
Swarthmore

College Bulletin 1999-2000

Volume XCVII Number 1

Catalog Issue August 1999

Directions for Correspondence

SWARTHMORE COLLEGE, 500 COLLEGE AVENUE, SWARTHMORE, PA 19081-1397	
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ACADEMIC POLICY	Jennie Keith Provost
FINANCIAL INFORMATION	Paul Aslanian Vice President
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GIFTS	Martha Dean Director of Development

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This *Bulletin* contains policies and program descriptions as of July 31, 1999, the date of publication, 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.

The Swarthmore College Bulletin (ISSN 0888-2126), of which this is Volume XCVII, number 1, is published in August, September, December, March and June by Swarthmore College, 500 College Avenue, Swarthmore, PA 19081-1397.

Periodical postage paid at Swarthmore, PA 19081 and additional mailing offices. Permit number 0530-620. Postmaster: Send address changes to Swarthmore College Bulletin, 500 College Avenue, Swarthmore, PA 19081-1397.

Phone (610) 328-8000

Printed in U.S.A.

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College Calendar

1999

August 28
September 1
September 2
September 24-25
September 25
October 8
October 18
October 22-24
November 15-23
November 24
November 24-30
November 29
December 3-4
December 9-10
December 10
December 11
December 13
December 17
December 21

Fall Semester

New student orientation begins
Registration
Classes and seminars begin
Meeting of the Board of Managers
Homecoming
October holiday begins at end of last class or seminar
October holiday ends at 8:30 a.m.
Meeting of Alumni Council
Advising period
Thanksgiving vacation begins at end of last class or seminar
Pre-enrollment for spring semester
Thanksgiving vacation ends at 8:30 a.m.
Meeting of the Board of Managers
Advising follow-up days
Classes end
Enrollment for spring semester
Final examinations begin
Seminars end
Final examinations end

2000

January 17
February 25-26
March 3
March 13
March 17-19
April 3-13
April 7-9
April 14-18
April 27-28
April 28
May 1
May 4
May 4
May 5-6
May 13
May 15
May 15-16
May 18-20
May 28
May 29
June 2-4

Spring Semester

Classes and seminars begin
Meeting of the Board of Managers
Spring vacation begins at end of last class or seminar
Spring vacation ends at 8:30 a.m.
Black Alumni Weekend
Advising period
Parents Weekend
Pre-enrollment period for fall semester
Advising follow-up days
Classes and seminars end
Enrollment meeting for fall semester
Written Honors examinations begin
Course examinations begin
Meeting of the Board of Managers
Course examinations end
Written Honors examinations end
Senior comprehensive examinations
Oral Honors examinations
Baccalaureate
Commencement
Alumni Weekend

2000

Tentative

August 29	New student orientation begins
September 2	Registration
September 4	Classes and seminars begin
September 29-30	Meeting of the Board of Managers
October 13	October holiday begins at end of last class or seminar
October 23	October holiday ends at 8:30 a.m.
November 13-21	Advising period
November 22	Thanksgiving vacation begins at end of last class or seminar
November 22-28	Pre-enrollment for spring semester
November 27	Thanksgiving vacation ends at 8:30 a.m.
December 1-2	Meeting of the Board of Managers
December 11-12	Advising follow-up days
December 12	Classes end
December 13	Enrollment for spring semester
December 15	Final examinations begin
December 15	Seminars end
December 23	Final examinations end

Fall Semester

2001

Tentative

January 22	Classes and seminars begin
February 23-24	Meeting of the Board of Managers
March 9	Spring vacation begins at end of last class or seminar
March 19	Spring vacation ends at 8:30 a.m.
March 23-25	Black Alumni Weekend
April 9-19	Advising period
April 16-18	Parents Weekend
April 20-24	Pre-enrollment for fall semester
May 3-4	Advising follow-up days
May 4	Classes and seminars end
May 4-5	Meeting of the Board of Managers
May 7	Enrollment for fall semester
May 10	Written Honors examinations begin
May 10	Final examinations begin
May 19	Final examinations end
May 21	Written Honors examinations end
May 21-22	Senior comprehensive examinations
May 24-26	Oral Honors examinations
June 3	Baccalaureate
June 4	Commencement
June 8-10	Alumni Weekend

