Performance Theory and Practice); *either* THEA 016 (Playwriting Workshop) *or* THEA 035 (Directing I); THEA 099 (Senior Company); THEA 106 (Theater History Seminar) *or* THEA 121 (Dramaturgy Seminar). In addition, each major will choose an area of specialization and take the intermediate and advanced courses in that area.

The areas of specialization are acting, directing, scenography, playwriting/dramaturgy, and theater history. Special arrangements will be made for students who seek secondary school certification. Prospective majors should consult with the chair of the department 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 and visitors.

Course Minor

Seven credits of work including: THEA 001 (Theater and Performance); THEA 002A (Acting I); 1 credit in scenography (THEA 004A, 004B, or 004C); THEA 015 (Performance Theory and Practice); and *either* THEA 016 (Playwriting Workshop) *or* THEA 035 (Directing I). In addition, each major will choose an area of specialization and take the intermediate and advanced courses 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.

Honors Major

General requirements include THEA 001 (Theater and Performance); THEA 002A (Acting I); 1 credit in scenography (THEA 004A, 004B, or 004C); THEA 015 (Performance Theory and Practice); *either* THEA 016 (Playwrights' Lab) *or* THEA 035 (Directing I); THEA 099 (Senior Company); THEA 106 (Theater History Seminar). In addition, each major will choose an area of specialization and take the intermediate and advanced courses in that area. Honors students majoring in theater will make a total of three preparations as follows:

1. Theater History Seminar (listed earlier), written examination, and an oral set by an outside examiner.
2. THEA 121 or a thesis attachment to a course to be read by an outside examiner along with an oral.
3. A production project in one of the following fields:

Directing

The student will, under faculty supervision, read in the 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. The department will hire one or more professional actors 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.

Scenography

The student will function as the resident designer for a production presented by the Theater Department in one area of scenography. Also, the student will prepare all research, sketches, mechanical drawings, models, and

preliminary writing for this project. 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 craftsmen during the fabrication phase, ensuring the full-scale scenography 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 be presented with the student's completed project portfolio. The examiner will question the student on the model of advanced classes in architecture.

Dramaturgy

This project will be associated with Dramaturgy Seminar, Directing, or Playwriting Workshop. The student will create a body of writing appropriate to the specific project. This will include (but is not limited to) notes on production history, given circumstances, script analysis, program and press kit notes, study guide, and a grant proposal. For a community, education, or other project, the student, in consultation with an instructor, will create and fulfill a protocol suited to the work. On a production project, the student will continue work in rehearsal. The external examiner will receive all materials as they are generated. If the work is rehearsed, the examiner will attend as many rehearsals as possible. If the work is performed, or the project presented in some other way, the examiner will attend. The examination proper, given during the honors weekend, will consist of an extended oral presentation similar to a design presentation.

Acting

The student, with the advice of an adviser, will select and prepare a role from an appropriate script. The program will hire one or more professional actors for a set number of rehearsal hours, which the student will supplement with practice and other acting "homework." The adviser will assist in this work on a regular basis. The external examiner will attend as many rehearsal sessions as possible to observe the student's process. The student will keep a journal (an expanded version of the private "book" actors keep) to support discussion with the examiner in an extended interview immediately following an in-house presentation of the work. During the honors weekend, the examiner will conduct a second oral examination focusing on the student's reconsideration of the work after some time has passed.

One of these combinations will constitute the normal honors major in theater. Honors students will take Senior Company in the fall of senior year, while they are planning their production project. The usual schedule will be spring of junior year, Theater History Seminar; fall of senior year, THEA 099 and project planning; and spring of senior year, thesis and production project.

Double majors taking three examinations in theater will also follow that schedule.

For double majors taking one examination and comps in theater, the examination may be a production project, depending on available resources.

Honors Minor

Seven credits of work including THEA 001 (Theater and Performance); THEA 002A (Acting I); 1 credit in scenography (THEA 004A, 004B, or 004C); THEA 015 (Performance Theory and Practice); *either* THEA 016 (Playwriting Workshop) *or* THEA 035 (Directing I); and *either* THEA 106 (Theater History Seminar) *or* THEA 121 (Dramaturgy Seminar). 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.

Co-curricular and extracurricular work in the Theater Department, although not specifically required, is strongly recommended for majors. Opportunities include paid and volunteer staff positions with the department, in-house projects for various classes, production work in The Eugene M. and Theresa Lang Performing Arts Center, and Drama Board productions.

With respect to the 20-course rule, courses in dramatic literature taught in the English Literature, Classics, or Modern Languages and Literatures departments may be designated as part of the major. Courses in nondramatic literatures taught in those departments will not

be considered part of the major.

Semester Abroad in Poland

The Theater Department and the Dance Program have jointly developed a semester-abroad program for interested Swarthmore students based at the Silesian Dance Theatre (Slaski Teatr Tanca) in Bytom in conjunction with the Jagiellonian University of Cracow and other institutions in the vicinity. The program is intended to provide participating students with a combination of foreign study with the experience of working in various capacities (dance performance, arts administration, scenography, etc.) within the environment of a professional dance theater company for credit. Participating students would be housed in Bytom and have the option of taking additional courses in Cracow. Intensive study of Polish while in the country will be required of all participating students. Students participating will be able to enroll for the equivalent of a full semester's credit (4 to 5 credits). Participation in the Annual International Dance Conference and Performance Festival hosted by Silesian Dance Theatre in June and July is highly recommended for certain types of credit and can be funded all or in part by the College in many cases. Beyond credits in theater, dance, and intensive Polish, a menu of possible tutorials is being developed in Polish literature and history, environmental studies, film, religion, Jewish and Holocaust studies, and other fields. Interested students should contact Professor Allen Kuharski, co-director of the Semester Abroad Program, as early as possible for advising purposes and updated information on the status of the program. See course listings in both Theater and the Music and Dance departments for types of academic credit being offered.

Theater majors and minors can also enroll in a semester of theater-related study conducted in English at the Jagiellonian University in Cracow. Students in comparative literature and modern languages and literatures are also welcome to contact Professor Kuharski about possible related programs of study at the Jagiellonian University. Intensive study of Polish is required of all participating students.

Funding support (including travel) is available for intensive language study in Poland during the summer before the student's planned semester abroad. Interested students should contact Professor Kuharski for details.

A separate but parallel semester abroad option in Cracow, Poland, is being offered through the Engineering and Environmental Studies departments. Interested students should contact Professor Arthur McGarity in the Engineering Department for details.

INTRODUCTORY COURSES

THEA 001. Theater and Performance

Combining a survey of classical and cross-cultural approaches to theatrical performance with the hands-on study of how theater is made. Study will include history, performance theory, and production dramaturgy in relationship to play scripts and videotaped or live performances. Sessions will include exercises in acting, design, directing, and text adaptation/playwriting. Writing requirements will include journal keeping, responses to readings, performances, the student's own projects, and research papers.

Primary distribution course. 1 credit.

Fall 2002 and *spring 2003*. Babb.

THEA 002A. Acting I

Work on the self through fundamental exercises in acting: vocal and physical warm-up, focus and release, sense and affective memory, and journals. Work toward collaborative models and the use of improvisation as a tool for invention and discovery. Short papers on local rehearsals and performances. Six hours per week.

1 credit.

Fall 2002: Devin. *Spring 2003:* to be announced.

THEA 002B. Voice Workshop

Foundations of vocal technique for actors, work with breath, projection, resonators, diction, and so forth. The class is strongly recommended to all acting students and may be taken without prerequisite. Three hours per week.

0.5 credit.

Spring 2003. Staff.

THEA 002C. Special Project in Acting

By individual arrangement with the directing

or acting faculty for performance work in connection with department directing workshops, honors thesis projects, or Senior Company.

Prerequisite: current or past enrollment in THEA 002A.

0.5 or 1 credit.

Fall 2002 and spring 2003. Staff.

THEA 004A. Set Design

The purpose of this course is to introduce students to the rich history and creative world of scenography. Students taking this course will explore design principals and the artistry used in taping their dramatic imagination. This course will examine theatrical rendering, research, model making, and computer-aided design. Reading and class discussion provide a theoretical basis for such creativity while the assignments and projects provide the practice for this artistic endeavor.

Required reading will include *Theatrical Design and Production* (J. Michael Gillette), *From Page to Stage* (Rosemary Ingham), and *Plays by American Women: 1900-1930* (edited by Judith Barlow).

1 credit.

Fall 2002. Marshall.

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.

Text: *Designing With Light* by J. Michael Gillette, *Draw Sketches* by Hans Schwarz; Software: *Power CADD* and *MacLux Pro* (both provided on the server network).

1 credit.

Spring 2003. Marshall.

THEA 004C. Costume Design

The purpose of this course is to introduce students to the form and procedures used in creating costume design for both theater and dance. Students in this class will explore costume history and develop a relationship with their creative imagination. Reading and class discussion provide a theoretical basis for such creativity while the assignments and projects provide the practice for this artistic endeavor.

Required text: *The Costume Designer's Handbook* by Rosemary Ingham, and *A Handbook of Costume Drawing* by Georgia O'Daniel Baker. Suggested text: *From Page to Stage* by Rosemary Ingham, and *Historic Costume for the Stage* by Lucy Barton.

1 credit.

Fall 2002. Marshall.

THEA 004D. Special Project in Scenography and Technology

By individual arrangement with Professor Marshall for a production project in connection with department directing workshops, honors thesis projects, Acting III, or Senior Company.

Prerequisite: current or past enrollment in THEA 004A, 004B, or 004C.

0.5 or 1 credit.

Fall 2002 and spring 2003. Marshall.

THEA 007. Dance Theater Workshop

(Cross-listed as DANC 049)

This class will offer an orientation to the technique and repertory of Silesian Dance Theatre. It is particularly recommended for students who are considering participation in the Semester Abroad Program in Poland in conjunction with this dance company. The instructor, a former member of the company, will be reconstructing appropriate sections of company repertoire for participating students. Several lecture/video screenings will be scheduled outside of class time. Open to all students with some *previous dance or theater training*.

Prerequisites: THEA 001 or 002A, any dance course numbered 040-044, or consent of the instructor.

0.5 credit.

Fall 2002. Willett.

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.

Movement Theater Workshop can be counted as the equivalent of Acting II (THEA 012) for requirements and prerequisites in the Theater Department.

Prerequisites: THEA 001 or 002A, any dance course numbered 040-044, or consent of the instructor.

1 credit.

Spring 2003. Bauriedel.

THEA 009. Literature as Performance in Africa

(Cross-listed as BLST 009)

Most of traditional as well as contemporary African and African-heritage literatures are produced in a cultural environment where the dominant mode of communication is oral. In addition, the concept and practice of performance is central to artistic expression in African and African-heritage tradition. This course shall consider, among other theoretical issues, the many ways in which literature as performance may be seen as a four-way encounter between text, context, artist, and audience, each one helping to enhance aesthetic experience and "enjoyment of the intrinsic qualities of the act of expression itself" (Bauman). The course provides an appropriate intellectual framework for critical analysis, interpretation, and appreciation of a wide range of traditional and contemporary verbal/musical/dramatic art forms. Those forms include oral poetry, including epic, dirge, praise, libation, and so forth from Africa; dozens, toast, and so forth from the diaspora; the folk tale and other oral narrative genres; drama, including dance-drama, folk opera, popular theater, such as the Concert Party in Ghana; oratory; and traditions of song: traditional, contemporary, popular, and so forth. Lectures, discussions, and readings are to be complemented with extensive use of audiovisual recordings and presentations by one or two guest artists. Students will be expected to offer individual and/or group performance projects as part of the course.

1 credit.

Fall 2002. Anyidoho.

THEA 010. Movement Improvisation Lab

(Cross-listed as DANC 010)

Designed as a movement laboratory in which to explore the dance elements: space, time, force, and form as well as theatrical elements of focus, breath, psychological and movement motivation, voice, text, and movement as metaphor. Members of the class will investigate improvisation as a performance technique and as a tool for dance composition. Individuals work on a personal vocabulary and on developing a sense of ensemble. A journal and paper are required, and a concurrent course in dance technique is strongly recommended. Three hours per week.

Prerequisites: THEA 001 or 002A; or any dance course numbered 040-044; or consent of instructor.

0.5 credit.

Fall 2002. Arrow.

INTERMEDIATE COURSES

THEA 012. Acting II

Work on playscripts through scene study and rehearsal process: given circumstances, character biography; objectives; tasks and behavior; activities and actions; vocal and physical warm-up; focus, release, and body awareness. Short papers on local rehearsals and performances. Six hours per week.

Prerequisites: THEA 001 and 002A.

1 credit.

Fall 2002: To be announced. Spring 2003: Belver.

THEA 015. Performance Theory and Practice

(Cross-listed with Asian studies)

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.

Prerequisite: THEA 001.

1 credit.

Spring 2003. Kuharski.

THEA 016. Playwriting Workshop

Exercises in writing, improvisational rehearsal, plotting, and dramaturgy, which result in a performance. Traditional playscript construction as well as organizing and recording improvisations.

Prerequisite: THEA 001.

1 credit.

Fall 2002. Olesker.

THEA 025. Special Project in Stage Management

By individual arrangement for a production project in connection with department directing workshops, honors thesis projects, Acting III, or Senior Company.

Prerequisite: THEA 004B or 035.

0.5 or 1 credit.

Fall 2002 and spring 2003. Staff.

THEA 035. Directing I: Directing Workshop

This course focuses on the theater director's role in a collaborative ensemble and on the ensemble's relation to the audience. Units cover the director's relationship with actors, designers, composers, technicians, and choreographers as well as playwrights and their playscripts. The student's directorial 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.

Prerequisites: THEA 001 and 002A.

1 credit.

Fall 2002. Kuharski.

ADVANCED COURSES

THEA 052. Acting III: Ensemble Work With an Audience

Rehearsal of a full-length work for public performance: ensemble techniques, improvisation, using the audience as part of the given circumstances.

Prerequisites: THEA 001, 002A or 008, and 012.

1 credit.

Spring 2003. Babb.

THEA 054. Special Project: Advanced Design

For the student, this course is an advance study in one of the areas found in scenography. This special project will examine complex forms and techniques used in scenography. It is an intensive study at the highest level of theatrical expression. Students will collaborate, develop, explore, and design the scenography for Acting III.

Prerequisites: THEA 004A *or* 004B *or* 004C.

Text: *Theatrical Design and Production* by J. Michael Gillette.

Required reading list before attending the class: *The History and Theory of Environmental Scenography* by Arnold Aronson, *The Theatre of the Bauhaus* by Arthur S. Wensinger, and *Zen in the Art of Archery* by Eugene Herrigel.

1 credit.

Spring 2003. Marshall.

THEA 055. Directing II: Advanced Directing Workshop

Directing II requires students to apply the exercises from Directing I (THEA 035) to a variety of scene assignments. These will address a variety of theatrical genres (farce, epic theater, verse drama, etc.) and various approaches to dramatic text (improvisation, cutting, and/or augmentation of playscripts, adaptation of nondramatic texts for performance, etc.). Projects will usually be presented for public performance.

Prerequisites: THEA 001, 002A, 004, 015, and 035.

1 credit.

Spring 2003. Kuharski.

THEA 070. Theater of Witness

(Cross-listed as DANC 070)

Prerequisites: THEA 001, 015, or 016.

1 credit.

Not offered 2002-2003. Sepinuck.

THEA 073. Arts Administration for Performance

(Cross-listed as DANC 073)

Available to students enrolled in the College's Semester Abroad Program in Poland. Students enrolled are encouraged to extend their stay in Poland through early July 2003 to participate in the Annual International Contemporary

Dance Conference and Performance Festival hosted by Silesian Dance Theatre in Bytom.

By arrangement with Allen Kuharski.

Spring 2003.

THEA 074. Scenography for Dance Theater Performance

(Cross-listed as DANC 074)

Available to students enrolled in the College's Semester Abroad Program in Poland. Students enrolled are encouraged to extend their stay in Poland through early July 2003 to participate in the Annual International Contemporary Dance Conference and Performance Festival hosted by Silesian Dance Theatre in Bytom.

By arrangement with William Marshall.

Prerequisites: Two credits of scenography.

Spring 2003.

THEA 076. Polish Theater and Drama

Available to students participating in the Semester Abroad Program in Poland. No reading knowledge of Polish required.

By arrangement with Allen Kuharski.

Prerequisite: THEA 001.

1 credit.

Spring 2003.

THEA 092. Off-Campus Projects in Theater

Residence at local arts organizations and theaters. Fields include management, financial and audience development, community outreach, and stage and house management.

Prerequisites: THEA 001 and appropriate preparation in the major.

1 credit.

Fall and spring semesters. Staff.

THEA 093. Directed Reading

1 credit.

THEA 094. Special Projects in Theater

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 will not normally be taken for external examination. Class members will consult with the instructor during spring semester of their junior year, before registration, to organize and make preparations. Course and honors minors may petition to enroll, provided they have met the prerequisites.

Prerequisites: THEA 001, 002A, 004, 015, 016, or 035, and the completion of one three-course sequence in theater.

1 credit.

Fall 2002. Devin.

SEMINARS

THEA 106. Theater History Seminar

(Cross-listed with Francophone studies and women's studies)

A critical and comparative survey of selected theatrical companies from the early Renaissance to the 20th century. Emphasis on collaborative relations within a given theatrical company, 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 fall 2002 seminar will focus on the work of Ariane Mnouchkine and the Théâtre du Soleil.

Prerequisites: THEA 001 and 015.

2 credits.

Fall 2002. Kuharski.

THEA 121. Production Dramaturgy Seminar

Fundamentals of dramaturgy (Lessing's Hamburg Dramaturgy, Piscator and Brecht's production dramaturgy, Peter Stein, Eugenio Barba, etc.), including script preparation and analysis, given circumstances and subject related research. There will be several writing assignments and papers. As the semester progresses, students will have the opportunity to work with Theater Department projects and possibly local professionals on planning and production.

Prerequisites: THEA 001 and 015 or 016.

2 credits.

Not offered in 2002-2003. Staff.

THEA 180. Honors Thesis Preparation

Credit either for honors attachments to courses or for honors thesis projects in directing, scenography, acting, and so on. By arrangement with the student's faculty adviser in theater.

Fall and spring semesters. Staff.

THEA 181. Honors Thesis Project

Credit for honors thesis projects in directing, scenography, acting, and so on. By arrangement with the student's faculty adviser in theater.

Fall and spring semesters. Staff.

Women's Studies

Coordinator: **BRUCE DORSEY** (History)
Jenny Gifford (Administrative Assistant)

Committee: **Jean-Vincent Blanchard** (Modern Languages)
Amy Bug (Physics)
Sibelan Forrester (Modern Languages)
Nora Johnson (English Literature)
Carolyn Lesjak (English Literature)
Jeanne Marecek (Psychology)
Carol Nackenoff (Political Science)
Sarah Willie (Sociology/Anthropology)

The Women's Studies Program provides students with the opportunity to study gender in a variety of social and historical contexts; to relate issues of gender to those of race, class, nationality, and sexuality; to examine the experiences of women in specific cultural contexts and social groups; and to explore the new methods and theories that arise from interdisciplinary study. Women's studies courses encourage students to examine critically the representations of women across the curriculum as well as in society at large.

Students in any major, whether in course or in the Honors Program, may elect a minor in women's studies by fulfilling the requirements stated later. Students may also design a special major in consultation with the women's studies coordinator. Students who intend to pursue women's studies should submit their proposed programs to the coordinator when they submit their sophomore papers. All program proposals must be approved by the Women's Studies Program.

The Jean Brosius Walton '35 Fund and the Wendy S. Cheek Memorial Fund contribute to the support of activities sponsored by the Women's Studies Committee.

COURSE MINOR

To minor in women's studies, students in course must take a minimum of 5 credits in women's studies. Because women's studies is an interdisciplinary program, the courses (or seminars) must be selected from at least two different divisions. Only one course counted for women's studies may overlap with the student's major. The senior seminar (WMST 091), normally taken in the spring of a student's senior year, is required. Students may elect, with the approval of the coordinator, to write a 1-credit thesis or pursue an independent study as a substitute for regular course work. Students may also, with the approval of the coordinator, include in their program courses on women and gender offered at Bryn Mawr, Haverford, the University of Pennsylvania, and in a foreign study program. If the institution in which the course was offered has a Women's Studies Program, the course in question must be part of that program to be accepted as a women's studies course at Swarthmore.

It is recommended that students take WMST 001: Introduction to Women's Studies in their first or second year.

HONORS MINOR

Students in the Honors Program may minor in women's studies by completing 6 credits in women's studies and preparing for and taking the external exam. The exam preparation consists of WMST 091: Seminar in Women's Studies, plus WMST 091A: Honors Attachment to the Seminar in Women's Studies.