Spring Semester

Introduction to
Swarthmore College

Educational Resources

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, Pennsylvania. It is a small college by deliberate policy. Its present enrollment is about 1,350 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 inde-

pendent 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 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 which 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 lecture-ships. Their gifts to Swarthmore have not only provided the physical plant but also have created an endowment fund of approximately \$900 million at market value on June 30, 1999. Swarthmore ranks 12th in the country in endowment per student. Income from the endowment during the academic year 1997-98 contributed approximately \$21,600 to meet the total expense of educating each student and provided more than 37 percent of the College's operating revenues.

The College's ability to continue to offer a high quality of education depends on continuing voluntary support. Swarthmore seeks additional gifts and bequests for its current operations, its permanent endowment, and its capital development programs to maintain and strengthen its resources. The vice president in charge of development will be pleased to provide information about various forms of gifts: bequests, outright gifts of cash or securities, real estate or other property, and deferred gifts through charitable remainder trusts and life income contracts in which the donor reserves the right to the annual income during his or her lifetime.

LIBRARIES

The College 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 towards 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.

The Swarthmore College Libraries together with those of Bryn Mawr and Haverford colleges are linked in a fully automated consortial library system, Tripod, with an online public access catalog and reciprocal borrowing. 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/>. Electronic bibliographic indexes and full-text databases have become increasingly important to undergraduate research. Swarthmore College and the consortium provide a growing selection of electronic research databases, indexes, and full-text e-journals that are available in the Libraries and networked to dormitory rooms and other campus settings.

The *Thomas B. and Jeanette L. McCabe Library* is the center of the College Library system housing the major portion of the College Library collections, reading and seminar rooms, an electronic resources room, a video classroom, and administrative offices. Total Library holdings amount to 749,000 volumes with some 20,000 volumes added annually. About 2,050 periodical titles are received regularly. The College participates in the Federal Depository Library Program by selecting publications most appropriate to the needs of the curriculum and the public, and by making them easy to find through the Tripod system.

The *Cornell Library of Science and Engineering* houses more than 54,200 volumes and serves the scientific, academic and research needs of students and faculty. The *Daniel Underhill Music Library* contains around 19,400 books and scores, 12,900 recordings and listening equip-

Educational Resources

ment. 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 travellers 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-forties; the *Bathe Collection* of the history of technology donated by Greville Bathe; the *Private Press Collection* representing the work of over 670 presses; and the *Swarthmoreana Collection* of over 6,200 publications by graduates of the College.

The Audiovisual Collection with 2,800 videotapes and discs and 1,400 spoken word recordings on disc and tape includes contemporary writers reading from and discussing their works; full-length versions of Shakespearean plays (both videocassettes and audiodiscs) and other dramatic literature; the literature of earlier periods read both in modern English and in the pronunciation of the time; recordings of literary programs held at Swarthmore; and video-recordings of U.S. and foreign classic feature films, as well as educational, documentary, and experimental films. These materials support all areas of study and are housed in all three libraries with the appropriate subjects.

Within the McCabe Library building are two special libraries which 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 1670's 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 (over 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). The library's collection of books and pamphlets by and about Friends numbers more than 43,000 volumes. More than 200 Quaker periodicals are currently received. There is also 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 which 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 over 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 serving 199 students. Today, it encompasses more than 40 buildings used by 1,350 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; the Women's and Black and Asian Studies Programs; 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.

Renovation studies were conducted in 1998 on *Martin Hall* and *DuPont Science Building*, two buildings devoted to the sciences. The College is embarking on a major project to create a unified science center with modern laboratories for the Physics and Astronomy, Chemistry, Mathematics and Statistics, Biology, and Computer Science Departments.