COURSES

The program offers the following courses and seminars:

WMST 001. Introduction to Women's Studies

An interdisciplinary course designed around an issue central to women's lives and the representation of women's experiences. The course introduces students to concepts, questions, and analytic tools that have been developed by women's studies scholars in diverse fields.

1 credit.

Spring 2003. Lesjak.

WMST 030. Women and Technology

The course will explore the relationships between women and technology in Western industrial society. Three aspects to be considered are the effect of technology on women; the role of female technologists in shaping that technology; and the effect on technology of average women acting as consumers, voters, and citizens. Students will research an area of personal interest and make a presentation to the class. Possible topics include reproductive technologies, the Internet, and feminist utopias in science fiction. Expected workload includes two long papers and several short ones, with no midterm, final, or labs.

WMST 030 does not fulfill a College-wide distribution requirement. However, it can be used to satisfy the distribution requirement for the minor.

1 credit.

Not offered 2002-2003.

WMST 091. Seminar in Women's Studies

An advanced seminar emphasizing theoretical and methodological questions that occur when women are placed at the center of study. The seminar has a substantial community-based learning component. This class is required of, and normally limited to, students with minors or special majors in women's studies. It must be taken in the senior year and cannot be used to fulfill distribution requirements in the concentration.

1 credit.

Spring 2003. Staff.

WMST 091A. Honors Attachment to the Seminar in Women's Studies

An advanced seminar or tutorial required of students who intend to take the external exam in women's studies.

1 credit.

Spring 2003. Staff.

WMST 092. Thesis

1 credit.

Each semester. Staff.

WMST 192A and B Thesis

For students completing a special major in honors (1 credit must be taken in each semester of the senior year).

2 credits. Staff.

The following departmental courses have been approved by the Women's Studies Committee for women's studies credit:

ARTH 076. The Body in Contemporary Art

BIOL 006. History and Critique of Biology

BIOL 093. Directed Reading in Feminist Critiques of Biology

DANC 025. Mapping Culture Through Dance

DANC 028. Politics and Aesthetics of Classical Indian Dance

DANC 035. Women Choreographers and Composers

DANC 036. Dancing Identities

ECON 073. Race, Ethnicity, and Gender in Economics

EDUC 061. Gender and Education

ENGL 005N. Illicit Desires in Literature

ENGL 005R. Fictions of Identity

ENGL 023. Renaissance Sexualities

ENGL 034. Restaging Romanticism

ENGL 036. The Age of Austen

ENGL 048. Contemporary Women's Poetry

ENGL 071J. Cherchez la femme: The "Mystery" of Woman in the Mystery Genre

ENGL 071K. Lesbian Novels Since World War II

ENGL 082. Transnational Feminist Theory

ENGL 083. Feminist Theory

ENGL 089. Women and Popular Culture: Fiction, Film, and Television

ENGL 090. Queer Media

ENGL 091. Feminist Film and Media Studies

ENGL 112. Women and Literature

FREN 030. L'invention de la modernité feminine en France

Women's Studies

FREN 061. Odd Couplings: Writings and Readings Across Gender Lines

FREN 076. Ecritures au féminin

GERM 088. Frauen und Film

GERM 108. Wien und Berlin

HIST 001C. Sex and Gender in Western Traditions

HIST 001G. Women, Family, and the State in China

HIST 001I. African-American Women's History

HIST 016. Sex, Sin, and Kin in Early Europe

HIST 029. Sexuality and Society in Modern Europe

HIST 052. The History of Manhood in America, 1750-1920

HIST 053. Topics in African-American Women's History

HIST 054. Women, Society, and Politics

LITR 051G. Gender and Race in European Cinema

LITR 061SA. Women's Testimonial Literature of Latin America

LITR 079R. Russian Women Writers

MUSI 035. Women Composers and Choreographers

PHIL 045. Philosophical Approaches to the Question of Woman

PHIL 145. Feminist Theory Seminar

PHYS 029. Seminar on Gender and (Physical) Science

POLS 013. Feminist Political Theory

POLS 031. Difference, Dominance, and the Struggle for Equality

POLS 032. Gender, Politics, and Policy in America

PSYC 044. Psychology and Gender

PSYC 058. Gender, Culture, and Mental Health

RELG 007B. Women and Religion

RELG 025B. Black Women and Religion in the United States

RELG 103. Women and Spirituality

RUSS 015. East European Prose

RUSS 079R. Russian Women Writers

RUSS 112. The Acmeists

SOAN 007C. Sociology Through African American Women's Writing

SOAN 049B. Comparative Perspectives in the Body

SPAN 066. La escritora española en los siglos XIX y XX

THEA 106. Theater History Seminar

VI

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21 College Avenue
Swarthmore PA 19081

Marge Pearlman Scheuer, *Vice Chair*
101 Central Park West
New York NY 10023

Lillian E. Kraemer, *Secretary*
2 Beekman Place
Apartment 14C
New York NY 10022

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Swarthmore College
Swarthmore PA 19081

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101 Central Park West
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2 Beekman Place
Apartment 14C
New York NY 10022

Ex officio
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Chairman of the Board Emeritus
Eugene M. Lang
912 Fifth Avenue
New York NY 10021

Current Term Expires December 2002

Catherine Good Abbott
7516 Royal Oak Drive
McLean VA 22102

Paul I. Corddry
Unit 14, The Enclave
601 Gulf Shore Boulevard North
Naples FL 34103

Carley Lesley Cunniff
1 West 72nd Street
New York NY 10023

Michael J. Kuh
14 Washington Place
New York NY 10003

Jane Lang
Sprenger & Lang
1614 Twentieth Street NW
Washington DC 20009

Elizabeth Scheuer
4730 Fieldston Road
Bronx NY 10471

Alan A. Symonette
717 Dorset Street
Philadelphia PA 19119

Current Term Expires June 2003

Richard R. Truitt, Alumni Council President
8560 SW Wilson Lane
Wilsonville OR 97070

Current Term Expires December 2003

Sherry F. Bellamy
Verizon Communications
1515 N. Court House Road
Suite 500
Arlington VA 22201-2909

Neil Grabois
Vice President for Strategic Planning
and Program Coordination
Carnegie Corporation of New York
437 Madison Avenue
New York NY 10022

Samuel L. Hayes III
345 Nahatan Street
Westwood MA 02090

James C. Hormel
Equidex, Inc.
19 Sutter Street
San Francisco CA 94104-4901

Barbara W. Mather
Pepper Hamilton LLP
3000 Two Logan Square
18th and Arch Streets
Philadelphia PA 19103-2799

Marge Pearlman Scheuer
101 Central Park West
New York NY 10023

David W. Singleton
8 South Hampshire Court
Wilmington DE 19807

Jeremy M. Weinstein
1724 Willard Street NW, #2
Washington DC 20009

Current Term Expires December 2004

Dulany Ogden Bennett
Oregon Episcopal School
6300 SW Nicol Road
Portland OR 97223

John D. Goldman
Willis Bay Area, Inc.
One Bush Street, Suite 900
San Francisco CA 94104

Julie Lange Hall
1161 Pine Street
Winnetka IL 60093

Lillian E. Kraemer
2 Beekman Place
Apartment 14C
New York NY 10022

Frederick W. Kyle
1900 Rittenhouse Square
Apartment 15B
Philadelphia PA 19103

Wilma Lewis
No. 5008
4301 Massachusetts Avenue NW
Washington DC 20016

William G. Nelson IV
Box 1105
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John A. Riggs
5230 Watson Street NW
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Carl R. Russo
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3905 State Street, No. 7
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Salem D. Shuchman
1820 Rittenhouse Square
Apartment PH2
Philadelphia PA 19103

Thomas E. Spock
43 Stoneyside Drive
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4807 Placid Place
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3145 Las Vegas Boulevard South
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Two staff members
Four faculty members

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Wendell S. Williams '51[1]
Sarasota, FL

1 Term ends 2005.
2 Term ends 2003.
3 Term ends 2004.
4 Nominating Committee.

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Bruce J. Gould '54
Philadelphia, PA

Jim J. Moskowitz '88
Philadelphia, PA

Pittsburgh

Barbara Sieck Taylor '75
Pittsburgh, PA

Michaelangelo Celli '95
Pittsburgh, PA

San Francisco

Neal D. Finkelstein '86

Rebecca Johnson '86
Oakland, CA

Seattle

Deborah Read '87
Seattle, WA

Twin Cities

Lia Theologides '89
Minneapolis, MN

Libby A. Starling '92
St. Paul, MN

Martha A. Easton '89
Minneapolis, MN

Paris

Catherine Seeley Lowney '82
Paris, France

National Chair

Don T. Fujihira '69
New York, NY

1 Term ends 2005.
2 Term ends 2003.
3 Term ends 2004.
4 Nominating Committee.

Faculty

EMERITI

Elisa Asensio, M.A., Middlebury College, Professor Emerita of Spanish. Apt. 8350, 3300 Darby Road, Haverford, PA 19041.

George C. Avery, B.A., M.A., and Ph.D., University of Pennsylvania, Professor Emeritus of German. 230 Haverford Avenue.

Lydia Baer, B.A., Oberlin College; M.A. and Ph.D., University of Pennsylvania, Professor Emerita of German. c/o Staff Leasing Group, P.O. Box 25020, Bradenton, FL 34206-5020.

Robert C. Bannister, B.A. and Ph.D., Yale University; B.A. and M.A., University of Oxford, Scheuer Professor Emeritus of History. Strath Haven Condominiums, Apt. 1224, 801 Yale Avenue.

Robert A. Barr Jr., B.A., Swarthmore College; M.A., University of Pennsylvania, Dean Emeritus of Admissions. Strath Haven Condominiums, Apt. 719, 801 Yale Avenue.

Oleksa-Myron Bilaniuk, Cand. Ingeanieur, Universitea de Louvain; B.S.E., B.S., M.S., M.A., and Ph.D., University of Michigan, Centennial Professor Emeritus of Physics. 100 Plush Mill Road, Wallingford, PA 19086.

Thomas H. Blackburn, B.A., Amherst; B.A. and M.A., University of Oxford; Ph.D., Stanford University, Centennial Professor Emeritus of English Literature. 801 Yale Avenue, #1001.

David L. Bowler, B.S. in E.E., Bucknell University; M.S. in E.E., Massachusetts Institute of Technology; M.A. and Ph.D., Princeton University, Howard N. and Ada J. Eavenson Professor Emeritus of Electrical Engineering. 535 Gradyville Road, Newtown Square, PA 19073.

Thompson Bradley, B.A., Yale University; M.A., Columbia University, Professor Emeritus of Russian. Price's Lane, Moylan, PA 19065.

Tatiana M. Cosman, B.A. and M.A., Middlebury College; M.A., Columbia University; Ph.D., New York University, Assistant Professor (part time) Emerita of Russian. Riddle Village, #215 Williamsburg, Media, PA 19063-6032.

Gomer H. Davies, B.S., East Stroudsburg State College; Ed.M., Temple University, Professor Emeritus of Physical Education. 212 Plush Mill Road, Wallingford, PA 19086.

H. Searl Dunn, B.S.E. and M.S.E., Princeton University; Ph.D., Brown University, Henry C. and J. Archer Turner Professor Emeritus of Engineering. Swarthmore College.

William C. Elmore, B.S., Lehigh University; Ph.D., Yale University, Morris L. Clothier Professor Emeritus of Physics. Dunwoody Village CH3, 3500 West Chester Pike, Newtown Square, PA 19073.

Edward A. Fehnel, B.S., M.S., and Ph.D., Lehigh University, Edmund Allen Professor Emeritus of Chemistry. 120 Paxon Hollow Road, Rose Tree, Media, PA 19063.

Launce J. Flemister, B.A., M.A., and Ph.D., Duke University, Professor Emeritus of Zoology. 36 Deerfield Road, Hilton Head, SC 29926.

John E. Gaustad, A.B., Harvard University; Ph.D., Princeton University, Edward Hicks Magill Professor Emeritus of Astronomy. 430 S. Chester Road.

Charles E. Gilbert, B.A., Haverford College; Ph.D., Northwestern University, Professor Emeritus of Political Science and Provost Emeritus. 223 Kenyon Avenue.

Barbara Lange Godfrey, Dean Emerita of Women. White Horse Village, B102 Gradyville Road, Newtown Square, PA 19073.

James H. Hammons, B.A., Amherst College; M.A. and Ph.D., The Johns Hopkins University, Professor Emeritus of Chemistry. 17 Furness Lane, Wallingford, PA 19086.

Mark A. Heald, B.A., Oberlin College; M.S. and Ph.D., Yale University, Morris L. Clothier Professor Emeritus of Physics. P.O. Box 284, Pleasant Hill, TN 38578.

Wulff D. Heintz, Dr. rer. nat. München University, Professor Emeritus of Astronomy. 540 Riverview Avenue.

Eleanor K. Hess, B.S. and M.S., University of Pennsylvania, Professor Emerita of Physical Education. 5 Plush Mill Road, Wallingford, PA 19086.

Gudmund R. Iversen, M.A., University of Michigan; Ph.D., Harvard University, Professor Emeritus of Statistics. 212 Elm Avenue.

T. Kaori Kitao, B.A. and M.A., University of California, Berkeley; Ph.D., Harvard University, William R. Kenan, Jr., Professor Emerita of Art History. 540 Westminster Avenue.

George Krugovoy, B.A., M.A., and Ph.D., Philosophical Institute, Salzburg, Austria, Professor Emeritus of Russian. 562 Juniata Avenue.

Asmarom Legesse, B.A., University College of Addis Ababa; Ed.M. and Ph.D., Harvard University, Professor Emeritus of Anthropology. Swarthmore College.

Paul C. Mangelsdorf Jr., B.A., Swarthmore College; Ph.D., Harvard University, Morris L. Clothier Professor Emeritus of Physics. 110 Cornell Avenue.

John D. McCrumm, B.A. and M.S., University of Colorado, Howard N. and Ada J. Eavenson Professor Emeritus of Engineering. Arlington #417, Riddle Village, Media, PA 19063.

Ann Kosakowski McNamee, B.A., Wellesley College; M.Phil. and Ph.D., Yale University, Professor Emerita of Music. 1850 Sandhill Road # 21, Palo Alto, CA 94304.

Philip Metzidakis, B.A., Dartmouth College; Ph.D., Yale University, Professor Emeritus of Spanish. 64 Tonset Road, Orleans, MA 02653.

Kathryn L. Morgan, B.A., Virginia State College; M.A., Howard University; M.A. and Ph.D., University of Pennsylvania, Sara Lawrence Lightfoot Professor Emerita of History. Apt. 710, Strath Haven Condominiums.

Jane Mullins, B.A., Swarthmore College, Registrar Emerita. 11 South Princeton Avenue.

Helen F. North, B.A., M.A., and Ph.D., Cornell University, Centennial Professor Emerita of Classics. 604 Ogden Avenue.

Martin Ostwald, B.A., University of Toronto; M.A., University of Chicago; Ph.D., Columbia University, William R. Kenan, Jr., Professor Emeritus of Classics. 408 Walnut Lane.

Harold E. Pagliaro, A.B., M.A., Ph.D., Columbia University, Alexander Griswold Cummins Professor Emeritus of English Literature and Provost Emeritus. 536 Ogden Avenue.

Dean Peabody, B.A., Swarthmore College; Ph.D., Harvard University, Professor Emeritus of Psychology. 312 Catch Penny Lane, Media, PA 19063-5443.

Jean Ashmead Perkins, B.A., Swarthmore College; M.A. and Ph.D., Columbia University, Susan W. Lippincott Professor Emerita of French. 44 Crosslands Drive, Kennett Square, PA 19348.

Ernest J. Prudente, B.S. and M.S., University of Pennsylvania, Professor Emeritus of Physical Education. 612 Rockburne Mills Court, Wallingford, PA 19086.

Frederic L. Pryor, B.A., Oberlin College; M.A. and Ph.D., Yale University, Professor Emeritus of Economics. 740 Harvard Avenue.

Gilbert P. Rose, B.A. and Ph.D., University of California, Berkeley, Susan Lippincott Professor Emeritus of Modern and Classical Languages. 551 Marietta Avenue.

David Rosen, B.A., New York University; M.A. and Ph.D., University of Pennsylvania, Professor Emeritus of Mathematics. 394 Riverview Road.

Alburt M. Rosenberg, B.A., Harvard University; M.S.,University of Florida; Ph.D., University of Pennsylvania, Associate Professor Emeritus of Natural Science. P.O. Box 1593, Harwich, MA 02645.

Robert Roza, B.A., University of Toronto; M.A. and Ph.D., Princeton University, Susan W. Lippincott Professor Emeritus of French. 233 Cornell Avenue.

Robert E. Savage, B.A., Oberlin College; M.S. and Ph.D., University of Wisconsin, Isaac H. Clothier, Jr., Professor Emeritus of Biology. 411 Vassar Avenue.

Bernard S. Smith, B.A. and M.A., University of Oxford; Ph.D., Harvard University, Professor Emeritus of History. The Coach House, Glascwm, Llandrindod Wells, Powys LD1 5SE, England.

David G. Smith, B.A., and M.A., University of Oklahoma; Ph.D., The Johns Hopkins University, Richter Professor Emeritus of Political Science. 448 S. Jackson Street, Media, PA 19063.

Gilmore Stott, B.A. and M.A., University of Cincinnati; B.A. and M.A., University of Oxford; M.A. and Ph.D., Princeton University, Associate Provost Emeritus and Associate Dean of the College Emeritus. 318 Dartmouth Avenue.

Barbara Yost Stewart, B.A., Swarthmore College; M.A. and Ph.D., Bryn Mawr College, Professor Emerita of Biology, 102 3rd Street, Oxford, MD 21654-1249.

Francis P. Tafoya, B.S. and M.A., University of Colorado; Ph.D., Yale University, Professor Emeritus of French and Spanish. 620 North Chester Road.

Peter T. Thompson, B.A., The Johns Hopkins University; Ph.D., University of Pittsburgh, Professor Emeritus of Chemistry. 203 College Avenue.

Derek Traversi, B.A. and M.A., University of Oxford, Alexander Griswold Cummins Professor Emeritus of English. 12 Richmond Mansions, Denton Road, Twickinham, Midd, TW 1, 2HH, England.

P. Linwood Urban Jr., B.A., Princeton University; S.T.B., S.T.M., and Th.D., General Theological Seminary, Charles and Harriett Cox McDowell Professor Emeritus of Religion. 20 South Princeton Avenue.

Douglas M. Weiss, A.T.C., Professor Emeritus of Physical Education. 117 S. Chester Road.

Timothy C. Williams, B.A., Swarthmore College; A.M., Harvard University; Ph.D., Rockefeller University, Professor Emeritus of Biology.

Harrison M. Wright, B.A., M.A., and Ph.D., Harvard University, Isaac H. Clothier Professor Emeritus of History and International Relations and Provost Emeritus. P.O. Box 209, Jamestown, RI 02855.

Sarah Lee Lippincott Zimmerman, B.A., University of Pennsylvania; M.A., Swarthmore College; D.Sc., Villanova University, Professor Emerita of Astronomy and Director Emerita of the Sproul Observatory. 29 Kendal Drive, Kennett Square, PA 19348-2323.

FACULTY AND INSTRUCTIONAL STAFF

Frank Agovino, B.S., St. Joseph's University, Coach/Instructor in Physical Education. Swarthmore College.

John Alston, B.M., Yankton College; M.M., University of Northern Iowa; Ph.D., Indiana University, Associate Professor of Music. Swarthmore College.

Deena R. Amiry, B.A., Georgetown University; M.A., Middlebury College; Ph.D., University of Pennsylvania, Visiting Assistant Professor of French (part time). Swarthmore College.

Diane Anderson, B.A., Montclair State College; M.S., Drexel University, Ph.D., University of Pennsylvania, Assistant Professor of Education. 210 Yale Avenue.

Nathalie F. Anderson, B.A., Agnes Scott College; M.A., Georgia State University; Ph.D., Emory University, Professor of English Literature. 3 Rutledge Avenue, Rutledge, PA 19070.

Akosua Anyidoho, B.A., University of Ghana; M.A., Indiana University; Ph.D., University of Texas at Austin, Cornell Visiting Professor, Black Studies Program. 405 Walnut Lane.

Koffi Anyinefa, License de Lettres (Université du Bénin, Lomé, Togo); Magister Artium (Universität Bayreuth, Germany); Ph.D., Universität Bayreuth, Visiting Associate Professor of French, Swarthmore College.

Diego Armus, B.A., University of Buenos Aires; M.A. and Ph.D., University of California, Berkeley, Assistant Professor of History. Swarthmore College.

Kim D. Arrow, B.S., Temple University; M.F.A., New York University, Assistant Professor of Dance (part time). Swarthmore College.