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, acknowledging its commitment to current and future societies. An exam-

Educational Resources

ple 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.

The *Computing Center*, 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 vari-

ety 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 Computing Center staff assigned to their respective division for curricular support.

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.

On the lower level of the LPAC is another more intimate theater, the *Frear Ensemble 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, baseball, and football. 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 that supports not only swimming training but scuba diving as well. The six outdoor *Faulkner Tennis Courts* will be supplemented with the addition of *The Mullan Tennis Center*, an indoor tennis and fitness pavilion to open for use in the spring of 2000. 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 advisors and religious organizations; 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 which 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, and tree peonies, and a great variety of 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 a restricted endowment and by outside grants.

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 which make up the Arboretum's total program, such as plant propagation, public lectures, and tours to other gardens. About 90 "Arboretum assistants" aid in campus maintenance on a regular basis by volunteering. Student memberships are available. The Arboretum's

Educational Resources

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 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 eighteen volumes.

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 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 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 which 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.

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 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 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 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 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 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 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.

Created in 1996 in honor of Robert Savage, Professor Emeritus of Biology, the *Savage Fund*

supports student research and other activities in cellular and molecular biology.

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

The Barnard Fund was established in 1964 by two graduates of the College, Mr. and Mrs. Boyd T. Barnard of Rosemont, Pennsylvania. 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 Department of Music who show unusual promise as instrumentalists or vocalists.

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 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 which stands on the campus and who became president of the Royal Academy.

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 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 Marjorie Heilman Visiting Artist Fund was established by M. Grant Heilman, Class of 1941, in memory of Marjorie Heilman to stimulate interest in art, particularly the practice of

Educational Resources

art, on campus.

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 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.

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, Professor of Biology, 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, member, and Virginia Stratton Cornell '30, former member of the Board of Managers, to bring professors and lecturers from other nations and cultures for a semester or a year. Since 1962, from every corner of the world, Cornell professors and their families 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 Department of Chemistry.

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, Hon. '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

Endowed Chairs

devoted entirely to research, study, enrichment or writing. It carries an annual discretionary grant for research expenses, books and materials.

The Eugene M. Lang Visiting Professorship endowed in 1981 by Eugene M. Lang '38, brings to Swarthmore College for a period of one semester to 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 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 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 Department or the Economics Department.

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 member of the Board of Managers, and his brother J. Archer Turner, Class of 1905 and member 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 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 Department of Physical Education and Athletics.

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.



Admissions
Expenses

Financial Aid

Admissions

Inquiries concerning admission and applications should be addressed to the Dean of Admissions, Swarthmore College, 500 College Avenue, Swarthmore, PA 19081-1397.

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 in 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 individual future worth to society and of their collective realization of the purpose of the College.

It is the policy of the College to have the student body represent not only different parts of the United States but many foreign countries, both public and private secondary schools, and various economic, social, religious, and racial groups. The College is also concerned to include in each class sons and daughters of alumni and of 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.

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 teachers.
3. Scores in the SAT-I or the ACT.
4. Scores in three SAT-II: Subject Tests, one of which must be the writing or composition test. Applicants considering a major in engineering must also take an SAT-II in

mathematics.

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. Reading, research, work, and travel experience, both in school and out.

Applicants must have satisfactory standing in school and SATs as well as strong intellectual interests. Other factors of interest to the College include 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, however, 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 (a) history and social studies, (b) literature, art, and music, (c) 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, and trigonometry.

APPLICATIONS AND EXAMINATIONS

Application to the College may be submitted through either the Regular Decision or one of

Admissions

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 January 1 deadline, but Form I 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. Early Decision candidates may not file early decision applications at other colleges, but they may file regular applications at other colleges with the understanding that these applications will be withdrawn upon admission to Swarthmore; however, one benefit of the Early Decision plans is the reduction of cost, effort, and anxiety inherent in multiple application procedures.