Paolo Asso, Laurea in Lettere Classiche, Instituto Universitario Orientale, Naples; Ph.D., Princeton University, Visiting Assistant Professor of Classics. Swarthmore College.

Brian K. Axel, B.A., Colby College; M. A. and Ph.D., University of Chicago, Visiting Assistant Professor of Anthropology. Swarthmore College.

Roger Babb, B.A., Empire State University, Visiting Instructor in Theater (part time), Swarthmore College.

Marcantonio Barone, B.M., The Curtis Institute of Music; Artists Diploma, Peabody Conservatory of Music, Visiting Professor of Music (part time), 509 Montgomery Avenue, Haverford, PA 19041.

Gabriel Quinn Bauriedel, B.A., Swarthmore College; Certificate École Internationale de Théâtre Jacques Lecoq, Visiting Instructor in Theater (part time). Swarthmore College.

Amanda Bayer, B.A., Williams College; M.A., M.Phil, and Ph.D., Yale University, Associate Professor of Economics. Swarthmore College.

Deborah Beck, B.A., Yale University; M.A.. and Ph.D., Harvard University, Assistant Professor of Classics. Swarthmore College.

Carla Belver, B.A., Temple University; M.A., Villanova University, Visiting Instructor in Theater (part time). 121 Dundee Mews, Media, PA 19063.

Stephen P. Bensch, M.A., University of Toronto; Ph.D., University of California, Berkeley, Professor of History. 614 Yale Avenue.

Benjamin Berger, A.B., Princeton University; M.A. and Ph.D., Harvard University, Assistant Professor of Political Science. Swarthmore College.

Deborah J. Bergstrand, B.S., Allegheny College; M.S. and Ph.D., University of Illinois, Professor of Mathematics/Statistics (part time). Swarthmore College.

Alan Berkowitz, M.A. and Ph.D., University of Washington, Associate Professor of Chinese. Swarthmore College.

Mary Ann Black, B.S., West Chester University, Supervisor of Student Teachers, 402 Glenloch Road, Ridley Park, PA 19078.

Jean-Vincent Blanchard, B.A. and M.A., Université de Montréal; Ph.D., Yale University, Assistant Professor of French. Swarthmore College.

Alfred Bloom, B.A., Princeton University; Ph.D., Harvard University, President of the College and Professor of Psychology and Linguistics. 324 Cedar Lane.

John R. Boccio, B.S., Polytechnic Institute of Brooklyn; Ph.D., Cornell University, Professor of Physics. 318 North Chester Road.

Elizabeth Bolton, B.A., Middlebury College; M.Phil. and Ph.D., Yale University, Associate Professor of English Literature. Swarthmore College.

Karen Borbee, B.S., University of Delaware; M.Ed., Widener University, Associate Professor of Physical Education. Swarthmore College.

Darlene D. Bramucci, B.A. and M.S., University of Maryland, Laboratory Instructor in Biology. Swarthmore College.

Elaine Brenneman, B.A., University of Vermont; M.Ed. and Ph.D., University of Delaware, Visiting Assistant Professor of Education (part time). 443 Chambers Lane, West Chester, PA 19382

Michael R. Brown, B.A., Pomona College; Ph.D., Dartmouth College, Associate Professor of Physics. 409 Turner Road, Wallingford, PA 19086.

Amy L. Brunner, B.S., Bates College; M.S., Smith College, Coach/Instructor in Physical Education. Swarthmore College.

Amy L.R. Bug, B.A., Williams College; Ph.D., Massachusetts Institute of Technology, Associate Professor of Physics. 302 Cornell Avenue.

Timothy J. Burke, B.A., Wesleyan University; M.A. and Ph.D., Johns Hopkins University, Associate Professor of History. Swarthmore College.

Caroline A. Burkhard, B.S. and M.S., University of Delaware, Laboratory Instructor in Chemistry. 705 Godshall Road, Telford, PA 18969.

Christopher Burns, B.S., Bishops University; M.S. and Ph.D., University of Toronto, Visiting Assistant Professor of Physics. Swarthmore College.

Henry Erik Butler, B.A., University of California, Santa Cruz; Ph.D., Yale University, Mellon Postdoctoral Fellow (German), Assistant Professor. Swarthmore College.

Kim E. Butler, B.A., Harvard University; M.A., The Johns Hopkins University, Visiting Instructor in Art History. Swarthmore College.

Faculty

Aurora Camacho de Schmidt, M.A. and Ph.D., Temple University, Associate Professor of Spanish. 204 West Street, Media, PA 19063.

Garikai Campbell, B.A., Swarthmore College; Ph.D., Rutgers University, Assistant Professor of Mathematics. Swarthmore College.

Edmund Campos, B.A., University of California, Los Angeles; Ph.D., Stanford University. Assistant Professor of English Literature. Swarthmore College.

Sydney L. Carpenter, B.F.A. and M.F.A., Tyler School of Art, Associate Professor of Studio Art. Swarthmore College.

Peter Carroll, B.S. and M.A., Villanova University, Coach/Instructor in Physical Education. Swarthmore College.

John P. Caskey, B.A., Harvard University; Ph.D., Stanford University, Professor of Economics. 220 West Rittenhouse Square, Apt. 23C, Philadelphia, PA 19103.

Pallabi Chakravorty, B.A., Jadavpur University; Ph.D., Temple University, Assistant Professor of Dance (part time). Swarthmore College.

Joy Charlton, B.A., University of Virginia; M.A. and Ph.D., Northwestern University, Professor of Sociology. 503 North Chester Road.

Leo Charney, B.A., Yale University; M.A. and Ph.D., New York University, Visiting Assistant Professor (part time). Swarthmore College.

Erik Cheever, B.S., Swarthmore College; M.S.E. and Ph.D., University of Pennsylvania, Professor of Engineering. 423 S. Olive Street, Media, PA 19063.

Horacio Chiong Rivero, B.A., Yale University; M.A. and Ph.D., Harvard University, Assistant Professor of Spanish, Swarthmore College.

Yvonne P. Chireau, B.A., Mount Holyoke College; M.T.S., Harvard University; Ph.D., Princeton University, Associate Professor of Religion. 700 Hillborn Avenue.

David H. Cohen, B.A., Harvard University; Ph.D., University of Wisconsin, Assistant Professor of Astronomy. 509 Rutgers Avenue.

Peter J. Collings, B.A., Amherst College; M.Ph. and Ph.D., Yale University, Morris L. Clothier Professor of Physics. 123 Locust Lane, Media, PA 19063.

Michael W. Cothren, B.A., Vanderbilt University; M.A. and Ph.D., Columbia University, Professor of Art History. 611 Strath Haven Avenue.

Sean Crist, B.A., West Virginia University; M.A., University of Delaware; Ph.D., University of Pennsylvania, Visiting Instructor in Linguistics (part time), Swarthmore College.

LaDeva Davis, B.M.Ed., Temple University, Associate in Performance (Dance). Swarthmore College.

Susan P. Davis, B.S., Springfield College; M.S., Smith College, Professor of Physical Education. 2411 Whitehouse Road, Berwyn, PA 19312.

Thomas S. Dee, B.A., Swarthmore College; M.A. and Ph.D., University of Maryland, Assistant Professor of Economics. 739 Harvard Avenue.

Ursula Neuerburg Denzer, B.A., Freie Universität; M.A., New York University, Instructor in Theater. 20 Oberlin Avenue.

Peggy deProphetis, A.B., Vassar; M.B.A., Wharton School, University of Pennsylvania; Ph.D., University of Pennsylvania. Visiting Associate Professor in Economics (part time). Swarthmore College.

Nathaniel Deutsch, B.A., M.A., and Ph.D., The University of Chicago, Associate Professor of Religion. Swarthmore College.

Lee Devin, B.A., San Jose State College; M.A. and Ph.D., Indiana University, Professor of Theater. 603 Hillborn Avenue.

Miguel Díaz-Barriga, B.A., University of Chicago; M.A. and Ph.D., Stanford University, Associate Professor of Anthropology. 420 Rutgers Avenue.

Nancy Donaldson, B.A., Swarthmore College, Supervisor of Student Teachers, 765 E. Forge Rd., Media, PA 19063.

Allison Dorsey, B.A., University of San Francisco; M.A. and Ph.D., University of California, Irvine, Associate Professor of History. Swarthmore College.

Bruce A. Dorsey, B.A., Biola University; A.M. and Ph.D., Brown University, Associate Professor of History. Swarthmore College.

Wendy Dowkings, B.J., The University of Texas at Austin, Visiting Lecturer (part time). Swarthmore College.

Martin Drexler, B.F.A., Florida State University; M.F.A. Cranbrook Academy of Art, Visiting Assistant Professor of Studio Art (part time). Swarthmore College.

Todd A. Drumm, B.S., Westminster College; Ph.D., University of Maryland, College Park, Assistant Professor of Mathematics. Swarthmore College.

Anda Dubinskis, B.F.A., Cooper Union; M.F.A., University of Pennsylvania, Visiting Assistant Professor of Studio Art. Swarthmore College.

Robert S. DuPlessis, B.A., Williams College; M.A. and Ph.D., Columbia University, Isaac H. Clothier Professor of History and International Relations. 211 Rutgers Avenue.

Frank H. Durgin, B.A., St. John's College; M.A., University of Pennsylvania; Ph.D., University of Virginia, Associate Professor of Psychology. 631 Parrish Road.

Mark Duzenski, B.S., Trenton State University, Coach/Instructor in Physical Education. Swarthmore College.

Richard Eldridge, A.B., Middlebury College; M.A. and Ph.D., University of Chicago, Professor of Philosophy. 423 Harvard Avenue.

Ali Erkan, B.S., M.S., Lehigh University, Visiting Instructor of Computer Science, 4 Crum Ledge Lane.

Raima Evan, B.A., Radcliffe College, Harvard University; M.A. and Ph.D., University of Pennsylvania, Visiting Assistant Professor of English Literature (part time). 501 Harvard Avenue.

Erich Carr Everbach, A.B., Harvard College; M.S. in M.E., and Ph.D., Yale University, Associate Professor of Engineering. Swarthmore College.

Philip J. Everson, B.A., Pomona College; M.A. and Ph.D., Harvard University, Associate Professor of Statistics. Swarthmore College.

Randall L. Exon, B.F.A., Washburn University; M.A. and M.F.A., University of Iowa, Professor of Studio Art. 431 Rogers Lane, Wallingford, PA 19086.

Marion J. Faber, B.A. and M.A., University of California, Berkeley; Ph.D., Harvard University, Professor of German. 234 Benjamin West Avenue.

Kimberly Fedchak, B.A., Oberlin College; M.A., Bryn Mawr College, Instructor in Russian (part time). Swarthmore College.

Theodore B. Fernald, B.A. and M.A., Ohio State University; Ph.D., University of California at Santa Cruz, Associate Professor of Linguistics. Swarthmore College.

Sibelan Forrester, B.A., Bryn Mawr College; M.A. and Ph.D., Indiana University, Associate Professor of Russian. Swarthmore College.

Dorothy K. Freeman, B.M., M.M., Boston University, Associate in Performance (Music). 206 Martroy Lane, Wallingford, PA 19086.

James D. Freeman, B.A., M.A., and Ph.D., Harvard University, Daniel Underhill Professor of Music. 206 Martroy Lane, Wallingford, PA 19086.

Sharon E. Friedler, B.A., Colby College; M.F.A., Southern Methodist University, Stephen Lang Professor of Performing Arts. 220 Vassar Avenue.

Joan Friedman, M.A., University of Wisconsin, Language Instructor in Spanish (part time). 421 Cornell Avenue.

J. William Frost, B.A., DePauw University; M.A. and Ph.D., University of Wisconsin, Howard M. and Charles F. Jenkins Professor of Quaker History and Research, and Director of the Friends Historical Library. Swarthmore College.

Nancy Gabel, B.A. and M.S., Middlebury College; Supervisor of Student Teachers. Swarthmore.

William O. Gardner, B.A., Columbia University; M.A. and Ph.D., Stanford University, Assistant Professor of Japanese. Swarthmore College.

Kenneth J. Gergen, B.A., Yale University; Ph.D., Duke University, Gil and Frank Mustin Professor of Psychology. 331 Rogers Lane, Wallingford, PA 19086.

Faculty

Farha N. Ghannam, B.A. and M.A., Yarmouk University; Ph.D., University of Texas at Austin, Assistant Professor of Anthropology. Swarthmore College.

Scott F. Gilbert, B.A., Wesleyan University; M.A. and Ph.D., The Johns Hopkins University, Professor of Biology. 224 Cornell Avenue.

Jane E. Gillham, B.A., Princeton University; Ph.D., University of Pennsylvania, Visiting Assistant Professor of Psychology (part time). 631 Parrish Road.

Jill Gladstein, B.S., University of Wisconsin, Madison; M.S.E.D., University of Pennsylvania; Ph.D., University of Pennsylvania, Assistant Professor of English Literature. Swarthmore College.

Dolores Luis Gmitter, B.A., St. Francis College; M.Ed., Temple University, Associate in Performance (Dance). Swarthmore College.

Stephen S. Golub, B.A., Williams College; M.A. and Ph.D., Yale University, Professor of Economics. 215 College Avenue.

Bruce Grant, B.A., McGill University; M.A. and Ph.D., Rice University, Associate Professor of Anthropology. Swarthmore College.

Pat Gress, B.S., Towson University, M.S., West Chester University, Coach/Instructor in Physical Education. Swarthmore College.

Charles M. Grinstead, B.A., Pomona College; M.A. and Ph.D., University of California, Los Angeles, Professor of Mathematics. 8 Whittier Place.

Cheryl P. Grood, B.A., University of Michigan; M.A. and Ph.D., University of Wisconsin, Assistant Professor of Mathematics. Swarthmore College.

Carl H. Grossman, B.S. and Ph.D., University of Pennsylvania, Associate Professor of Physics. Whittier Place.

Maria Luisa Guardiola, Licenciada, Universitat autonoma de Barcelona; Ph.D., University of Pennsylvania, Associate Professor of Spanish. Swarthmore College.

Julie Hagelin, B.A. Pomona College, Ph.D., University of New Mexico; Assistant Professor of Biology. Swarthmore College.

Cynthia Perwin Halpern, B.A., Tulane University; M.A., The London School of Economics; Ph.D., Princeton University, Associate Professor of Political Science. Swarthmore College.

K. David Harrison, B.A. American University; Magister, Jagiellonian University/Poland; M.A., Yale University; Ph.D., Yale University, Visiting Assistant Professor of Linguistics.

John J. Hassett, B.A., St. Francis College; M.A., University of Iowa; Ph.D., University of Wisconsin, Professor of Spanish. 514 S. Providence Road, Wallingford, PA 19086.

Karen R. Hatwell, B.S., Mary Washington College; M.S. and Ph.D., University of Massachusetts, Visiting Assistant Professor of Chemistry, Swarthmore College.

Rachel Havrelock, B.A., University of California, Santa Cruz, Visiting Assistant Professor of Religion, Swarthmore College.

Adam Hertz, B.A., University of Redlands; M.Ed., Temple University, Associate Director of Athletics. Swarthmore College.

Sally Hess, B.A., Barnard College; M.Phil., Yale University, Assistant Professor of Dance (part time). Swarthmore College.

Sara Hiebert, B.S., University of St. Andrews; Ph.D., University of Washington, Associate Professor of Biology. Swarthmore College.

Robinson G. Hollister Jr., B.A., Amherst College; Ph.D., Stanford University, Joseph Wharton Professor of Economics. 1 Whittier Place.

Raymond F. Hopkins, B.A., Ohio Wesleyan University; M.A., Ohio State University; M.A. and Ph.D., Yale University, Richter Professor of Political Science. 308 Ogden Avenue.

Steven P. Hopkins, B.A. and M.A., University of California, Santa Barbara; A.M. and Ph.D., Harvard University, Associate Professor of Religion. 312 S. Chester Road.

Wendy A. Horwitz, B.A., Harvard University; M.A. and Ph.D., Temple University, Visiting Assistant Professor of Psychology (part time). 502 Westview St., Philadelphia, PA 19119.

Kathleen P. Howard, B.A., Princeton University; Ph.D., Yale University, Assistant Professor of Chemistry. Swarthmore College.

Constance Cain Hungerford, B.A. Wellesley College; M.A., Ph.D., University of California, Berkeley, Provost and Mari S. Michener Professor of Art History. 410 Dickinson Avenue.

Thomas J. Hunter, B.S., University of Chicago; Ph.D., Massachusetts Institute of Technology, Associate Professor of Mathematics. Swarthmore College.

Virginia M. Indivero, B.S., Elizabethtown College; M.S., Villanova University, Lecturer in Chemistry. 2915 Wakefield Drive, Holmes, PA 19043.

Johanna Inman, B.A., Beaver College; M.F.A., Tyler School of Art, Visiting Assistant Professor of Studio Art (part time). Swarthmore College.

Mark Jacobs, B.A., Harvard University; Ph.D., Stanford University, Centennial Professor of Biology. 112 North Providence Road, Wallingford, PA 19086.

Jeanne Jaffe, B.F.A., Tyler School of Art; M.F.A., Alfred University, Visiting Assistant Professor of Studio Art (part time). Swarthmore College.

Charles L. James, B.S., State University of New York at New Paltz; M.S., State University of New York at Albany, Sara Lawrence Lightfoot Professor of English Literature. 402 Laurel Lane, Wallingford, PA 19086.

Philip N. Jefferson, B.A., Vassar College; M.A., Ph.D., University of Virginia, Associate Professor of Economics. 625 Elm Avenue.

John B. Jenkins, B.S. and M.S., Utah State University; Ph.D., University of California, Los Angeles, Isaac H. Clothier Jr. Professor of Biology. 330 Cornell Avenue.

Eric L.N. Jensen, B.A., Carleton College; M.S., Ph.D., University of Wisconsin, Assistant Professor of Astronomy. Swarthmore College.

Joshiko Jo, B.A., Seiwa College, Nishinomiya, Japan; B.A., North Central College, Illinois; M.A., University of Illinois-Urbana-Champaign. Instructor in Japanese (part time). Swarthmore College.

Michael Johns, B.A., New England Conservatory; M.M. and Doctor of Musical Arts, Temple University, Associate in Performance (Music). Swarthmore College.

Aimee S.A. Johnson, B.A., University of California, Berkeley; Ph.D., University of Maryland, College Park, Assistant Professor of Mathematics. Swarthmore College.

Kendall Johnson, B.A., University of Michigan; M.A., University of Pennsylvania; Ph.D., University of Pennsylvania. Assistant Professor of English Literature. Swarthmore College.

Nora Johnson, B.A., University of California, Los Angeles; M.A. and Ph.D., University of California, Berkeley, Associate Professor of English Literature. Swarthmore College.

Pieter M. Judson, B.A., Swarthmore College; M.A. and Ph.D., Columbia University, Associate Professor of History. 1108 Spruce Street, #2F.

Edward T. Kako, B.A., Brown University; M.A. and Ph.D., University of Pennsylvania, Assistant Professor of Psychology. Swarthmore College.

Wol-A Kang, B.A., Fu-Jen Catholic University, Taipei, Taiwan; M.A., Peking University, Beijing, China, Language Instructor in Chinese (part time). Swarthmore College.

Tracy R. Kay, B.S., St. Lawrence University; M.F.S., Yale University; Executive Director, Schuylkill Center for Environmental Education, Instructor of Education (part time). Swarthmore College.

Jennie Keith, B.A., Pomona College; M.A. and Ph.D., Northwestern University, Centennial Professor of Anthropology. 612 Ogden Avenue.

Charles F. Kelemen, B.A., Valparaiso University; Ph.D., Pennsylvania State University, Professor of Computer Science. 776 Hillview Road, Malvern, PA 19355.

Deborah G. Kemler Nelson, B.A., M.A., and Ph.D., Brown University, Professor of Psychology. 211 Benjamin West Avenue.

Mary K. Kenney, A.B., Chestnut Hill College; M.A., Villanova University, Language Instructor in Spanish (part time). Swarthmore College.

Faculty

Mary Ann Klassen, B.A., Agnes Scott College; M.S., University of Wyoming, Lecturer in Physics and Astronomy. Swarthmore College.

Mitch Kline, B.S., Penn State University; Ed.M., Temple University, Coach/Instructor in Physical Education.

Eugene A. Klotz, B.S., Antioch College; Ph.D., Yale University, Albert and Edna Pownall Buffington Professor of Mathematics. 735 Yale Avenue.

Ann Komaromi, B.A., Northwestern University; M.A. and Ph.D., The University of Wisconsin-Madison, Assistant Professor of Russian. Swarthmore College.

Haili Kong, M.A., People's University, Beijing; Ph.D., University of Colorado at Boulder, Associate Professor of Chinese. Swarthmore College.

Kostis Kourelis, B.A. and M.A., University of Pennsylvania, Visiting Instructor in Art History (part time). Swarthmore College.