Application under any plan must be accompanied by a nonrefundable application fee of \$60. Timetables for the plans are the following:

<i>Fall Early Decision</i>	
Closing date for applications	November 15
Notification of candidate	on or before December 15
<i>Winter Early Decision</i>	
Closing date for applications	January 1
Notification of candidate	on or before February 1
<i>Regular Decision</i>	
Closing date for applications	January 1
Notification of candidate	on or before April 1
Candidates reply date	May 1

Any Early Decision candidate not accepted 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.

All applicants for first-year admission must take the SAT-I or the ACT. They must also take three SAT-II: Subject Tests, one of which must be the writing or composition test. Applicants considering a major in Engineering must also take an SAT-II in mathematics. It is strongly recommended that students whose first language is not English take the TOEFL.

Application to take these tests is usually done through the secondary school counseling office, but application may be made directly to the College Entrance Examination Board, Box 6200, Princeton, NJ 08540. A bulletin of information may be obtained without charge from the Board. Students who wish to be examined in any of the following western states, provinces, and Pacific areas—Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, Wyoming, Alberta, British Columbia, Manitoba, Saskatchewan, Mexico, Australia, and all Pacific Islands including Taiwan and Japan—should address their inquiries and send their applications to the College Entrance Examination Board, Western Regional Office, 2099 Gateway Place, Suite 480, San Jose CA 95110-1017. Application should be made to the Board at least a month before the date on which the test will be taken.

For those students wishing to take the ACT, information may be obtained by writing to ACT, P.O. Box 414, Iowa City IA 52243.

Information concerning financial aid will be found on pages 26-38.

Under certain circumstances, admitted students may apply in writing to defer their admission for one year. These requests must be approved in writing by the dean of Admissions. Students granted deferment may neither apply to nor enroll at another degree-granting college/university program.

THE INTERVIEW

An admissions interview with a representative of the College is a recommended part of the first-year application process. Transfer applicants are not scheduled for interviews. Applicants should take the initiative in arranging for this interview. 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 applicants should request a meeting with an alumni representative in their own area. Interviews with alumni representatives take longer to arrange than interviews on campus. Applicants must make alumni interview arrangements well in advance of the final dates for receipt of supporting materials.

Arrangements for on-campus or alumni interviews can be made by writing to the Office of Admissions, by calling (610) 328-8300 or (800) 667-3110, or by contacting the office by e-mail: admissions@swarthmore.edu.

ADVANCED PLACEMENT

Entering 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 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—they may become juniors in their second year. To qualify for advanced standing a student must (1) do satisfactory work in the first semester; (2) obtain 14 credits by the end of the first year; (3) intend to complete the degree requirements in 3 years; and (4) signify this intention when she/he applies for a major by writing a sophomore paper 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.

APPLICATIONS FOR TRANSFER

The College welcomes well-qualified transfer students but, in fact, is able to accept very few applicants. Applicants for transfer must have had an outstanding academic record in the institution attended and must present full credentials for both college and preparatory work, including a statement of honorable dismissal. They must take the SAT-I given by the College Entrance Examination Board 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 mid-year 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 applications are notified of decisions on or before May 30.

*Directions for reaching the College can be found on p. 400 of this catalog.

Expenses

STUDENT CHARGES

Total charges for the 1999-2000 academic year (two semesters) are as follows:

Tuition	\$23,964
Room	3,850
Board	3,650
Student Activities Fee	226
	<u>\$31,690</u>

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 1½% 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 vari-

ations 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 (\$2,996) or half course (\$1,498), 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 Advisor, 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 August 16 and for the second semester by January 14. A 1.5 percent late fee will be assessed monthly on payments received after the due date. Many parents have indicated a preference to pay college charges on a monthly basis rather than in two installments. For this reason, Swarthmore offers a monthly payment

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:

<i>For Students Who Withdraw</i>	<i>Tuition and Fees Will Be Reduced</i>	<i>Board Fees Will Be Reduced</i>
Week 2 of classes	To \$200	By 95 percent
Week 3 of classes	By 90 percent	By 90 percent
Week 4 of classes	By 80 percent	By 85 percent
Week 5 of classes	By 70 percent	By 80 percent
Week 6 of classes	By 60 percent	By 75 percent
Week 7 of classes	By 50 percent	By 70 percent
Week 8 of classes	No further reductions	By 65 percent
Week 9 of classes	—	By 60 percent
Week 10 of classes	—	By 55 percent
No reductions thereafter	—	

(continued next page)

plan, which provides for payment in installments without interest charges. Information on the plan is mailed to all parents in April.

HOUSING FINES

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

For 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. Then the fine will be \$100 each.
 - b. Notice between June 1 and the opening of school will cost \$500 for each person moving off campus.
 - c. Notice after school starts will cost \$1,000.
 - d. Notice after midsemester will have no room refund.
2. Take a leave of absence and notify the Dean's Office
 - a. By August 1, a \$100 penalty.
 - b. Between August 1 and the opening of school, a penalty of \$500.
 - c. After the opening of school but before midsemester, a penalty of \$1,000.
 - d. After midsemester, there will be no room refund.

For 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 December 1.
 - b. Notice between December 1 and January 5 will cost \$500 each.
 - c. Notice after January 5 will cost \$1,000 each.
 - d. Notice after midsemester will receive no room refund.

2. Take a leave of absence and notify the Dean's Office
 - a. By December 1, no penalty.
 - b. Between December 1 and January 5, a \$100 penalty.
 - c. After January 5 and before classes start, \$500.
 - d. By midsemester, \$1,000.
 - e. Leave after midsemester, there will be no room refund.

Inquiries: All correspondence regarding payment of student charges should be addressed to Denise Risoli, Bursar (610) 328-8394.

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. Most 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.

A prospective student must apply for Swarthmore and for outside assistance while applying for admission: admission and financial aid decisions are, however, 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 \$1,360 to \$1,780 summer earnings contribution as well as a portion of the student's personal savings and assets.

For 1999-2000 the College bill, which includes tuition, room and board, and a comprehensive fee, will be \$31,690. 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 \$33,410. This allows \$1,720 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 need, the College reviews each student's award annually. Mid-year, each student who has aid must submit a new financial aid application for the next academic year. 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 con-

sideration of a sibling's educational expenses. Students who choose to live off campus will not receive College scholarship or College loan assistance in excess of their College bill. The cost of living off campus will, however, 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.

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 (no new aid applications can 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 at our Web site, www.swarthmore.edu (click on "campus links" to find financial aid).

SCHOLARSHIPS

For the academic year 1999-2000, we awarded more than \$13 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. 27-38. The federal government also makes Pell Grants and Supplemental Educational Opportunity Grants available. 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 some endowed scholarships are restricted by locality, sex, religion or physical vigor, the College's system of awarding aid makes it possible to meet need without regard to these restrictions. Financial need is a requirement for all College scholarships unless otherwise indicated.

LOAN FUNDS

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

Aided students are expected to meet a portion of their demonstrated need (from \$1,000 to about \$5,500 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 Swarthmore College Loans. No separate application is needed for the Perkins or SCL loans since 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 \$32,000 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 admission office) or visit our Website at www.swarthmore.edu.

The College also maintains special loan funds which are listed below:

The Jay and Sandra Levine Loan Fund

The Thatcher Family Loan Fund

The Swarthmore College Student Loan Fund

The Joseph W. Conard Memorial Fund, established by friends of the late Professor Conard, provides short-term loans without interest to meet student emergencies. Income earned by *The Alphonse N. Bertrand Fund* is also available for this purpose.

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, departmental offices, the post office, the student-run coffee house, etc., and placements can be arranged when students arrive in the fall. On-campus rates of pay run from \$5.75 to \$6.25 per hour. Students receiving financial aid are usually offered the opportunity to earn up to \$1,360 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 detriment to their academic performance. We hope that students will not work more than about seven or eight hours weekly.