Scott Kugle, B.A., Swarthmore College; Ph.D., Duke University, Assistant Professor of Religion, Swarthmore College.

Allen Kuharski, B.A., University of Wisconsin-Madison; M.A. and Ph.D., University of California, Berkeley, Associate Professor of Theater. 317 N. 35th Street, Philadelphia, PA 19104.

Mark Kuperberg, B.A., Amherst College: M.A. and Ph.D., Massachusetts Institute of Technology. Professor of Economics. 147 Park Avenue.

James R. Kurth, B.A., Stanford University; M.A. and Ph.D., Harvard University, Claude C. Smith Professor of Political Science. 100 Rutgers Avenue.

Hugh M. Lacey, B.A. and M.A., University of Melbourne; Ph.D., Indiana University, Professor of Philosophy. 336 Park Avenue.

Harleigh Leach, B.A., Trinity College; M.S., Smith College, Coach Instructor in Physical Education, Swarthmore.

Grace Ledbetter, B.A., Bryn Mawr College; M.A., University of Virginia; Ph.D., Cornell University, Associate Professor of Classics and Philosophy. 241 Rutgers Avenue.

Deborah Leddy, B.A. Goucher College; M.S. University of Delaware, Laboratory Instructor in Biology. Swarthmore College.

Carolyn Lesjak, B.A., Swarthmore College; M.A., Duke University; Ph.D., Duke University, Assistant Professor of English Literature. 2036 Delancey Place, Philadelphia, PA 19103.

Gerald Levinson, B.A., University of Pennsylvania; M.A. and Ph.D., University of Chicago, Jane Lang Professor of Music. 307 Maple Avenue.

Lillian M. Li, A.B., Radcliffe College; A.M. and Ph.D., Harvard University, Professor of History. 308 Chestnut Avenue.

Margie Inman Linn, B.S. and M.Ed., University of Pittsburgh; Ph.D., University of Pennsylvania, Visiting Assistant Professor (part time) Educational Studies.

Tamsin Lorraine, B.A., Middlebury College; Ph.D., University of Massachusetts, Associate Professor of Philosophy. 314 N. Providence Road, Wallingford, PA 19086.

Jose-Luis Machado, B.S. Universidad de Los Andes, Bogota; M.S., University of Vermont; Ph.D., University of Minnesota, Assistant Professor of Biology. Swarthmore College.

Nelson A. Macken, B.S., Case Institute of Technology; Ph.D., University of Delaware. Howard N. and Ada J. Eavenson Professorship in Engineering. 250 Haverford Avenue.

Ellen B. Magenheim, B.A., University of Rochester; M.A., Ph.D., University of Maryland, Professor of Economics. Swarthmore College.

Bakirathi Mani, B.S.F.S., Georgetown University; M.A., Jawaharlal Nehru University; Ph.D., Stanford University, Assistant Professor of English. Swarthmore College.

Jeanne Marecek, B.S., Loyola University; Ph.D., Yale University, Professor of Psychology. 325 S. Monroe Street, Media, PA 19063.

Michael Marissen, B.A., Calvin College; Ph.D., Brandeis University, Associate Professor of Music. 915 Harvard Avenue, #1301.

William Marshall, B.F.A., University of Florida; M.F.A., Virginia Tech, Associate Professor of Theater and Resident Designer, Theater. Swarthmore College.

Jocelyne Mattei-Noveral, B.S., Orsay University, Laboratory Instructor in Biology. Swarthmore College.

Stephen B. Maurer, B.A., Swarthmore College; M.A. and Ph.D., Princeton University, Professor of Mathematics. 206 Benjamin West Avenue.

Bruce A. Maxwell, B.A. and B.S., Swarthmore College; M.Phil, Cambridge University; Ph.D., Carnegie-Mellon University, Assistant Professor of Engineering, 951 Beatty Road, Springfield, PA 19064.

Arthur E. McGarity, B.S., Trinity University; M.S.E., Ph.D., The Johns Hopkins University, Professor of Engineering. 135 Rutgers Avenue.

Lisa Meeden, B.A., Grinnell College; M.S. and Ph.D., Indiana University, Associate Professor of Computer Science. 12 Shepherds Lane, Wallingford, PA 19086.

Justine Melo, B.A. Princeton University, Ph.D. University of California at San Francisco; Visiting Assistant Professor of Biology, Swarthmore College.

Rachel A. Merz, B.A., Western New Mexico University; M.S., University of Florida; Ph.D., University of Chicago, Professor of Biology. 401 Dickinson Avenue.

Brian A. Meunier, B.F.A., University of Massachusetts, Amherst; M.F.A., Tyler School of Art, Temple University, Professor of Studio Art. Swarthmore College.

Janine Mileaf, B.A., Wesleyan University; M.A., Ph.D., University of Pennsylvania, Assistant Professor of Art History. Swarthmore College.

Lynne A. Molter, B.S. and B.A., Swarthmore College; S.M. and Sc.D., Massachusetts Institute of Technology, Professor of Engineering. Swarthmore College.

Frank A. Moscatelli, B.S., C.W. Post College; M.S. and Ph.D., New York University, Professor of Physics. 302 Avondale Road, Wallingford, PA 19086.

George Moskos, B.A., Davidson College; M.A. and Ph.D., University of Wisconsin, Madison, Professor of French, James C. Hormel Professor in Social Justice. 730 Yale Avenue.

Michael L. Mullan, B.A., University of California, Berkeley; M.Ed., Temple University; Ph.D., University of Delaware, Professor of Physical Education. 401 Rogers Lane, Wallingford, PA 19086.

Braulio Muñoz, B.A., University of Rhode Island; M.A. and Ph.D., University of Pennsylvania, Professor of Sociology. 500 Harvard Avenue.

Rosaria V. Munson, Laurea in Lettere Classiche, Università degli Studi, Milano; Ph.D., University of Pennsylvania, Professor of Classics. Swarthmore College.

Jeffrey S. Murer, B.A. University of Wisconsin; Ph.D., University of Illinois at Chicago, Assistant Professor of Political Science. Swarthmore College.

Marjorie Murphy, B.A., Jersey City State College; M.A., San Jose State University; Ph.D., University of California, Davis, Professor of History. Swarthmore College.

Carol Nackenoff, A.B., Smith College; M.A. and Ph.D., University of Chicago, Professor of Political Science. 302 S. Chester Road.

C. Kemal Nance, B.A., Swarthmore College; M.Ed., Temple University, Associate in Performance (Dance). Swarthmore College.

Donna Jo Napoli, B.A., M.A., and Ph.D., Harvard University, Professor of Linguistics. 226 Park Avenue.

Carole Netter, Maitrisse and DEA, University of Paris, Language Instructor in French (part time). Swarthmore College.

Tia Newhall, B.S.-SED, M.S., Ph.D., University of Wisconsin–Madison, Assistant Professor of Computer Science, #5 Crum Ledge.

Hans F. Oberdiek, B.S. and Ph.D., University of Wisconsin, Henry C. and Charlotte Turner Professor of Philosophy. 410 Dickinson Avenue.

Stephen A. O'Connell, A.B., Oberlin College; Ph.D., Massachusetts Institute of Technology, Professor of Economics. 509 Harvard Avenue.

Virginia Adams O'Connell, B.A., Haverford College; M.A., University of Pennsylvania, Visiting Assistant Professor of Sociology and Anthropology. 509 Harvard Avenue.

Faculty

Lizzie Olesker, B.A., Antioch College; M.F.A., New York University, Visiting Instructor in Theatre Studies (part time). Swarthmore College.

Frederick L. Orthlieb, B.S. and M.S., Massachusetts Institute of Technology; Ph.D., Carnegie-Mellon University. Professor of Engineering. The Isaiah V. Williamson Chair of Civil and Mechanical Engineering. 13 Green Valley Road, Wallingford, PA 19086.

Elizabeth A. Ottinger, B.A., Franklin and Marshall College; Ph.D., University of Minnesota, Assistant Professor of Chemistry. Swarthmore College.

Robert S. Paley, B.S., McGill University; M.S. and Ph.D., University of Michigan, Associate Professor of Chemistry. 602 Elm Avenue.

Robert F. Pasternack, B.A. and Ph.D., Cornell University, Edmund Allen Professor of Chemistry. 800 Avondale Road, Wallingford, PA 19086.

Donna T. Perrone, B.S., University of Delaware, Laboratory Instructor in Chemistry. 1002 Beech Road, Wallingford, PA 19086.

Steven I. Piker, B.A., Reed College; Ph.D., University of Washington, Professor of Anthropology. 125 Rutgers Avenue.

Michael J. Piovoso, B.S., University of Delaware, M.S.E.E., University of Michigan, Ph.D., University of Delaware. Visiting Associate Professor of Engineering. Swarthmore College.

Elke Plaxton, B.A., Brigham Young University; M.A., University of Colorado, Language Instructor in German (part time). 2022 Brandywine Street, Philadelphia, PA 19103.

Colin Purrington, B.A., Reed College; Ph.D., Brown University, Assistant Professor of Biology. Swarthmore College.

Paul R. Rablen, B.A., Haverford College; M.A., Columbia University; Ph.D., Yale University, Associate Professor of Chemistry. 404 Elm Avenue.

Charles Raff, B.A., University of Rochester; M.A. and Ph.D., Brown University, Professor of Philosophy. 214 Rutgers Avenue.

Eric Raimy, B.A., University of Toronto; Ph.D., University of Delaware, Visiting Assistant Professor of Linguistics and Phonetics Laboratory Coordinator. 46 Julie Lane, Newark, DE 19711.

Keith Reeves, B.A., Swarthmore College; Ph.D., University of Michigan, Associate Professor of Political Science. 308 S. Chester Road.

Patricia L. Reilly, B.A., University of California; M.A., Bryn Mawr College; Ph.D., University of California, Assistant Professor of Art History. Swarthmore College.

Michele Reimer, B.A., Yale University; M.S.W., Smith College School for Social Work; Ph.D., Temple University, Assistant Professor of Psychology (part time). 50 Rosedale Road, Wynnewood, PA 19096.

Celia B. Reisman, B.F.A., Carnegie-Mellon University; M.F.A., Yale University, Assistant Professor of Studio Art (part time). 49 Merbrook Lane, Merion Station, PA 19066.

James A. Rego, B.A., University of California, San Diego; Ph.D., University of Colorado. Visiting Assistant Professor of Chemistry. Swarthmore College.

K. Ann Renninger, B.A., University of Pennsylvania; M.A. and Ph.D., Bryn Mawr College, Professor of Education. 20 President Avenue, Rutledge, PA 19070.

Micheline Rice-Maximin, Licence and Maitrise Universite de la Sorbonne, Paris-IV; M.A., University of North Texas; Ph.D., University of Texas–Austin, Associate Professor of French. 525 Elm Avenue.

Barbara Riebling, B.A., University of Pennsylvania; M.A., University of Pennsylvania; Ph.D., University of Pennsylvania, Visiting Associate Professor of English Literature (part time). Swarthmore College.

Gwyn Roberts, B.A., Bryn Mawr College; Performer's Certificate, Utrecht Conservatory, Associate in Performance (Music). Swarthmore College.

Ellen M. Ross, B.A., Princeton University; M.A. and Ph.D., University of Chicago, Associate Professor of Religion. 604 Elm Avenue.

Mary E. Roth, B.A., Kenyon College; Ph.D., Massachusetts Institute of Technology, Lecturer in Chemistry. 119 Chapel Hill Drive, Newark, DE 19711.

Richard L. Rubin, A.B., Brown University; M.A. and Ph.D., Columbia University, Professor of Political Science and Public Policy (part time). Swarthmore College.

Bernard Saffran, B.A., City College of New York; Ph.D., University of Minnesota, Franklin and Betty Barr Professor of Economics. 201 Garrett Avenue.

Bernoussi Saltani, Maîtrise de langue et de littératures françaises, Faculté des lettres; DEA (lettres modernes), Thèse de troisième cycle, Université d'Aix-en-Provence; Doctorat d'état, université de la Sorbonne nouvelle, Paris III, Associate Professor of French. Swarthmore College.

Peter J. Schmidt, B.A., Oberlin College; M.A. and Ph.D., University of Virginia, Professor of English Literature. 606 Elm Avenue.

Allen M. Schneider, B.S., Trinity College; Ph.D., Indiana University, Eugene M. Lang Research Professor of Psychology. 608 Elm Avenue.

Prudence G. Schran, B.S., University of Maine; M.A., West Chester University, Lecturer in Physics. Swarthmore College.

Darrell Schroeter, B.A., Reed College; A.B.D. and Ph.D., Stanford University, Visiting Assistant Professor of Physics (part time). Swarthmore College.

Richard Schuldenfrei, B.A. and M.A., University of Pennsylvania; Ph.D., University of Pittsburgh, Professor of Philosophy. 19 White Pine Lane, Rose Valley, PA 19065.

Barry Schwartz, B.A., New York University; M.A. and Ph.D., University of Pennsylvania, Dorwin P. Cartwright Professor of Social Theory and Social Action. 279 S. Fifth Street, Philadelphia, PA 19106.

Dan Sears, B.S., Pennsylvania State University, Coach/Instructor in Physical Education. Swarthmore College.

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

Paula Sepinuck, B.A., Bennington College; M.A., Villanova University, Associate in Performance (Dance). Swarthmore College.

Helene Shapiro, B.A., Kenyon College; Ph.D., California Institute of Technology, Professor of Mathematics. Swarthmore College.

Kenneth E. Sharpe, B.A., Dartmouth College; M.S., London School of Economics and Political Science; Ph.D., Yale University, Professor of Political Science. 521 Elm Avenue.

Caroline Sherman, B.A., College of Wooster, M.A., University of Pennsylvania, Supervisor of Student Teachers, 620 West Wayne Avenue, Wayne, PA 19087.

Jon Sherman, B.A., Temple University, Associate in Performance (Dance). Swarthmore College.

Adrienne Shibles, B.A., Bates College; M.S., Smith College, Associate Professor of Physical Education. Swarthmore College.

Don Shimamoto, B.S., Stanford University; M.A. and Ph.D., Brandeis University, Associate Professor of Mathematics. Swarthmore College.

Faruq M.A. Siddiqui, B.S., Bangladesh University of Engineering and Technology; M.S. and Ph.D., University of Pittsburgh, Professor of Engineering. 30 Waterford Way, Wallingford, PA 19086.

Sunka Simon, M.A., Universitadt Hamburg; Ph.D., The Johns Hopkins University, Assistant Professor of German. Swarthmore College.

Sulak Sivaraksa, B.A., St. Davids College, Lampeter, England; LL.B., Middle Temple, Inns of the Court, England. Eugene Lang Visiting Professor of Social Change.

Kathleen K. Siwicki, B.S., Brown University; M. Phil., Cambridge University; Ph.D., Harvard University, Associate Professor of Biology. 15 White Pine Lane, Media, PA 19063.

Lisa Smulyan, B.A., Swarthmore College; M.A.T., Brown University; Ed.D., Harvard Graduate School of Education, Professor of Education. 350 Vassar Avenue.

Kirsten E. Speidel, B.A., Oberlin College; M.A., Johns Hopkins University, Language Instructor of Chinese (part time). Swarthmore College.

Leah Stein, B.A., Wesleyan University, Associate in Performance (Dance). Swarthmore College.

Thomas A. Stephenson, B.S., Furman University; Ph.D., The University of Chicago, Professor of Chemistry. 737 Harvard Avenue.

Charles F. Stone III, B.A., Swarthmore College; Ph.D., Yale University, Visiting Professor in Economics (part time). Swarthmore College.

Richard Stone, B.F.A., SUNY Purchase, Associate in Performance (Music). Swarthmore College.

Andrea L. Stout, B.A., Lawrence University; Ph.D., University of Michigan, Assistant Professor of Physics. Swarthmore College.

Donald K. Swearer, B.A., M.A., and Ph.D., Princeton University; B.D. and S.T.M., Yale Divinity School, Charles and Harriett Cox McDowell Professor of Religion. 109 Columbia Avenue.

Kari Swingle, B.A. and M.A., University of Minnesota, Instructor in Linguistics. 1511A Wallingford Road, Springfield, PA 19064.

Janet C. Talvacchia, M.A., Bryn Mawr College; Ph.D., University of Pennsylvania, Associate Professor of Mathematics. Swarthmore College.

Robert Templeton, A.B., Loyola College, M.A., Villanova University, Ph.D., University of Pennsylvania, Visiting Instructor of Education (part time). 13 West Jefferson Street, Media, PA 19063.

Eva F. Travers, B.A., Connecticut College; M.A. and Ed.D., Harvard University, Professor of Education. 416 Park Avenue.

John Turner, M.A. and Ph.D., University of Michigan, Visiting Assistant Professor of History (part time). Swarthmore College.

William N. Turpin, M.A., University of St. Andrews; M.A., University of Toronto; Ph.D., Cambridge University, Professor of Classics. 7 Sylvan Avenue, Rutledge, PA 19070.

Richard Valelly, B.A., Swarthmore College; Ph.D., Harvard University, Professor of Political Science. Swarthmore College.

Thomas Valente, B.S., Montana State University, Laboratory Instructor in Biology. Swarthmore College.

Elizabeth A. Vallen, B.A., Case Western Reserve University; Ph.D., Princeton University, Associate Professor of Biology. Swarthmore College.

Patricia Vargas, M.A., Inca Garcilaso de la Vega University, Lima, Peru, Language Instructor in Spanish (part time). Swarthmore College.

Kukuli Velarde, Visiting Assistant Professor of Studio Art (part time). Swarthmore College.

Judith G. Voet, B.S., Antioch College; Ph.D., Brandeis University, James H. Hammons Professor of Chemistry. 9 Tanglewood Circle, Wallingford, PA 19086.

Amy Cheng Vollmer, B.A., William Marsh Rice University; Ph.D., University of Illinois, Associate Professor of Biology. Swarthmore College.

Eric Wagner, B.A., Connecticut College; Coach/Instructor in Physical Education, Swarthmore.

Robin E. Wagner-Pacifici, B.A., Brown University; M.A. and Ph.D., University of Pennsylvania, Professor of Sociology. 330 North Princeton Avenue.

Mark I. Wallace, B.A., University of California at Santa Barbara; M. Div., Princeton Theological Seminary; Ph.D., University of Chicago, Associate Professor of Religion. 604 Elm Avenue.

Rachel Heath Wallace, B.A. Skidmore College, M.Sci. Ohio State University, Laboratory Instructor in Biology. Swarthmore College.

Steve Wang, B.S. Cornell University; M.S., Ph.D., University of Chicago, Assistant Professor of Statistics. Swarthmore.

Andrew H. Ward, A.B., Harvard University; Ph.D., Stanford University, Assistant Professor of Psychology. 801 Yale Avenue #704.

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

Robert E. Weinberg, B.S., Cornell University; M.A., Indiana University; Ph.D., University of California, Berkeley, Professor of History. 940 Harvard Avenue.

Philip M. Weinstein, B.A., Princeton University; M.A. and Ph.D., Harvard University, Alexander Griswold Cummins Professor of English Literature. 510 Ogden Avenue.

Stephen Welsh, B.A., Swarthmore College; M.F.A., Temple University, Associate in Performance (Dance). Swarthmore College.

Hansjakob Werlen, M.A., University of Notre Dame; Ph.D., Stanford University, Associate Professor of German. 515 Elm Avenue.

Larry E. Westphal, B.A., Occidental College; Ph.D., Harvard University, J. Archer and Helen C. Turner Professor of Economics. Swarthmore College.

Patricia White, B.A., Yale University; Ph.D., University of California, Santa Cruz, Associate Professor of English Literature. Swarthmore College.

Tyrene White, B.A., Middle Tennessee State University; M.A., Ph.D., Ohio State University, Associate Professor of Political Science. 4 Whittier Place.

Thomas Whitman, B.A., Swarthmore College; Ph.D., University of Pennsylvania, Assistant Professor of Music. Swarthmore College.

Brenda L. Wido, B.S., Elizabethtown College; M.C.C., Hahnemann University, Laboratory Instructor in Chemistry. 705 Erlen Road, Plymouth Meeting, PA 19462.

Jennine Willett, B.A. Dance, B.A. English, Point Park College, M.F.A. Dance, Florida State University, Associate in Performance–Dance, Department of Music and Dance.

Robert E. Williams, B.S., Delaware State College; M.S., Rutgers University, Marian Snyder Ware Professor of Physical Education and Athletics. 507 Oak Crest Lane, Wallingford, PA 19086.

Craig Williamson, B.A., Stanford University; M.A., Harvard University; Ph.D., University of Pennsylvania, Professor of English Literature. 501 Harvard Avenue.

Sarah Willie, B.A., Haverford College; M.A. and Ph.D., Northwestern University, Associate Professor of Sociology. Swarthmore College.

Lee Wimberly, B.A. Stanford University; J.D., University of California at Berkeley, Associate Professor of Physical Education. Swarthmore College.

James S. Wiseman, B.S., Massachusetts Institute of Technology; M.S. and Ph.D., Northwestern University, Visiting Assistant Professor of Mathematics. Swarthmore College.

Sujane Wu, B.A., Soochow University, Taipei, Taiwan; M.A. and Ph.D., University of Wisconsin–Madison, Assistant Professor of Chinese. Swarthmore College.

Carina Yervasi, B.A., Hofstra University; Ph.D., the City University of New York, Assistant Professor of French. Swarthmore College.

Divisions and Departments

I. DIVISION OF THE HUMANITIES
Marion Faber, Chair

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III. DIVISION OF THE SOCIAL SCIENCES
Robin Wagner-Pacifici, Chair

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Deborah G. Kemler Nelson, Chair (fall 2002)
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Sociology and Anthropology
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- Publications
- Stewardship

Alfred H. Bloom, B.A., Princeton University; Ph.D., Harvard University, President and Professor of Psychology and Linguistics.

Constance Cain Hungerford, B.A., Wellesley College; M.A., Ph.D., University of California, Berkeley, Provost and Mari S. Michener Professor of Art History.

Paul J. Aslanian, B.A., M.B.A., University of Washington; C.P.A., Vice President for Finance and Planning.

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

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

Robert J. Gross, B.A., Swarthmore College; M.S.S., Bryn Mawr College Graduate School of Social Work; M.A.T. and Ed.D., Harvard University, Dean of the College.

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Donna Bartenbach, R.N.; A.S., Delaware County Community College, Nurse.

Geraldine Cole, R.N., C.R.N.P.; A.S., Delaware County Community College; B.S.N., M.S.N., and F.N.P. Certificate, Widener University, Nurse and Nurse Practitioner.

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Barbara Krohmer, R.N.; A.S., Delaware County Community College.

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Mari Clements, R.D.; B.S., Immaculata College; M.H.Ed., St. Joseph's University, Nutrition Clinical Specialist.

Andrea Sconier LaBoo, B.A., Swarthmore College; M.A., Pennsylvania State University, HIV Test Counselor.

James E. Clark, M.D.; B.A., West Virginia University; M.D., Jefferson Medical College, Director of Medical Education, Crozer Chester Medical Center, Consultant.

Rima Himelstein, M.D.; B.S., University of Pennsylvania; Consultant, Adolescent Medicine.

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Kim Paterson, M.D.; B.S., Cornell University; M.D., Temple Medical School, Consultant, Internal Medicine.

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Sabrina Ford, B.S., University of Michigan; M.A., University of Iowa; Ph.D., University of Iowa, Clinical Psychologist.

Joseph C. Hewitt, B.A., University of Pennsylvania; D.O., University of Medicine and Dentistry New Jersey–School of Osteopathic Medicine; Fellow, Child and Adolescent Psychiatry, Jefferson Medical College, Consulting Psychiatrist.

Marion J. Coffey, B.A., Trinity College; Ph.D., Brown University; Master's Candidate, Bryn Mawr College Graduate School of Social Work and Social Research, Psychology Intern.

Marsha Richardson, B.A., Swarthmore College; M.A. Widener University; Doctoral Candidate, Widener University Institute of Graduate Clinical Psychology, Psychology Intern.

Nicholas C. Scull, B.A., University of Arizona; M.S.S., L.S.W., Bryn Mawr College Graduate School of Social Work and Social Research, Clinical Social Work Fellow.

Dafni Marina Stamatogianni, B.A., Panteion University, Athens, Greece; Doctoral Candidate, Widener University Institute of Graduate Clinical Psychology, Psychology Intern.

Birgitte Haselgrove, Administrative Assistant.

PUBLIC SAFETY

Owen Redgrave, B.S., West Chester University; A.A.S., Delaware County Community College, Director of Public Safety.

Leon Francis, Assistant Director of Public Safety.

Marty Dietz, A.A.S., Philadelphia Community College; **Brian Harris, Pat Laurenzi,** Patrol Sergeants.

Jim Ellis, Kathy Agostinelli, A.A.S., Delaware County Community College; **Bakir Fareed, Joe Louderback, Rob Warren, Linda Cornwell,** B.S., Temple University, A.A.S., Community College of Philadelphia, Public Safety Officers.

Bob Stephano, Patrol Corporal.

Ellie Jamison, George Darbes, Fire Protection Engineering, A.A.S., Safety Management, Delaware Technical Community College; **Bill Kaeser,** Communications Center Staff.

Terri Narkin, Sally Coultes, Administrative Assistants.

REGISTRAR'S OFFICE

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

Diane M. Collings, B.A., Smith College, Associate Registrar.

Elaine Hamilton, Assistant Registrar.

Janet McSwiggan, Assistant Registrar.

THE SCOTT ARBORETUM

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

Andrew Bunting, A.A.S., Joliet Junior College; B.S., Southern Illinois University, Curator.

John Manion, Curatorial Intern.

Josephine O. Hopkins, Office Manager.

Jeff Jabco, B.S., Penn State University; M.S., North Carolina State University, Horticultural Coordinator.

Julie Jenney, B.A., University of Oregon, Education and Special Events Coordinator.

Rhoda Maurer, B.A., University of Washington, Plant Records Supervisor.

Allison Necaise, B.S., James Madison University, Assistant Education Coordinator.

Helen DiFeliciantonio, Administrative Assistant.

TREASURER'S OFFICE

Suzanne P. Welsh, B.A., B.S., University of Delaware; M.B.A., University of Pennsylvania, Treasurer.

Lori Ann Johnson, B.A., Rutgers University; M.B.A., Villanova University, Assistant Treasurer.

Louisa C. Ridgway, B.A., Vassar College; M.B.A., University of Pennsylvania, Senior Investment Officer.

Carmen Duffy, Treasury Operations Assistant.

Delores R. Robinson, Administrative Assistant.

UPWARD BOUND

C. Kemal Nance, B.A., Swarthmore College; M.A., Temple University, Director.

DeLois M. Collins, B.A., Temple University, Associate Director.

Sharon D. White, B.A., Eastern College; M.S.W., Bryn Mawr College, Academic Coordinator.

VISUAL RESOURCES COLLECTIONS, DEPARTMENT OF ART

Tessa Izenour, B.A., Swarthmore College; M.F.A., Yale University, Curator.

Laura Grutzeck, B.F.A., Tyler School of Art; M.S., Drexel University, Assistant Curator.

DEPARTMENT/CONCENTRATION ASSISTANTS AND TECHNICIANS

Art: June V. Cianfrana, A.A.S., Delaware County Community College, Administrative Assistant; Nick Haney, B.F.A., Virginia Commonwealth University; M.F.A., Tyler School of Art, Studio Technician.

Asian Studies: Jenny Gifford, Administrative Assistant.

Biology: Matt Powell, Administrative and Technology Manager, B.S., Central Michigan University; Maria E. Musika, Administrative Assistant; John Kelly, A.A.S., Community College of Philadelphia; B.S., The Wharton School, University of Pennsylvania, Senior Technical Specialist; Gwen Rivnak, B.S. Denison University; M.E., Widener University, Laboratory Coordinator; Bill Pinder, B.A., Swarthmore College, Biology Greenhouse Manager.

Black Studies: Jenny Gifford, Administrative Assistant.

Chemistry: Kathryn R. McGinty, B.A., M.A., California State University at Long Beach, Administrative Assistant; David S. Trimble, B.S., Denison University; Ph.D., University of Tennessee, Instrument Coordinator.

Classics: Francesca Giegengack, Administrative Assistant.

Computer Science: Bridget M. Rothera, Administrative Assistant; Jeffrey M. Knerr, B.S., William and Mary College; M.S. and Ph.D., University of North Carolina, Lab/System Administrator.

Economics: Nancy Carroll, B.A., Barat College, Administrative Assistant.

Educational Studies: Kae Kalwaic, B.S., Shippensburg University; M.Ed., Temple University, Administrative Assistant.

Engineering: Holly A. Castleman, Administrative Assistant; Grant Lee Smith, Mechanician; Edmond Jaoudi, Electronics, Instrumentation and Computer Specialist.

English Literature: Carolyn Anderson, Administrative Coordinator; Nancy Bech, Administrative Assistant.

Environmental Studies: Holly Castleman, Administrative Assistant.

Francophone Studies: Eleonore Baginski, B.S., St. Joseph's University, Administrative Coordinator.

German Studies: Eleonore Baginski, B.S., St. Joseph's University, Administrative Coordinator.

History: Theresa Brown, A.A.S., Delaware County Community College; B.B.A., Temple University, Administrative Assistant.

Latin American Studies: Jenny Gifford, Administrative Assistant.

Linguistics: Jeff Wu, Administrative Assistant.

Modern Languages and Literatures: Eleonore Baginski, B.S., St. Joseph's University, Administrative Coordinator; Michael Jones, B.A., SUNY, Buffalo, Language Resource Center Director; Deborah DiFilippo, Administrative Assistant (part time).

Music and Dance: Judy Lord, A.A., Wesley College, Administrative Coordinator; Hans Boman, B.M, Philadelphia College of Performing Arts, Dance Program Accompanist.

Philosophy: Donna Mucha, Administrative Assistant.

Physical Education and Athletics: Marian Fahy, Administrative Assistant; Sharon J. Green, Administrative Assistant; Ray Scott, David Lester, Equipment/ Facilities Managers; Marie Mancini, A.T., C., B.S., West Chester University.

Physics and Astronomy: Deborah J. Economidis, A.A., Cecil Community College, Administrative Assistant; James Haldeman, Instrumentation/Computer Technician; Steven Palmer, Machine Shop Supervisor; Christopher D. Cothran, B.S., Stanford University; Ph.D., University of Virginia, Postdoctoral Research Scientist.

Political Science: Kathleen Kerns, B.A., University of Pennsylvania, Deborah Sloman, Administrative Assistants.

Psychology: Joanne Bramley, Administrative Coordinator; Julia Welbon, B.A., William Smith College, Academic Coordinator; Donald Reynolds, Instrumentation Technician.

Public Policy: Catherine Wareham, A.S., Wesley College, Administrative Assistant.

Religion: Eileen McElrone, Administrative Assistant.

Sociology and Anthropology: Rose Maio, Administrative Coordinator.

Women's Studies: Jenny Gifford, Administrative Assistant.

Visiting Examiners 2002

ART
Professor Betsy Bachelor, *Arcadia University*
Professor Evelyn Lincoln, *Brown University*
Professor Kathleen Nolan, *Hollins University*
Professor Charles Palermo, *Williams College*
Professor Quitman Phillips, *University of Wisconsin*
Professor Christopher Reed, *Lake Forest College*

BIOLOGY
Professor Ted Abel, *University of Pennsylvania*
Professor Jessica Bolker, *University of New Hampshire*
Professor Todd Cooke, *University of Maryland*
Professor Donald Gailey, *California State University*
Professor Bruce Goldman, *University of Connecticut*
Professor Carl Huether, *University of Cincinnati*
Professor Heidi Kaplan, *University of Texas Medical School*
Professor Catherine Loudon, *University of Kansas*
Professor Azim Mallik, *Lakehead University, Ontario*
Professor Scott McRobert, *St. Joseph's University*
Professor Maurizio Pacifici, *University of Pennsylvania Dental School*
Professor Forrest Spencer, *Johns Hopkins University School of Medicine*
Professor Rolf Sternglanz, *State University of New York, Stony Brook*

BLACK STUDIES
Professor Kevin Mumford, *Towson University*

CHEMISTRY
Professor Frances Blase, *Haverford College*
Professor Ludwig Brand, *Johns Hopkins University*
Professor David Hansen, *Amherst College*
Professor Helen Leung, *Mt. Holyoke College*

CLASSICS
Professor Kerry Christensen, *Williams College*
Professor Gregson Davis, *Duke University*
Professor Harriet Flower, *Franklin & Marshall College*
Professor Judith Ginsburg, *Cornell University*
Professor Ralph Rosen, *University of Pennsylvania*

COMPUTER SCIENCE
Professor Norman Badler, *University of Pennsylvania*
Professor Bruce Char, *Drexel University*
Professor Michael Gasser, *Indiana University*
Mr. Alain Kagi, Intel Laboratories
Professor Robert Noonan, *College of William and Mary*
Mr. Mitchell Potter, *Naval Research Laboratory*
Professor Robert Roos, *Allegheny College*

DANCE
Professor Ze'Eva Cohen, *Princeton University*

ECONOMICS
Mr. Leonard Nakamura, *The Federal Reserve Bank of Philadelphia*
Mr. Vijayendra Rao, *The World Bank*
Professor Paul Ruud, *University of California-Berkeley*
Mr. Peter Schochet, *Mathematica Policy Research, Inc.*
Professor Laurence Seidman, *University of Delaware*
Professor Thomas Wiseman, *University of Texas-Austin*
Professor Stephen Ross Yeaple, *University of Pennsylvania*

EDUCATION
Professor Nancy Jennings, *Bowdoin College*
Professor David Karen, *Bryn Mawr College*
Professor Cynthia Lightfoot, *Pennsylvania State University-Del. Co.*
Professor Katherine Schultz, *University of Pennsylvania*

ENGINEERING
Professor Maurice Aburdene, *Bucknell University*
Professor Khondokar Billah, *Stevens Institute of Technology*
Dr. Ian Lane Davis, *Mad Doc Software LLC*
Professor Kevin Flood, *Orbit /FR, Inc.*
Professor Kenneth Foster, *University of Pennsylvania*
Professor Wenli Huang, *United States Military Academy*
Professor JoAnn Koskol, *Widener University*
Mr. Mark Stevens, *Charles River Analytics*
Professor Kevin Theobald, *University of Delaware*

ENGLISH LITERATURE

Professor Stuart Curran, *University of Pennsylvania*
Professor Katherine Eggert, *University of Colorado-Boulder*
Professor Farah Jasmine Griffin, *Columbia University*
Professor Martin Hipsky, *Wesleyan University*
Professor Vicki Mahaffey, *University of Pennsylvania*
Mr. Stephen McCauley, *Independent Scholar*
Professor Michael Moses, *Duke University*
Professor Judith Musser, *LaSalle University*
Ms. Maureen Owen, *The Poetry Project*

FILM AND MEDIA STUDIES

Professor Timothy Corrigan, *Temple University*
Professor Jonathan Kahana, *Bryn Mawr College*

HISTORY

Professor Reid Andrews, *University of Pittsburgh*
Professor Belinda Davis, *Rutgers University*
Professor Rebecca Edwards, *Vassar College*
Professor James Grubb, *University of Maryland-Baltimore Co.*
Professor Dorothy Ko, *Barnard College*
Professor Adele Lindenmyer, *Villanova University*
Professor Mark Meyerson, *University of Toronto*
Professor Kenda Mutongi, *Williams College*
Professor Linda Perkins, *CUNY/Teachers College*
Professor Janice Reiff, *University of California-Los Angeles*
Professor Lillian Williams, *SUNY at Albany*

INTERPRETATION THEORY

Professor James Katz, *Rutgers University*

LINGUISTICS

Professor Mark Aronoff, *Stony Brook University*
Professor Emmon Bach, *University of Massachusetts/Amherst*
Professor Tonia Bleam, *Northwestern University*
Professor David Embick, *University of Pennsylvania*
Professor Ralph Fasold, *Georgetown University*
Professor Vivian Gadsden, *University of Pennsylvania*
Professor Bryan Gick, *University of British Columbia*
Professor Roberta Golinkoff, *University of Delaware*
Professor Tom Roby, *California State University*

MATHEMATICS AND STATISTICS

Professor Eric Bradlow, *Wharton School of Business*
Professor Curtis Greene, *Haverford College*
Professor Hal Sadofsky, *University of Oregon*
Professor David Walnut, *George Mason University*

MODERN LANGUAGES—CHINESE

Professor Yingjin Zhang, *University of California-San Diego*
Professor Xueping Zhong, *Tufts University*

MODERN LANGUAGES—FRENCH

Professor Koffi Anyinefa, *Haverford College*
Professor Benoit Bolduc, *University of Toronto*

MODERN LANGUAGES—GERMAN

Professor Susan Cocalis, *University of Massachusetts/Amherst*

MODERN LANGUAGES—RUSSIAN

Professor Diana Burgin, *University of Massachusetts-Boston*
Professor Vladimir Golstein, *Yale University*
Professor Kevin Moss, *Middlebury College*

MODERN LANGUAGES—SPANISH

Professor Javier Duran, *Michigan State University*
Professor Lucia Melgar-Palacios, *Princeton University*

MUSIC

Professor Ingrid Arauco, *Haverford College*
Dr. Kenneth Slowik, *Smithsonian Institution*
Professor Calvin Stapert, *Calvin College*

PHILOSOPHY

Professor Sharyn Clough, *Rowan University*
Professor Garry Hagberg, *Bard College*
Professor Robert Hannaford, *Ripon College*
Professor Julie Klein, *Villanova University*
Professor Mary Beth Mader, *University of Memphis*

Visiting Examiners

Professor Susan Meyer, *University of Pennsylvania*

PHYSICS AND ASTRONOMY

Dr. Alejandro Corichi, *University of Mississippi*
Professor Tom Donnelly, *Harvey Mudd College*
Professor Kevin Jones, *Williams College*
Professor Stan Owocki, *Bartol Research Institute-Univiversity of Delaware*
Professor Cindy Schwarz, *Vassar College*

POLITICAL SCIENCE

Professor Marc Blecher, *Oberlin College*
Professor Thomas Callaghy, *University of Pennsylvania*
Professor Joshua Dienstag, *University of Virginia*
Professor Ronald Kahn, *Oberlin College*
Professor Markus Kreuzer, *Villanova University*
Professor Joshua Miller, *Lafayette College*
Professor Kenneth Oye, *Massachusetts Institute of Technology*
Professor Arthur Schmidt, Temple University
Professor Jane Schneider, *City University of New York*
Professor Steve Teles, *Brandeis University*

PSYCHOLOGY

Professor Kathryn Hirsh-Pasek, *Temple University*
Dr. Lynn Kirby, *Childrens Hospital of Philadelphia*
Professor Colin Leach, *University of California/Santa Cruz*
Dr. Caitrin Lynch, *Johns Hopkins University*
Professor Clark McCauley, *Bryn Mawr College*
Mr. Randy Milden, *Independent Scholar*
Professor Sharon Thompson-Schill, *University of Pennsylvania*
Dr. Laura Wagner, *Harvard University*

PUBLIC POLICY

Mr. Hans Lofgren, *International Food Policy Research*

RELIGION

Professor Mara Donaldson, *Dickinson College*
Professor Stephen Dunning, *University of Pennsylvania*
Professor Glenn Dynner, *Brandeis University*
Professor Millicent Feske, *St. Joseph's University*
Rachel Havrelock, *University of California-Berkeley*
Professor Carol Karlsen, *University of Michigan*
Professor Joyce Kloc McClure, *Oberlin College*
Professor Anne McGuire, *Haverford College*
Professor William Werpehowski, *Villanova University*
Professor Peter Williams, *Miami University*

SOCIOLOGY AND ANTHROPOLOGY

Professor Tom Dumm, *Amherst College*
Professor Lisa Hajjar, *Univ of California/Santa Barbara*
Professor Douglas Hartmann, *University of Minnesota*
Professor Gary McDonogh, *Bryn Mawr College*
Professor Anne Meneley, *Trent University*
Nancy Minugh-Purvis, *University of Pennsylvania*
Professor Ann Mische, *Rutgers University*
Sita Reddy, *University of Pennsylvania*
Professor Jackie Urla, *University of Massachusetts/Amherst*

THEATER

Professor Henrik Borgstrom, *Niagara University*
Professor Marcia Ferguson, *University of Pennsylvania*
Mark Lord, *Bryn Mawr College*
Professor Cary Mazer, *University of Pennsylvania*
James Pyne, Jr., *Independent Scholar*
Professor Mark Sussman, *Parsons School of Design*
Professor Tamara Trojanowska, *University of Toronto*