For students who qualify under the federal College Work-Study Program (most aided students), off-campus placements in public or private, non-profit agencies in the local or Philadelphia area can be arranged through the Financial Aid Office during the academic year or nation-wide during the summer (when federal funds are sufficient). Among suitable agencies are hospitals, schools, museums, social service agencies and local, state or federal government agencies.

Scholarships

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

(Financial need is a requirement for all scholar-

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

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* established as a memorial by the Alden Trust 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 Department of Art, 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 *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 *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 environ-

ment.

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.

The *Patty Y. and A. J. Bekavac Scholarship*. Established in 1997 by their daughter, Nancy Y. Bekavac '69, the scholarship is awarded on the basis of need, with preference given to students from western Pennsylvania.

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 *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, or wildlife preservation, or animal behavior research. The recipient is chosen with the approval of biology and Classics faculty.

The Malcolm Campbell 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 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 fiftieth 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 which so influenced its members.

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 bitter-sweet 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 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 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.

The District of Columbia Scholarship was established by alumni residents in the area of Washington, D.C., to encourage educational opportunity for qualified minority and disadvantaged students. Awards are made on the basis of merit and need.

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

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through involvement in community or environmental activism. The scholarship is renewable through the senior year. (Preference is given to residents of Berkshire County, Massachusetts.)

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 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 with need, whether from near or far. The scholarship is awarded to members of the first-year class and is renewable annually, and provides a summer opportunity grant which is awarded on the recommendation of the Dean.

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 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 Chairman of the Department of Music 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.

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 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 will be awarded each year on the basis of need to a worthy student.

The Ernesto Galarza Scholarship, funded in part by the Ahmanson Foundation and John C. Crowley '41, 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 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 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. Accordingly, in the selection of The Berda Goldsmith Scholar, preference will be given to a student who attended the Settlement Music School; preference also will be given to a student who shows interest and proficiency in playing the piano.

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 '80. 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 who have been 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 sometime 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 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 non-profit 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 Richard Humphreys Fund Scholarship provides assistance to a student (or students) of African descent.

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 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, 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 Howard Cooper Johnson Scholarship, established by Howard Cooper Johnson '96, is awarded on the basis of all-around achieve-

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ment to a male undergraduate who is a member of the Society of Friends.

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 graduates of Strath Haven High School with demonstrated financial need who attend Swarthmore College. Edmund A. Jones was the son of Adalyn Purdy Jones, Class of 1940 and Edmund Jones, Class of 1939, longtime residents of Swarthmore.

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 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, and is renewable through the senior year.

The William H. Kistler '43 Scholarship is endowed in his memory by his wife, Suzanne, and 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 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.

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 Reimer 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 definite

interest in a career in business.

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 in honor of a former distinguished Professor of Engineering and, therefore, students who plan to major in engineering are given preference. An award is made annually.

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 Dickin-son '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.

The David Laurent Low Memorial Scholarship, 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, is awarded to a man or woman who gives 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, established by Frank L. Lyman Jr. '43 and his wife, Julia, on the occasion of his 50th Reunion in 1993, 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, Pennsylvania. 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 December 15.

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 Shool.

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 Meinke Scholarship, established by his friends and former students, to honor Dr. Norman A. Meinke, 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

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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 Florence Eising Naumburg Scholarship, named in 1975 in honor of the mother of an alumna of the Class of 1943, 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 of the 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 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 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 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 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 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 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 Walter Ludwig Schnaring Scholarship was es-

tablished in 1998 by a gift from the estate of Helen Hillborn Schnaring, in memory of her husband. The scholarship is unrestricted and renewable.

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, 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, 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 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 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 sixteen years of stewardship of the College's affairs and his tragic death in its ser-

Financial Aid

vice.

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 Pre-medical Scholarship* is the gift of Harold E. Snyder, Class of 1929. It provides support up to full tuition and fees for junior or senior pre-medical 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 *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 *Harry E. Sprogel Scholarship* was established in 1981 in memory of Harry E. Sprogel '32, and 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*, established in 1980 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 in the State of Illinois.