WOMEN'S STUDIES

Professor Mary Beth Mader, *University of Memphis*

Degrees Conferred

June 2, 2002

BACHELOR OF ARTS

Prince Chuks Achime, *Political Science*
Nii Saka Addo, *Computer Science and Engineering*
Imo Joseph Akpan, *Chemistry*
Mohammed Turki Al-Saud, *Economics*
Edward Joseph Albers, *Economics*
Andrew Phillip Alderete, *Biology*
Susan Elizabeth Ansell, *Special Major in Education and History*
Jacqueline Rose Aponte, *English Literature*[12]
Matthew Ken Asano, *Political Science*
Christine Elizabeth Asgar, *Biology and Psychology*
Nathan Miller Ashby-Kuhlman, *Political Science*
Blake Richey Atkins, *Economics*
Joyce Danielle Atkins, *Philosophy*
Amy Rebecca Auerbach, *Biology*
Peter Andrew Austin, *History*
Suma Kamakshi Balu, *English Literature*
Bubu Ama Banini, *Biology*
Patrice Ariminta Barley, *French and Psychology*
Marvin Lee Barron III, *Economics*
Jon Miles Bartner, *Economics*
Aisha Ahmed Baruni, *History and Sociology and Anthropology*[12]
Priti Batta, *Biology*
Jill Melissa Bean, *Special Major in Education and Psychology*[13]
Daniel Walker Belsky, *Psychology*
Gunes Bender, *Biology*
Robert John Berger II, *Computer Science and Engineering*
Rahul Ramesh Bhalodia, *Economics and Computer Science*
Mavis Louise Biss, *Philosophy*[8]
Daniel Montagu Bjerre, *Physics*
Samuel Orion Hunt Blair, *Mathematics*[10]
Richard Daniel Blim, *Music and Art History*
Jessica Dara Bloom, *Religion*
Aliki Bonarou, *Economics and Mathematics*
Bryan Christopher Bonato, *Economics*
John Edwin Borrebach, *Music and Economics*
Julia Robinson Bouwsma, *English Literature*
Corinne Norvel Brinkley, *Psychology*
Yehonathan Brodski, *English Literature*
Joanna Margaret Brown, *Chemistry and Special Major in Astrophysics*
Albert Duc Bui, *Economics and Computer Science*
Jason Daniel Burton, *Special Major in Linguistics and Language*
Brian Joseph Byrnes, *Biology*
Wayne Arnold Cabradilla, *Economics*
Kimberly Jo Cariello, *English Literature*
Dwayne Vincent Chambers, *Mathematics*
Gloria Si-Chun Chan, *Political Science*
Theodore Chan, *History and Psychology*
Judy Chen, *Political Science*
Hui Yi Sara Cheo, *Biology*
Kuan Ning Chin, *Computer Science and Engineering*
Jason Jaehyun Choi, *Economics*
Joon Suk Choi, *Political Science and Biology*
Megan Carisa Choy, *Special Major in Psychobiology*
Jae Won Edward Chung, *Philosophy*
Christina Ciambriello, *English Literature*
Rebecca Diane Cikoski, *Physics*
Tracie Renee Cobb, *History*
Isaac Leslie Cohen, *Economics and History*
Julie Laura Cohen, *Psychology*[11]
Christopher Joseph Conaway, *Art*
Kaysha Lisbeth Corinealdi, *History*[9]
Joseph John Corso, *Economics*

1 with the concentration in black studies
2 with the concentration in cognitive science
3 with the concentration in computer science
4 with the concentration in environmental studies
5 with the concentration in film and media studies
6 with the concentration in Francophone studies
7 with the concentration in German studies
8 with the concentration in interpretation theory
9 with the concentration in Latin American studies
10 with the concentration in peace and conflict studies
11 with the concentration in public policy
12 with the concentration in women's studies
13 Pennsylvania Teacher Certification

Degrees Conferred

Jonathan Brent Crosson, *Sociology and Anthropology*
Christine Michelle Crumley, *Biology*
Sierra Katherine Curtis-McLane, *Special Major in Biological Anthropology*[4]
Mitzie-Ann Tamika Davis, *Biology*
Ashley Kanoeokalani Makaiwi DeMello, *Asian Studies*
Yasuhito Denda, *History*
Amy Christine DiBenedetto, *Special Major in Linguistics and Language*
James Edward Dolan, *Mathematics and Physics*
Patrick Joseph Dostal, *Special Major in Biochemistry*
Hillary Kathryn Dresser, *Religion*
Carol Que Dan Duong, *French*[8]
Jonah Beaumont Eaton, *Political Science and Engineering*
Jeffrey Paul Ebert, *Psychology*[2]
Jared Hillel Eisenstat, *Philosophy*
David Maurice Ellis, *Economics and Political Science*
Eileen Marie Estes, *Biology*
Gabriel Jayme Fairman, *Special Major in Death and Rebirth of Human Agency*[8]
Christina Arcadia Falcone, *English Literature and Comparative Literature*
Joshua Manna Farber, *Sociology and Anthropology*
Richard Allen Favors Jr., *Computer Science*
Matthew Alan Feldman, *Linguistics*
Andrea Frances Figueroa, *Political Science*
Daniel Lawrence Finkel, *Mathematics*
Rashad Fareed Foley, *Linguistics*[1]
Fabienne Francesca Francois, *French*
Samara Slifkin Freemark, *Political Science*
Allan Andron Friedman, *Computer Science*[11]
Alina Georgeta Emma Fulop, *Economics and Political Science*[11]
Benjamin Scharlau Gaines, *Economics*[11]
Joshua David Galun, *History*
Philip Morgan Garboden, *Greek*
Irene Lucile Garcia, *Biology*
Jeanne Emerson Gardner, *History*[8]
Stefan Francois Gary, *Art History and Engineering*
Zhiling Gau, *Special Major in Chinese*
Julie Elizabeth George, *Economics*
Karla Ann Gilbride, *Linguistics*
Eve Claire Gilman, *Art History*
Rodliz Folasade Gilpin-Jackson, *Economics and French*
Elizabeth Sara Goldsmith, *English Literature and Biology*
Russell Morrison Gordley, *Special Major in Biochemistry*
Marah Elizabeth Gotcsik, *Special Major in Psychobiology*[12]
Emily Chatham Gray, *Art and English Literature*
Stephen Andrew Green, *Biology*
Taina Alves Guarda, *Religion*
Lottos Gutierrez Saldarriaga, *Economics*
Marilyn Liz Guzman, *Special Major in Psychobiology*
Judy Ha, *Special Major in Education and Political Science*
Megan Jarret Haberle, *Sociology and Anthropology*
Patrick James Hagan, *Asian Studies*
Camille Kay Nadia Hall, *English Literature*
Carly Allison Hammond, *Ancient History*
Mimi Hanaoka, *Philosophy and Religion*
Christine Marie Hancock, *Biology*[9]
Elizabeth Anne Marie Hansen, *Latin*

1 with the concentration in black studies
2 with the concentration in cognitive science
3 with the concentration in computer science
4 with the concentration in environmental studies
5 with the concentration in film and media studies
6 with the concentration in Francophone studies
7 with the concentration in German studies
8 with the concentration in interpretation theory
9 with the concentration in Latin American studies
10 with the concentration in peace and conflict studies
11 with the concentration in public policy
12 with the concentration in women's studies
13 Pennsylvania Teacher Certification

Katherine Lila Robinson Harper, *Political Science*
Danielle Alana Harris, *Political Science*
Tanea Katrese Harris, *Political Science*
Selma Mohammed Hassan, *Economics*
Josey Addison Hastings, *Special Major in Education and Art*
Jeffrey Scott Heckelman, *Special Major in Sociology and Anthropology and Psychology*
Sarah Ann Hegland, *Political Science*
Alice Austra Hershey, *Psychology*
Melanie Anne Hirsch, *Special Major in Sociology and Anthropology and Psychology*
Anne Bao Hoang, *Economics and French*
Phillip Justin Hoefs, *Political Science*
Lisa Beth Huang, *French and Special Major in Chinese*
Joshua Hayes Hurwitz, *English Literature*[3]
Mara Farrah Hvistendahl, *Comparative Literature*
Annaliesse Marie Hyser, *Economics*[4]
Sasha Peter Issenberg, *History*
Gregory Mark Jablonski, *Computer Science*
Kellen Rhys Jackson, *Mathematics*[3]
Michael Philip Jeffries, *Sociology and Anthropology*
Lisa Therese Jenkins, *Religion*
Diego Dolph Johnson, *Political Science*
Marta Sann Johnson, *Special Major in Biological Anthropology*
Alyson Elizabeth Jones, *Music*
Karina Nicole Kacala, *Special Major in Education and English Literature*
David Carl Kamin, *Economics and Political Science*
Justin Charles Kane, *Philosophy*
Rachel Fenton Kane, *Psychology*
Brendan Jeffrey Karch, *History*
Andrew Phillip Karr, *English Literature*
Brian Langdon Kasch, *Physics*
Sara Kates-Chinoy, *Religion*
Matthew Brian Kaufman, *Economics*
Simon Peter Kaufman, *Economics*
Randall Keim, *Special Major in Education and History*
Kunthea Ker, *English Literature and Religion*
Heather Leigh Kile, *Computer Science*
Haena Kim, *Biology*
Suor Kim, *Computer Science and Engineering*
Yani Tambu Kisoki, *Economics and Psychology*
Douglas Ellsworth Kneeland, *Latin*
Ariel Autumnstar Kobylak, *Psychology*
Daniel Alan Koltonski, *Philosophy*
Daniel Stewart Korobkin, *Philosophy*[11]
Shira Fraida Kost-Grant, *Economics and French*
Erika Marie Kottenmeier, *Biology and German*
Andrew David Kramer, *Computer Science*
Justin Micah Kramon, *English Literature*
Daniel William Krausz, *Economics*
Keetje Jean Kuipers, *Theatre Studies*
Scott Louis Kushner, *Sociology and Anthropology*
Adam Joseph Kwiatkowski, *Economics and Biology*
Lisa Ann Ladewski, *Biology*
Karen Marlene Lange, *Mathematics*
Evan Connell Lareau, *Art*
Lisa Marie Larrimore, *Physics*
Lashanna Denise Lawler, *English Literature and Theatre Studies*[5]
Hung Quoc Le, *Political Science and Sociology and Anthropology*
Cynthia Ling Lee, *English Literature*
Kyung Min Lee, *Economics*

1 with the concentration in black studies
2 with the concentration in cognitive science
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8 with the concentration in interpretation theory
9 with the concentration in Latin American studies
10 with the concentration in peace and conflict studies
11 with the concentration in public policy
12 with the concentration in women's studies
13 Pennsylvania Teacher Certification

Degrees Conferred

Leaya Joy Lee, *English Literature and Special Major in Chinese Studies*
Siu Ching Lee, *History and Art*
Young-Ai Lee, *Special Major in Education and Psychology*
Nicole Helyne Lemon, *Religion*
Tiffany Lyn Lennon, *Special Major in Film Studies*
Mariam Sophia Levy, *History*[1]
Tynan Kyle Lewis, *Economics*
Bruce Robert Lichtenstein, *Special Major in Biochemistry*
Elizabeth Sarah Lindsey, *History and French*
David Litterine-Kaufman, *Computer Science*
Anthony Louis Loew, *Economics and Political Science*
Luis Rafael Lopez Jr., *Sociology and Anthropology*
Laura Mary Louison, *English Literature*
Abigail Lynch Lowther, *Special Major in Biological Anthropology*
Lenette Lin Lu, *Biology*
Christen Elizabeth Lungren, *Economics*
Elizabeth Allison Lyons, *History*
George Steven Macros, *Biology*
Semhar Mahmud, *Biology*
Molly Abigail Manvel, *German and French*
Sonia Elise Mariano, *Linguistics*[4]
Amy Elizabeth Marinello, *Mathematics and Computer Science*
Corey Dempsey Mark, *Psychology*
Eric Matthew Martin, *Special Major in Education and English Literature*[13]
Francisco Jose Martinez II, *Philosophy and Economics*
Elisa Ann Matula, *French and Theatre Studies*
Marcy Elisabeth McCullaugh, *English Literature*
Robert Nicholas McFarland, *Physics*[3]
Damon Duell McMahon, *Special Major in English and Performance*
A. Keith McManimen, *Computer Science*[4]
Amy Patricia Meek, *Philosophy*
Diana Robin Metrick, *English Literature*
Laurie Mireles, *Special Major in Education and Sociology and Anthropology*
Dianne Annette Moise, *Special Major in Environmental Biology*
Brendan Pablo Montagnes, *Economics*
Colin Destin Moore, *Political Science*
Alvaro Jose Munoz, *Economics*
Charles Edward Muntz, *Latin*[3]
Leslie Justin Murray, *Chemistry and Biology*
Tumpale Twambilile Mwaungulu, *French*
Rachel Jane Nafziger, *English Literature and Spanish*[9]
Adnan Ahmed Naseemullah, *Political Science and Economics*
Sarah Parker Nusser, *Special Major in Urban Studies*
Kathleen Marie O'Hara, *English Literature*[5]
Matthew Saul Oransky, *Psychology*
Cristobal Joel Ortiz, *Psychology*
William Blustein Ortman, *Political Science*
Nicholas Testroet Ouellette, *Physics and Computer Science*
Justin Daniel Pagliei, *Economics and Political Science*
Nandini B. Pandey, *Latin*
Benjamin Jongsoo Park, *Special Major in Education and Sociology and Anthropology*
Rebecca Jeanette Paul, *Mathematics*[3]
Aurelio Jose Perez, *English Literature*
Alejandro Stacy Perez Cebulski, *Biology*[4]
Maya Karin Peterson, *History*[7]
Loring Ann Pfeiffer, *English Literature*

1 with the concentration in black studies
2 with the concentration in cognitive science
3 with the concentration in computer science
4 with the concentration in environmental studies
5 with the concentration in film and media studies
6 with the concentration in Francophone studies
7 with the concentration in German studies
8 with the concentration in interpretation theory
9 with the concentration in Latin American studies
10 with the concentration in peace and conflict studies
11 with the concentration in public policy
12 with the concentration in women's studies
13 Pennsylvania Teacher Certification

Claire Elizabeth Phillips-Thoryn, *Religion*
Jennifer Rose Pike, *Political Science*
Kim Nakia Pinckney, *Spanish*
Maria Christabel Exaura Pinto, *Biology*
Edith Helena Presler, *Religion*
Jessica Carey Pulver, *English Literature*
Hilary Jensen Rice, *Political Science*
Jessica Ann Rickabaugh, *History*
Kiran Hall Rikhye, *English Literature and Theatre Studies*
Jonathan David Rodis, *Philosophy*
Olga Victoria Rostapshova, *Economics and Engineering*[4, 11]
Elizabeth Suzanne Rothwell, *Philosophy*
Cornelia Sydnor Roy, *Greek and Latin*
Caitlin Ann Ryland, *Political Science*
Steven Daniel Salter, *Computer Science and Theatre Studies*
Jessica Amy Sayers Salvatore, *Psychology*
Onnicha Sawangfa, *Economics*
Cynthia Elizabeth Schairer, *Sociology and Anthropology*
Christopher David Scheller, *Political Science*
Nina Schichor, *History*
Amanda Eleanor Schneider, *Biology*
Rachael Abigail Schultz, *Special Major in Biological Anthropology*
Rebecca Alexandra Schultz, *Special Major in Chinese*
Daniel Perez Schwartz, *Biology*
Benedict John Schweigert, *Political Science*
Terrence Marlon Seales, *Biology*
Kwaku Nyarko Sefa-Dedeh, *Economics*
Kevin Luke Setter, *Physics*
Joshua Matthew Shakin, *Economics and Computer Science*
Dmitriy Vladimirovich Shchelokov, *Computer Science and Economics*
Eiji Shibata, *Economics*
Somayyah Ahmad Siddiqi, *Economics*
Emily Paige Sigalow, *Sociology and Anthropology*
Brandon Ashley Silverman, *Philosophy*
Frances Rhett Simonds, *Economics*
Jason Mark Skonieczny, *Linguistics*
Jeremy Daniel Slezak, *Economics*
Casey Arthur Smith, *Computer Science and Engineering*
Rachel Leah Solomon, *English Literature*
Anna Staab, *Special Major in Film and Cultural Studies*[9]
Jonathan Raffaele Stancato, *Theatre Studies*
Thomas Saunders Stepleton, *Computer Science*[2]
Laura Ann Swerdlow, *Psychology*
Nadav Elan Tanners, *Religion*[4]
Kathryn Alexandra Tarr, *Psychology*
Catherine Halsted Taylor, *Biology and Special Major in Chinese*
Shook Yee Teh, *Political Science and Asian Studies*
Reiko Teshiba, *Sociology and Anthropology*
Linda Thai, *Asian Studies*[5]
David Watson Thomas, *Political Science*
John Rogers Thomas, *Religion*
Karen Andrea Thompson, *Political Science*[1]
Lawrence Chandler Tingley, *Sociology and Anthropology*[8]
Lauren Allison Tobias, *Psychology*
Nga-Yee Nellie Tong, *Economics and Philosophy*
Marcella Tortora, *Psychology*
Matthew Nicholas Trakimas, *Economics and French*
Lynn Hong Trieu, *Biology*

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8 with the concentration in interpretation theory
9 with the concentration in Latin American studies
10 with the concentration in peace and conflict studies
11 with the concentration in public policy
12 with the concentration in women's studies
13 Pennsylvania Teacher Certification

Elizabeth Mei-Ling Tsai, *Latin and Computer Science*[10]
Chia-En Kimberly Tu, *Biology*
Laura Elaine Valentine, *Biology*
Katherine Ann Walley, *Psychology and Theatre Studies*
Tanyaporn Wansom, *Biology and Special Major in Chinese Studies*
Chika Watanabe, *Sociology and Anthropology*
David Benjamin Weaver, *Physics*
Colin Christopher Weidig, *Religion*
Hunter Boykin Wells, *Biology*[9]
Rebecca Kate Wilkinson, *History*
Jessica Starr Williams, *Biology*[4]
William McKinley Williams III, *Economics*
Jonathan James Winskill, *Computer Science*
Charles Albert Withers II, *Biology*
Renee Tovah Witlen, *Political Science*
Stephanie Jill Wojtkowski, *Computer Science*
Laura Alexandra Wolfram, *Art History*
Michael Stephen Wollenberg, *Special Major in Biochemistry*
Andrea Ming-Wai Wong, *Sociology and Anthropology and Special Major in Chinese Studies*
Andy Shie Kee Wong, *Political Science and Special Major in Women's Studies*[10]
Anna Claire Woodiwiss, *Religion and Political Science*
Kam Antero Woods, *Computer Science*
Malik Jamar Wright, *Psychology*
Jeffrey Wu, *Linguistics*
Sarah Shaw Yardney, *Special Major in Religion and Theater*
Jaime Mirit Yassif, *Biology*
Kwabena Owusu Ansa B. Yiadom, *Economics*
Johanna Moran Yoon, *Art and Engineering*
Jansen Parker Young, *History*
Tina Ling Yuan, *Biology*
Emily Jean Zackin, *Political Science and English Literature*
Ying Zhou, *Economics and Mathematics*
Sarah Rebecca Zlotnik, *Special Major in Education and Psychology*

BACHELOR OF SCIENCE

Nii Saka Addo, *Engineering and Computer Science*
Fred Warren Benton III, *Engineering*
Robert John Berger II, *Engineering and Computer Science*
Spencer Charles Brubaker, *Engineering*
Kuan Ning Chin, *Engineering and Computer Science*
Jonah Beaumont Eaton, *Engineering and Political Science*
David Lowell Gammill, *Engineering*
Stefan Francois Gary, *Engineering and Art History*
Suor Kim, *Engineering and Computer Science*
David Minton Knouf, *Engineering*
Rory Edward Curran Kondrad, *Engineering*
Michelle Elizabeth Lowry, *Engineering*
Pukar Malla, *Engineering*[3]
Linda Kelly McLaren, *Engineering*
Marc Andrew Richards, *Engineering*
Olga Victoria Rostapshova, *Engineering and Economics*[11]
Katherine Marie Saltanovitz, *Engineering*
Caleb Andrew Shetland, *Engineering*
Casey Arthur Smith, *Engineering and Computer Science*
Andrew Gregory Szafran, *Engineering*
Tan Mau Wu, *Engineering*
Johanna Moran Yoon, *Engineering and Art*

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11 with the concentration in public policy
12 with the concentration in women's studies
13 Pennsylvania Teacher Certification

Awards and Distinctions

HONORS AWARDED BY THE VISITING EXAMINERS

HIGHEST HONORS:

Christina Arcadia Falcone, Karla Ann Gilbride, David Carl Kamin, Brendan Jeffrey Karch, Daniel Stewart Korobkin, Bruce Robert Lichtenstein, William Blustein Ortman, Nandini B. Pandey, Rebecca Jeanette Paul

HIGH HONORS:

Susan Elizabeth Ansell, Amy Rebecca Auerbach, Marvin Lee Barron III, Aisha Ahmed Baruni, Gunes Bender, Mavis Louise Biss, Spencer Charles Brubaker, Wayne Arnold Cabradilla, Theodore Chan, Kaysha Lisbeth Corinealdi, Hillary Kathryn Dresser, Jonah Beaumont Eaton, Jeffrey Paul Ebert, David Maurice Ellis, Samara Slifkin Freemark, Irene Lucile Garcia, Elizabeth Sara Goldsmith, Russell Morrison Gordley, Taina Alves Guarda, Carly Allison Hammond, Michael Philip Jeffries, Lisa Therese Jenkins, Alyson Elizabeth Jones, Justin Charles Kane, Daniel Alan Koltonski, Justin Micah Kramon, Lisa Ann Ladewski, Karen Marlene Lange, Lisa Marie Larrimore, Cynthia Ling Lee, Tiffany Lyn Lennon, Lenette Lin Lu, Christen Elizabeth Lungren, Pukar Malla, Amy Elizabeth Marinello, Robert Nicholas McFarland, Amy Patricia Meek, Diana Robin Metrick, Brendan Pablo Montagnes, Colin Destin Moore, Charles Edward Muntz, Adnan Ahmed Naseemullah, Matthew Saul Oransky, Nicholas Testroet Ouellette, Benjamin Jongsoo Park, Aurelio Jose Perez, Maya Karin Peterson, Jessica Ann Rickabaugh, Cornelia Sydnor Roy, Steven Daniel Salter, Amanda Eleanor Schneider, Benedict John Schweigert, Kevin Luke Setter, Caleb Andrew Shetland, Thomas Saunders Stepleton, Shook Yee Teh, Linda Thai, David Watson Thomas, Elizabeth Mei-Ling Tsai, Chia-En Kimberly Tu, Tanyaporn Wansom, Stephanie Jill Wojtkowski, Laura Alexandra Wolfram, Anna Claire Woodiwiss, Tan Mau Wu, Sarah Shaw Yardney, Emily Jean Zackin

HONORS:

Nii Saka Addo, Nathan Miller Ashby-Kuhlman, Peter Andrew Austin, Bubu Ama Banini, Julia Robinson Bouwsma, Joanna Margaret Brown, Albert Duc Bui, Judy Chen, Jae Won Edward Chung, Rebecca Diane Cikoski, Daniel Lawrence Finkel, Fabienne Francesca Francois, Philip Morgan Garboden, Eve Claire Gilman, Katherine Lila Robinson Harper, Selma Mohammed Hassan, Jeffrey Scott Heckelman, Sarah Ann Hegland, Melanie Anne Hirsch, Phillip Justin Hoefs, Mara Farrah Hvistendahl, Douglas Ellsworth Kneeland, Daniel William Krausz, Nicole Helyne Lemon, Elizabeth Allison Lyons, Marcy Elisabeth McCullaugh, Loring Ann Pfeiffer, Claire Elizabeth Phillips-Thoryn, Jessica Amy Sayers Salvatore, Onnicha Sawangfa, Christopher David Scheller, Kwaku Nyarko Sefa-Dedeh, Somayyah Ahmad Siddiqi, Emily Paige Sigalow, Brandon Ashley Silverman, Jason Mark Skonieczny, Jeremy Daniel Slezak, Jonathan Raffaele Stancato, Colin Christopher Weidig, Rebecca Kate Wilkinson, Andy Shie Kee Wong, Jansen Parker Young

ELECTIONS TO HONORARY SOCIETIES

PHI BETA KAPPA:

Christine Elizabeth Asgar, Aisha Ahmed Baruni, Samuel Orion Hunt Blair, Hillary Kathryn Dresser, Jeffrey Paul Ebert, Christina Arcadia Falcone, Jeanne Emerson Gardner, Christine Marie Hancock, Josey Addison Hastings, Melanie Anne Hirsch, Lisa Beth Huang, Mara Farrah Hvistendahl, Alyson Elizabeth Jones, David Carl Kamin, Justin Charles Kane, Brendan Jeffrey Karch, Daniel Stewart Korobkin, Justin Micah Kramon, Lisa Ann Ladewski, Karen Marlene Lange, Lisa Marie Larrimore, Cynthia Ling Lee, Bruce Robert Lichtenstein, Christen Elizabeth Lungren, Pukar Malla, Amy Elizabeth Marinello, Amy Patricia Meek, Diana Robin Metrick, Leslie Justin Murray, Adnan Ahmed Naseemullah, William Blustein Ortman, Nicholas Testroet Ouellette, Nandini B. Pandey, Rebecca Jeanette Paul, Maya Karin Peterson, Kiran Hall Rikhye, Amanda Eleanor Schneider, Rachael Abigail Schultz, Benedict John Schweigert, Joshua Matthew Shakin, Caleb Andrew Shetland, Casey Arthur Smith, Thomas Saunders Stepleton, Nadav Elan Tanners, Katherine Ann Walley, Chika Watanabe, Renee Tovah Witlen, Stephanie Jill Wojtkowski, Sarah Shaw

Yardney, Emily Jean Zackin

SIGMA XI:

Nii Saka Addo, Imo Joseph Akpan, Andrew Phillip Alderete, Amy Rebecca Auerbach, Bubu Ama Banini, Priti Batta, Gunes Bender, Joanna Margaret Brown, Spencer Charles Brubaker, Megan Carisa Choy, Julie Laura Cohen, Mitzie-Ann Tamika Davis, Jeffrey Paul Ebert, Irene Lucile Garcia, Stefan Francois Gary, Elizabeth Sara Goldsmith, Russell Morrison Gordley, Marah Elizabeth Gotcsik, Marilyn Liz Guzman, Christine Marie Hancock, Rachel Fenton Kane, Haena Kim, Suor Kim, Lisa Ann Ladewski, Karen Marlene Lange, Lisa Marie Larrimore, Bruce Robert Lichtenstein, Lenette Lin Lu, Semhar Mahmud, Pukar Malla, Amy Elizabeth Marinello, Robert Nicholas McFarland, Leslie Justin Murray, Matthew Saul Oransky, Nicholas Testroet Ouellette, Rebecca Jeanette Paul, Olga Victoria Rostapshova, Katherine Marie Saltanovitz, Steven Daniel Salter, Jessica Amy Sayers Salvatore, Kevin Luke Setter, Casey Arthur Smith, Thomas Saunders Stepleton, Lauren Allison Tobias, Elizabeth Mei-Ling Tsai, Chia-En Kimberly Tu, Laura Elaine Valentine, Tanyaporn Wansom, Stephanie Jill Wojtkowski, Tan Mau Wu

TAU BETA PI:

Pukar Malla, Linda Kelly McLaren, Caleb Andrew Shetland, Casey Arthur Smith, Tan Mau Wu

FELLOWSHIPS

The Susan P. Cobbs Prize Fellowship to Claire Weiss '03

The Sarah Kaighn Cooper Scholarship to Susan Elizabeth Christensen '03 and James Reynold Maiolo '03

The Hannah A. Leedom Fellowship to Richard Vezina '99, Katalyn Vidal '00, and Mark Dingfield '01

The Joshua Lippincott Fellowship to Ila Deshmukh '99, David Adler '00, Lisa Massengale '01, and Wayne Arnold Cabradilla '02

The John Lockwood Memorial Fellowship to Matthew St. Clair '97, and Michael Waddington '00

The Thomas B. McCabe Jr. and Yvonne Motley McCabe Memorial Fellowship to Peter Kosa '91, Andrew Feldman '96, John Randolph '97, Denna Bahri '98, and Andrew Robbins '98

The Mellon Minority Undergraduate Fellowship to Njideka Akunyili '04, Veronica Herrera '03, Cynthia Leger '03, Kanani Milles '03, Rajaa Shakir '04, and Anna Stratton '04

The Lucretia Mott Fellowship to Rhea Sujin Seo '98, Lynda Yankaskas '99, Meredith Weems '00, Kristin Chadderton '01, Katharine Hutchinson '01, Bohee Yoon '01, Aisha Ahmed Baruni '02, Mara Farrah Hvistendahl '02, and Johanna Moran Yoon '02

The J. Roland Pennock Undergraduate Fellowship in Public Affairs to Sophia Acord '03, Marina Boevska '03, Phuong Anh Bui '04, Noah Metheny '03, and Benjamin Wiles '03

The David G. Smith Internship in Health and Social Policy to Dannel Dan '03, and Nicolle Gorby '03

The Martha E. Tyson Fellowship to Brenda Arellano '97, and Mara Landers '97

The Hans Wallach Research Fellowship to Mara Catherine Gustafson '03

AWARDS AND PRIZES

The Adams Prize in Econometrics to Rebecca Paul '02

The Stanley Adamson Prize in Chemistry to Drew Adams '03

The Jonathan Leigh Altman Summer Grant to Emily Almberg '03

The American Chemical Society Scholastic Achievement Award to Leslie Murray '02

The American Chemical Society Undergraduate Award in Analytical Chemistry to Krista Marshall '03

The American Chemical Society Undergraduate Award in Polymer Chemistry to James Maiolo '03

The American Institute of Chemists Student Honor Award to Bruce Lichtenstein '02

The Solomon Asch Award in Psychology to Jeffrey Paul Ebert '02 and Matthew Saul Oransky '02

The Boyd Barnard Prize to Justin Capps '03

The Paul H. Beik Prize in History to Kaysha Corinealdi, '02

The Tim Berman Memorial Award to Francisco Sersale di Cerisano '03

The Black Alumni Prize to Brandyn White '03

The Brand Blanshard Prize in Philosophy to Justin Kane '02

The Sophie and William Bramson Prize to Chika Watanabe '02

Daniel Walter Brenner Memorial Scholarship to Lisa Ladewski '02

The Brinkmann Prize to Samuel Blair '02 and Kellen Jackson '02

Chemistry Department Senior Service Awards to Leslie Murray '02 and Michael Wollenberg '02

Chemistry Department Junior Service Awards to Robyn Harshaw '03 and Michael Loeb '03

The Susan P. Cobbs Scholarship to Kellam Conover '03

The CRC Press Freshman Chemistry Achievement Award to Katherine Berry '05

The Alice L. Crossley Prize in Asian Studies to Hung Le '02 and Tanya Wansom '02

The Deans' Awards to Imo Akpan '02, Susie Ansell '02, Sam Blair '02, Gloria Chan '02, Jean Gardner '02, Marah Gotcsik '02, Jeff Heckelman '02, Alice Hershey '02, Pukar Malla '02, Claire Phillips-Thoryn '02, Kim Pinckney '02, Brandon Silverman '02, Tanya Wansom '02, and Andy Wong '02

The Robert Dunn Award to Matt Goldstein '04 and Jacob Letendre '04

The William C. Elmore Prize in Physics to Lisa Larrimore '02 and Nicholas Ouellette '02

The Lew Elverson Trophy to Blake Atkins '02

The Robert Enders Field Biology Award to Amanda Schneider '02

The Friedman Field Research Award (not awarded this year)

The Dorothy Ditter Gondos Award (not awarded this year)

The Gonzalez-Vilaplana Prize for Outstanding Achievement in Chemistry to Leslie Murray '02 and Bruce Lichtenstein '02

The Hay-Urban Award in Religious Studies to Bradley Phillips '04

The John Russell Hayes Poetry Prizes to Caitlin Rogers '04 and Ursula Whitcher '03

The Samuel Hayes III Research Grant to Laura M. Damerville '03

The Eleanor Kay Hess Award to Anjani Reddy '04

The Philip M. Hicks Prize for Literary Criticism Essay to Christine Smallwood '03 (first prize) and Andy Wong '02 (second prize)

The Jesse H. Holmes Prize in Religion to Anna Woodiwiss '02.

The Gladys Irish Award to Imo Akpan '02

The Ivy Award to Samuel Blair '02

The Michael Keene Award to Karla Glibride '02

The Naomi Kies Award to Gloria Chan '02

The Kwink Trophy to Michael Jeffries '02

The Lande Field Research Award to Eileen Thorsos '03, Thuy Tran '04, and Erica Cartmill '03

The Lang Award to Rebecca Paul '02, and Nandini Pandey '02

The Leo M. Leva Memorial Prize in Biology to Lisa Ladewski '02, Christine Asgar '02, and Lucy Garcia '02

The Linguistics Prizes to Susan Lipsett (Haverford College '02) (theoretical linguistics) and both Amy DiBenedetto '02, and Matthew Feldman '02 (applications of linguistics)

Edward Martin Scholarship to Beth Williams '01

The McCabe Engineering Award to Casey Arthur Smith '02

The Norman Meinkoth Field Biology Award to Robert Hart '04, Charles Withers '02, Chinwe Nwaneshiudu '04, Sarah Hughes '04, Aja Peters-Mason '04, Claire Weiss '03, Hernease Davis '04, Lucy Irene Garcia '02, and Ben Rhee '04

The Morris Monsky Prize in Mathematics to Yijun Li '05

The Lois Morrell Poetry Award to Sarah St. Vincent '04

The Morrell-Potter Summer Stipend in Creative Writing to Kara Levy '03

The A. Edward Newton Student Library Prizes to Jonah Volk '03

The Helen F. North Award (not awarded this year)

Awards and Distinctions

The Oak Leaf Award to Gloria Chan '02

The Mark Osterweil Prize to Denise Finley '03

The May E. Parry Award to Katie Tarr '02

The Drew Pearson Prize to Deirdre Conner '03

The Perdue Award to Susan Elizabeth Christensen '03

The William Plumer Potter Prizes in Fiction to Amy Long '04 (first prize), Jae Won Chung '02 (second prize), and Elinore Kaufman '04 and Diana Metrick '02 (third prizes)

The Ernie Prudente Award to Emily Gray '02 and Joe Corso '02

The Dinny Rath Award to Heather Kile '02

The Judith Polgar Ruchkin Prize to Daniel Korobkin '02

The James H. Scheuer Environmental Fellowship to Jennifer Johnson '05

The Frank Solomon Jr. Student Art Prize to Emily Gray '02 and Evan Lareau '02

The Hally Jo Stein Memorial Award for Dance to Natsu Furuichi '02, Cynthia Lee '02, Kimberly Pinckney '02, and Malik Wright '02

The Karen Dvonch Steinmetz '76 Memorial Award to Susannah Starr Glidden '98 and Guido Grasso-Knight '00.

The Peter Gram Swing Prize to Alyson Jones '02, Karina Kacala '02

The Melvin B. Troy Award to David Weaver '02 (music); Liza Clark '03, Cynthia Lee '02, and Jennifer Pike '02 (dance)

The Vollmecke Service Award to Pukar Malla '02

The Jerome H. Wood Prize in Latin American Studies (not awarded this year)

Enrollment Statistics

ENROLLMENT OF STUDENTS BY CLASSES (Fall 2001)

	MEN	WOMEN	TOTAL
Seniors	155	187	342
Juniors	176	188	364
Sophomores	166	195	361
Freshmen	187	194	381
	684	764	1,448
Graduate students	0	0	0
Special students	6	13	19
TOTAL	690	777	1,467

Note: These counts include 94 students studying abroad.

GEOGRAPHICAL DISTRIBUTION OF STUDENTS (Fall 2001)

Alabama	9
Alaska	2
Arkansas	3
Arizona	12
Army Post Offices	1
California	118
Colorado	14
Connecticut	38
Delaware	13
District of Columbia	17
Florida	37
Georgia	14
Hawaii	12
Illinois	32
Indiana	10
Iowa	4
Kansas	3
Kentucky	5
Louisiana	2
Maine	7
Maryland	93
Massachusetts	85
Michigan	25
Minnesota	19
Mississippi	1
Missouri	11
Montana	3
Nebraska	3
Nevada	3
New Hampshire	14
New Jersey	94
New Mexico	6
New York	220
North Carolina	15
North Dakota	2
Ohio	42
Oklahoma	2
Oregon	20
Pennsylvania	188
Puerto Rico	3
Rhode Island	7
South Carolina	4
Tennessee	8
Texas	30
Utah	2
Vermont	6
Virgin Islands	1
Virginia	51
Washington	30
West Virginia	4
Wisconsin	8
Wyoming	2
Total United States	1,355
Argentina	3
Australia	1
Bolivia	1
Brazil	4
Bulgaria	4
Canada	7
Colombia	1
Costa Rica	1
Croatia	1
Egypt	1
Ethiopia	1
France	4
Germany	2
Ghana	6
Greece	1
Hong Kong	5
India	4
Indonesia	3
Ireland	1
Israel	1
Italy	3
Jamaica	4
Japan	9
Kenya	2
Malaysia	4
Mexico	1
Nepal	3
New Zealand	1
Pakistan	1
People's Republic of China	5
Romania	2
Singapore	4
South Korea	2
Spain	1
Taiwan	1
Tanzania	1
Trinidad and Tobago	4
Turkey	5
United Kingdom	2
Venezuela	1
Vietnam	2
Zimbabwe	2
Total From Abroad	112
GRAND TOTAL	1,467

Index

Absence from examinations, 82
Academic misconduct, 49
Academic support, 61
Accounting, 402, 407
Administration and staff, 402
Administrative divisions, 402
Admissions, 25
Admissions procedure, 25
  Application dates, 26
  Scholastic Aptitude and Achievement Tests, 25
  School subjects recommended, 25
Advanced degrees, 85
Advance Placement, 27
Advanced standing, 27
Advancement Information Systems, 402, 406
Advancement Operations, 402, 405
Advising, 61
Alumni Association officers, 384
Alumni Council, 384
Alumni and Gift Records, 402, 405
Alumni Relations, 66, 402, 406
Ancient history, 131
Annual Giving, 402, 405
Art, 96
Art history, 97
Arts, studio, 103
Asian studies, 106
Associate dean for academic affairs, 402, 403
Associate dean for student life, 402, 403
Associate dean for multicultural affairs, 402, 404
Associate provost, 402, 403
Associate provost for information technology, 402, 403
Astronomy, 308, 314
Athletics, 306
Attachments to courses, 74
Attendance at classes, 80
Auditing courses, 82
Automobiles, regulations, 56
Awards and distinctions, awarded, 425
Awards and prizes, described, 87

Bachelor of arts degree, 85
Bachelor of science degree, 85
Bequests, 11
Biology, 112
Black Cultural Center, 58, 402, 404
Black studies, 118
Board of Managers, committees of, 382
Bookstore, 402, 406
Botany, see biology, 112
Bursar, 30, 402, 407
Business Office, 402, 407

Calendar, College, 5
Calendar, yearly, 4
Capital Giving, 402, 405
Career Services, 402, 406
Center for Social and Policy Studies, 15, 402, 406
Chemistry, 122
Chinese, 244, 253
CIVIC, 65
Classics, 128
Cocurricular activities, 62
Code of Conduct, 48
Cognitive science, 134
College entrance examinations, 25
College jobs, 32
Community-based learning, 65
Comparative literature, 136
Comprehensive examinations, 69, 71, 85
Computer science, 139
Computing services, see Information Technology Services, 14, 402, 410
Controller's Office, 402, 407
Cooper (William J.) Foundation, 17
Cooperation with neighboring institutions, 77
Cornell Library of Science and Engineering, 12
Corporate, Foundation, and Government Relations, 402, 405
Corporation, officers of, 380
Courses of instruction, 95
Course numbering system, 95
Creative arts, 77
Credit/no credit, 81
CROP (Chester Road Orientation Program), 65
Cross-listed course rules, 70
Curriculum, 69

Dance, 278, 285
Degree requirements, 85
Degrees conferred, 419
Degrees offered, 85
Development, 402, 405
Dining hall, 58
Dining Services, 407
Directed reading, 75
Directions for correspondence, 2
Directions for reaching the College, 436
Distribution requirements, 69
Divisions and departments, 399
Divisions for distribution requirements, 70

Domestic exchange, 77
Drama, 64, 289, 367
Drop/add, see registration, 81
DuPont (Pierre S.) Science Building, 14

Economics, 146
Educational Studies, 153
Education abroad, 77
Emeriti faculty, 386
Endowed chairs, 21
Endowment, 11
Engineering, 160
English literature, 172
Enrollment in courses, see registration, 81
Enrollment statistics, 429
Environmental Services, 402, 408
Environmental studies, 191
Equal Opportunity Office, 407
Equal Opportunity statement, 2
Examination regulations, 82
Exceptions to the four-year program, 74
Exchange programs, 77
Exclusion from the College, 84
Executive assistant to the provost and faculty grants administrator, 402, 403
Expenses, 29
Extracurricular activities, 64

Facilities management, 402, 407
Faculty advisers, 61
Faculty members, 388
Faculty regulations, 80
Fees (tuition, residence, etc.), 29, 86
Fellowships, 92
Film and media studies, 194
Final examinations, 82
Financial aid, 31
Fine arts, see art history, 97
Footnote key, 95
Foreign language requirement, 85
Foreign students, 27, 429
Foreign study, see study abroad, 29, 77, 370
Foreign Study Office, 402, 408
Formats of instruction, 74
Francophone studies, 197
Fraternities, 59
French, 244, 257
Friends Historical Library, 12

Gender education, 53
Geographical distribution of students, 429
German, 264
German studies, 261
Ghana Program, 289
Gifts, 2, 11
Grades, 80
Graduate study, 85
Graduation requirements, see also distribution requirements, 69, 85
Greek, 129
Grenoble Program, 77
Grounds, 9, 12, 14

Health care, 59
Health Sciences Advisory Program, 76
Health Services, 60
History, 203
Honors examiners, 73, 416
Honors Program, 73
Housing, 57
Human Resources, 402, 409

Incomplete grade policies, 80
Independent study, 75
Information Technology Services, 14, 402, 410
Institutional research, 402, 408
Insurance, 60
Intercultural Center, 59
Interdisciplinary work, 76
International admissions, 27
Interpretation theory, 219

Judicial bodies, 57

Kohlberg Hall, 13

Lang Music Building, 15
Lang Performing Arts Center, 13, 410
Latin, 130
Leaves of absence, 82
Libraries, 11, 410
Linguistics, 224
List Gallery, 15, 96, 412
Literature, see comparative literature, 136
Loans to students, 32

Madrid Program, 78
Maintenance, 402, 408
Map of College grounds, 434
Martin Hall, 14
Master's degrees, 85
Mathematics and statistics, 232
McCabe Library, 12, 402, 410
Media Services, 402, 410
Media, student, 64
Medieval studies, 242
Modern languages and literatures, 244

Index

Music, 278
Music, performance, 279, 288

Nason fellowships, 93
News and Information Office, 67
Normal course load, 74

Observatory, 14
Occupational and environmental safety, 410
Office of Community Service Learning programs, 65, 402, 410
Office of the Dean of Admissions and Financial Aid, 402, 404
Office of the Dean of the College, 402, 403
Office of the President, 402, 403
Office of the Provost, 402, 403
Office of the Vice President for Alumni, Development, and Public Relations, 402, 405
Office of the Vice President for Facilities and Services, 402, 407
Office of the Vice President for Finance and Planning, 402, 408
Office Services, 402, 407
Orchestra, 62
Outreach programs, 64

Papazian Hall, 13
Pass/fail, see credit/no credit, 81
Payroll, 410
PDC, primary distribution courses, 69
Peace and conflict studies, 298
Philosophy, 301
Physical Education and Athletics, 306
Physical education requirements, 84, 306
Physics and astronomy, 308
Plagiarism, 49
Planned Giving, 402, 405
Planning and Construction, 402, 408
Poland Program, 289, 370
Political science, 316
Post office, 413
Practical work, 76
Premedical advising, 76
President, 403
Primary distribution courses (PDC), 69
Prizes, awarded, 426
Prizes, described, 87
Program of study, 69
  Freshmen and sophomores, 69
  Juniors and seniors, 71
  Honors Program, 73
Psychological Services, 60
Psychology, 327
Public policy, 337
Public Safety, 413
Publications, College, 66
Publications, student, 64
Publications Office, 402, 406

Readmission to the College, 82
Registrar's Office, 413
Registration, 81
Religion, 341
Religious advisers, 59
Religious life, 10
Repeated course rules, 81
Requirements for admission, 25
Requirements for graduation, (see also distribution requirements), 69, 85
Research, 71, 73, 75, 78
Residence halls, 57
Residence, regulations, 58
Residential life, 56, 57
Russian, 244, 268

Scholarships, 31, 32
Scholastic Aptitude Test, 25
Scott Arboretum, 16, 402, 414
Security policies and procedures, 62
Senior-year residency requirement, 85
Sharples Dining Hall, 58
Social Affairs Committee, 62
Social centers, 58
Social coordintor, 402, 403
Sociology and anthropology, 351
Spanish, 244, 272
Special major, 71
Sproul Observatory, 14
Standing committees of the faculty, 401
Statistics, 232
Student activities, 62
Student conduct, 48
Student Council, 55, 62, 64
Student employment, 32
Student exchange programs, 77
Student judicial system, 57
Student Right to Know, 79
Student rights, 55
Student-run courses, 75
Study abroad, 29, 77
Submission of the same work in more than one course, 50
Summer of Service, 66
Summer programs, 402, 407
Summer school work, 83
Swarthmore College Peace Collection, 12
Swarthmore Foundation, 66

Tarble Social Center, 58
Teacher certification, 154
Theater, 64, 289, 367
Transfer, application for, 28
Transfer credit, see work done elsewhere, 83
Treasurer's Office, 402, 414
Tuition and other fees, 29
Twenty-course credit rule, 71

Underhill Music Library, 12, 402, 411
Upward Bound, 64

Venture Program, 83
Vice president for college and community relations and executive assistant to the president, 2, 402, 403
Visiting examiners, 416
Vocational advising, 61

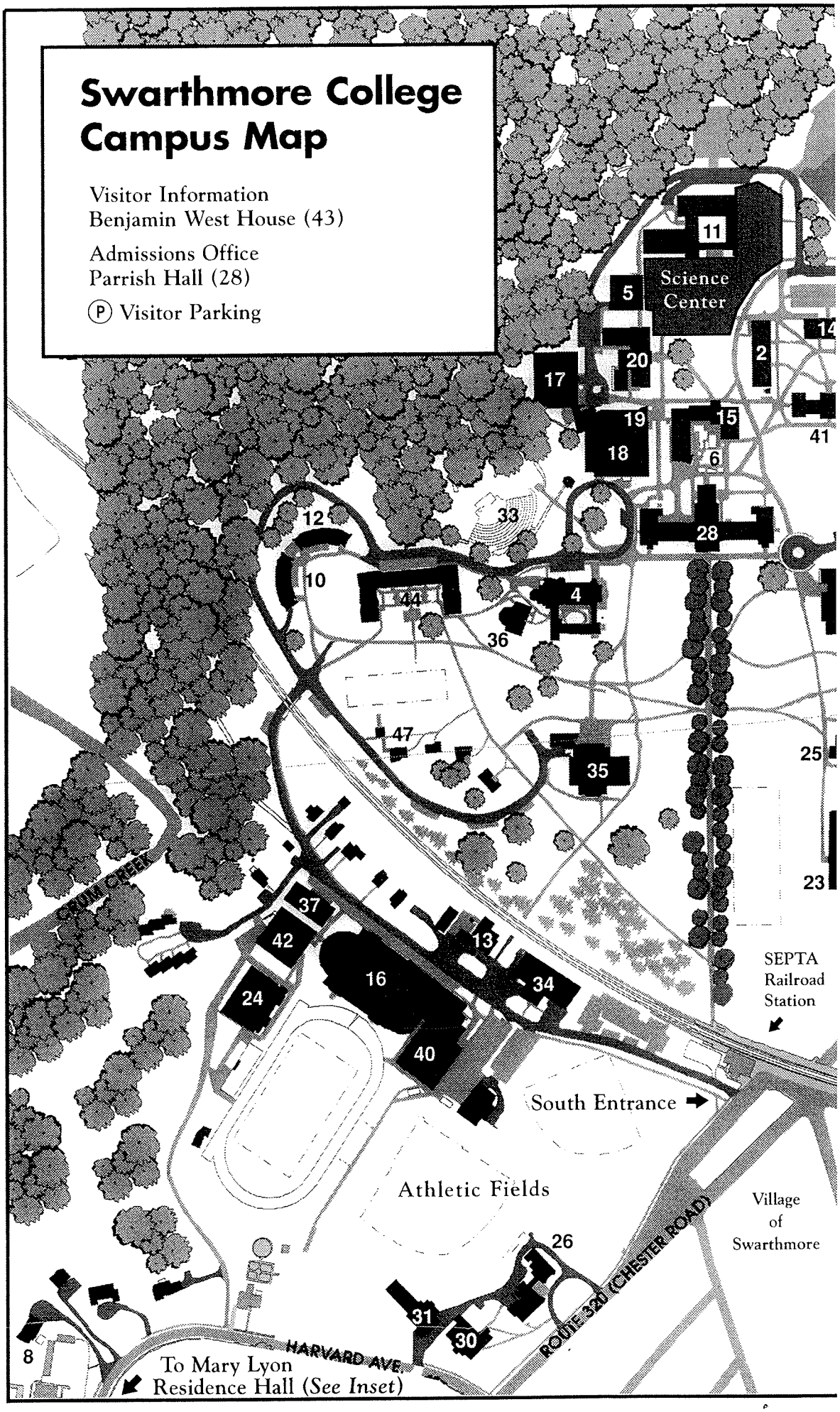
Withdrawal from the College, 82
Withdrawal from courses, 81
Women's Resource Center, 58
Women's studies, 376
Work done elsewhere, 83
Worth Health Center, 59
Writing Center, 61

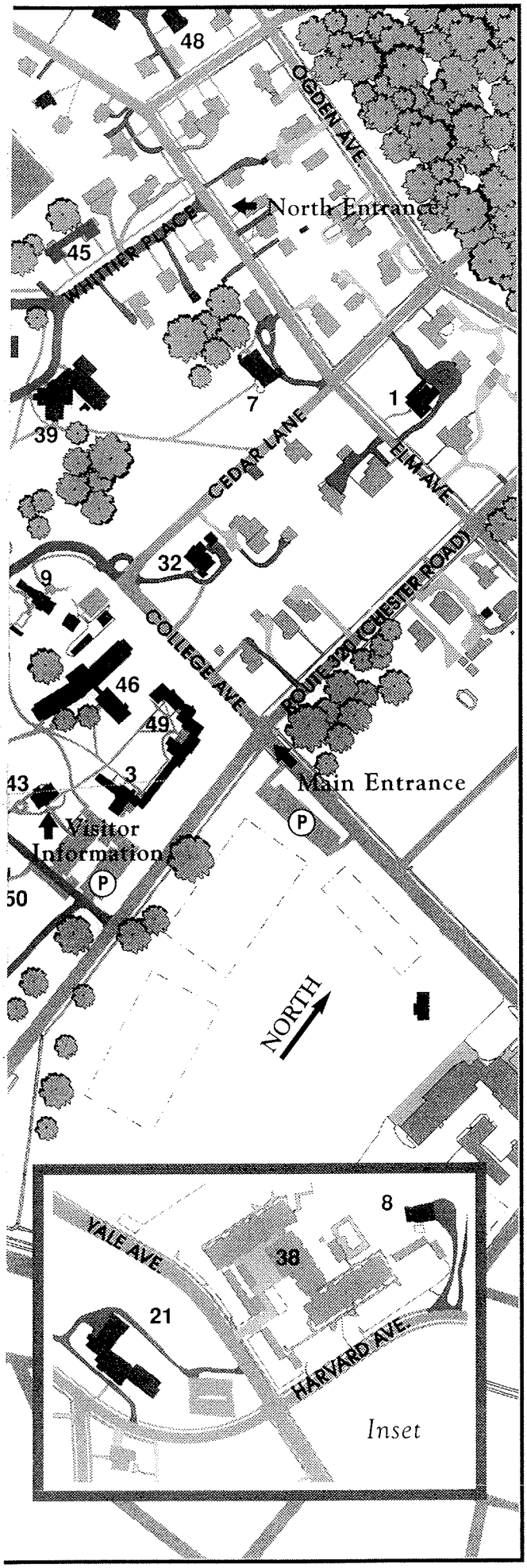
Swarthmore College Campus Map

Visitor Information
Benjamin West House (43)

Admissions Office
Parrish Hall (28)

Ⓟ Visitor Parking





1. Ashton House—*College guest house*
2. Beardsley Hall—*Art History, Studio Art, Information Technology Services*
3. Bond and Lodges—*Student residence and meeting rooms*
4. Clothier Memorial Hall—*Tarble Social Center, snack bar, student offices, bookstore, Intercultural Center*
5. Cornell Science and Engineering Library
6. Cosby Courtyard
7. Courtney Smith House—*President's residence*
8. Cratsley House—*College guest house (Inset)*
9. Cunningham House—*Scott Arboretum offices and Terry Shane Teaching Garden*
10. Dana Hall—*Student residence*
11. DuPont Science Building—*Chemistry, Physics and Astronomy*
12. Hallowell Hall—*Student residence*
13. Heating Plant
14. Hicks Hall—*Engineering*
15. Kohlberg Hall—*Economics, Modern Languages and Literatures, Sociology and Anthropology, Language Resource Center, Scheuer Room, Corddry Wing*
16. Lamb-Miller Field House
17. Lang Music Building—*Music, Underhill Music Library*
18. Eugene M. and Theresa Lang Performing Arts Center—*Theater, Dance, English Literature*
19. List Gallery
20. Martin Building and Animal Laboratory—*Biology, Kirby Lecture Hall*
21. Mary Lyon Building—*Student residence (Inset)*
22. McCabe Library
23. Mertz Hall—*Student residence*
24. Mullan Tennis Center
25. Old Tarble
26. Palmer Hall—*Student residence*
27. Papazian Hall—*Philosophy, Psychology, Engineering Laboratory*
28. Parrish Hall—*Admissions Office, administrative offices, student residence, mail room*
29. Pearson Hall—*Educational Studies, Linguistics, Religion, Human Resources, Foreign Study Office*
30. Pittenger Hall—*Student residence*
31. Roberts Hall—*Student residence*
32. Robinson House—*Black Cultural Center*
33. Scott Amphitheater
34. Service Building—*Maintenance, Grounds, and Environmental Services*
35. Sharples Dining Hall
36. Sproul Observatory—*Astronomy, Computer Science, Alumni and Gift Records*
37. Squash Courts
38. Strath Haven Condominiums
39. Swarthmore Friends Meetinghouse
40. Tarble Pavilion—*Physical Education*
41. Trotter Hall—*Political Science, History, Classics*
42. Ware Pool
43. Benjamin West House—*Visitor information, Public Safety, communications center*
44. Wharton Hall—*Student residence*
45. No. 5 Whittier Place—*Mathematics and Statistics*
46. Willets Hall—*Student residence*
47. Women's Resource Center
48. Woolman House—*Student residence*
49. Worth Hall—*Student residence*
50. Worth Health Center

Notes

Notes

Directions for Reaching Swarthmore College

DRIVING

From the Pennsylvania Turnpike, going East

From Exit 326 (Valley Forge) take I-76 East (Schuylkill Expressway) about 2½ miles to I-476 South. Take I-476 approximately 13 miles to Exit 3, Media/Swarthmore. At the bottom of the exit ramp, follow the sign for Swarthmore by turning left onto Baltimore Pike. (See below for ". . . the rest of the way.")

From the Pennsylvania Turnpike, going West

Take Exit 25A (I-476 South). Stay on I-476 approximately 17 miles to Exit 3, Swarthmore/Media. At the bottom of the exit ramp, follow the sign for Swarthmore by turning left onto Baltimore Pike. (See below for ". . . the rest of the way.")

From the New Jersey Turnpike

Take Exit 6 (PA Turnpike) and proceed as directed above "From the Pennsylvania Turnpike, going West."

From the South

Traveling north on I-95, pass the Chester exits and continue to Exit 7, I-476 North/Plymouth Meeting. Take I-476 to Exit 3, Media/Swarthmore. At the bottom of the exit ramp, follow the sign for Swarthmore by turning right onto Baltimore Pike. (See below for ". . . the rest of the way.")

". . . the rest of the way"

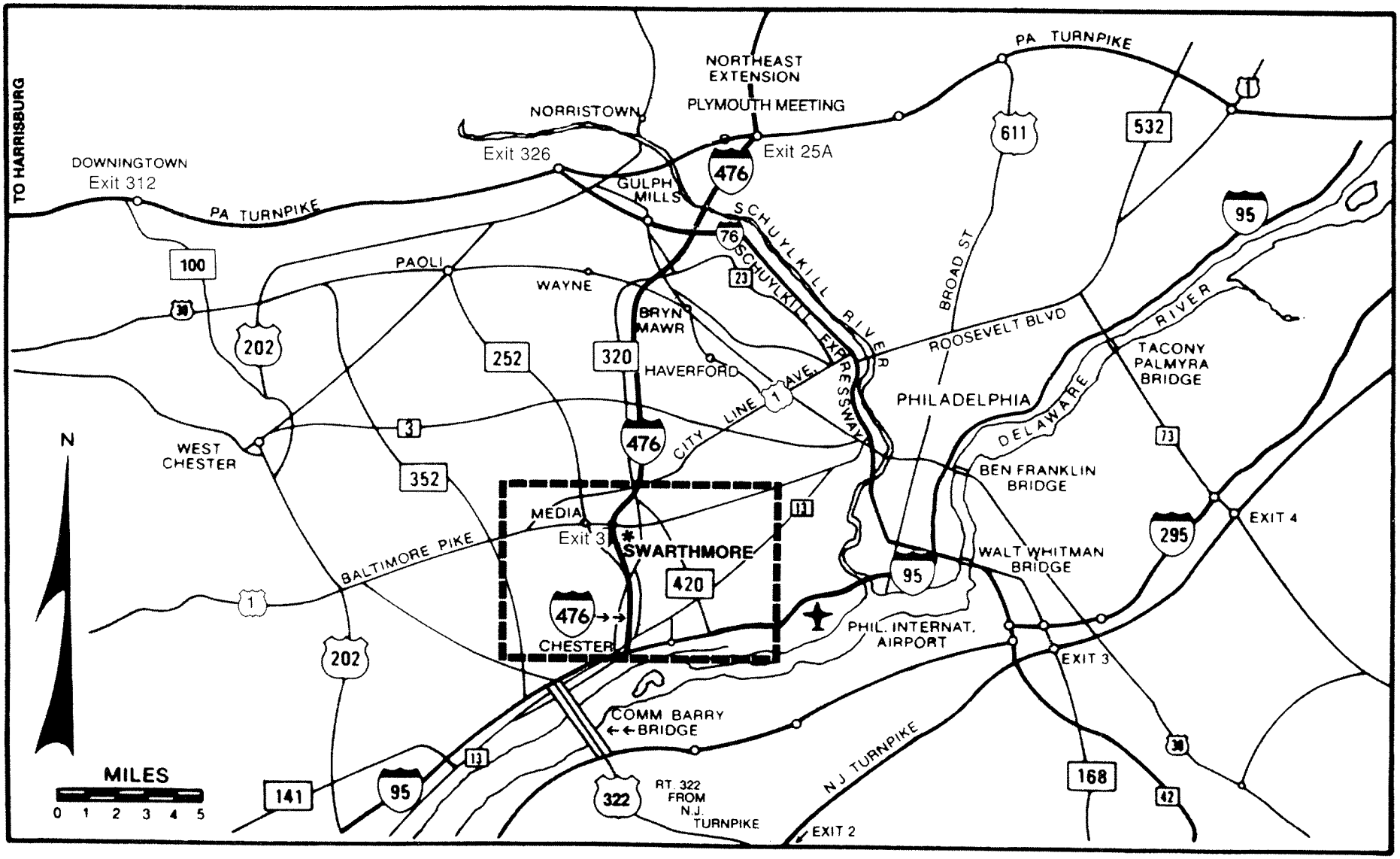
On Baltimore Pike, stay in the right lane. In less than one mile, turn right onto Route 320 South. (At the next light, Route 320 turns right.) Proceed through the light at College Avenue to the first driveway on the right to visitor parking at the Benjamin West House (the College's Visitor's Center).

TRAIN

The College is readily accessible from Philadelphia by train. Amtrak trains from New York and Washington arrive hourly at Philadelphia's 30th Street Station. From 30th Street Station, the SEPTA Media/Elwyn Local (R3) takes 22 minutes to reach the Swarthmore station, which is adjacent to campus.

AIR

An express train runs from the airport to 30th Street Station, where you can take the SEPTA Media/Elwyn Local (R3) train directly to the Swarthmore campus. The combined fare is about $10, and the trip requires about one hour. Taxi service is also available. The fare is approximately $30, and the trip requires about 20 minutes. By car from the airport, take I-95 South to Exit 7, I-476 North/Plymouth Meeting. Take I-476 North to Exit 2, Media/Swarthmore. At the bottom of the exit ramp, follow the sign for Swarthmore by turning right onto Baltimore Pike. (See above for ". . . the rest of the way.")


TO HARRISBURG
DOWNINGTOWN
Exit 312
PA TURNPIKE
NORRISTOWN
Exit 326
NORTHEAST EXTENSION
PLYMOUTH MEETING
Exit 25A
PA TURNPIKE
GULPH MILLS
476
SCHUYLKILL RIVER
SCHUYLKILL EXPRESSWAY
BROAD ST
611
532
95
100
PAOLI
WAYNE
202
252
320
BRYN MAWR
HAVERFORD
ROOSEVELT BLVD
TACONY PALMYRA BRIDGE
DELAWARE RIVER
PHILADELPHIA
CITY LINE AVE.
WEST CHESTER
352
MEDIA
Exit 3
SWARTHMORE
420
BALTIMORE PIKE
CHESTER
BEN FRANKLIN BRIDGE
WALT WHITMAN BRIDGE
295
EXIT 4
PHIL. INTERNAT. AIRPORT
EXIT 3
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