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 *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 Fund* was established to provide financial assistance on the basis of need and merit.

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

The Barcus Scholarship Fund

The Belville Scholarship

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 Class of 1925 Scholarship Fund

The Class of 1956 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 Kappa Kappa Gamma Scholarship

The Jessie Stevenson Kovalenko Scholarship Fund

The Lafore Scholarship

The E. Hibberd Lawrence Scholarship Fund

The Thomas L. Leedom Scholarship Fund

The Sarah E. Lippincott Scholarship Fund

The Long Island Quarterly Meeting, N.Y., Scholarship

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

Financial Aid

The Sarah W. Shreiner Scholarship
The Walter Frederick Sims Scholarship Fund
The Frank Solomon Memorial 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 Phebe Anna Thorne 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



College Life

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 College students, however, College policies and jurisdiction may apply regardless of the location of the incident. Students should also realize that 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

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 AAUP 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 which 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."

The College policy governing faculty obligation in the area of academic freedom and responsibility is found on page II-A-1 of the *Faculty Handbook*. If a student has a grievance against a faculty member that cannot be resolved directly through the faculty member in-

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 Honesty

(Adopted by the Faculty May 19, 1984)

The *Faculty Handbook* states, "Academic honesty is a foundation of academic life." One of its tenets is that all scholars present as their work only that which is truly their own. For students this standard embraces all work submitted for academic purposes, not only examinations, laboratory reports, term papers, essays, etc., handed in for academic credit, but also papers written for seminar or for class discussion, whether graded or not. Transgressions of this principle are known as *plagiarism*, the use of another's ideas, language or thoughts and representation of them as one's own.

When an instructor suspects plagiarism in a piece of written work, the instructor should present the evidence to the student who submitted it. If the student is unable to remove the instructor's suspicion of guilt, the instructor is required to submit the case to the Dean for consideration by the College Judicial Committee. In its deliberations, the Committee considers the following to be evidence of plagiarism in a piece of writing: (1) the failure to put quotation marks around (or, when appropriate, to indent and to single-space) words, symbols, phrases, or sentences quoted verbatim from any source, whether published or not; (2) the failure to acknowledge one's use of reworded or restated material—even when loosely paraphrased; (3) the inclusion of another's data, ideas or arguments when not acknowledged by footnote and reference.

Writers may refer to a handbook on scholarly writing for information about correct citation procedures. The *MLA Handbook* is particularly useful since 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.

Because plagiarism is considered so serious a transgression, it is the opinion of the faculty that for the first offense failure in the course and, as appropriate, suspension for a semester or deprivation of the degree in that year is not suitable; for a second offense the penalty should normally be expulsion. Cases of alleged academic dishonesty are brought before the College Judicial Committee."

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 which 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 userid, and must take reasonable steps to insure 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 userid 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 Email 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." The Computing Center will from time to time issue guidelines to the use of shared resources. Since 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 which come to the attention of The Computing Center will be referred as appropriate to the offices of the dean, provost or personnel. These offices will consider violations using information provided by the Computing Center. In cases of violation of "f" above, the Computing Center 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 (for example, files in a user's account) the same degree of privacy as personal files in College-assigned space in an office, lab or dormitory (for example, 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, including 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 identifi-

cation upon 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 Colleges 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 degrading³ 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): 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 im-

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.

posed to insure 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 Colleges 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 Advisor, a dean, or others does not obligate a person to file a formal complaint initiating judicial procedures. The Gender Education Advisor will register each request for assistance in resolving a case in-

volving 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 persons genital, anal, or oral openings; touching an unwilling persons intimate parts such as genitalia, groin, breasts, lips, buttocks or the clothes covering them; or forcing an unwilling person to touch another persons 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 persons 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 impair 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 ori-

entation, 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 student's 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 Advisor, a dean, 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 or 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 Advisor, a dean, 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 Advisor, 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 Deans 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.

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 incurred by the College and/or fire department(s).

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 which 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 College Judicial Committee of serious infractions of College regulations, including all formal charges of academic dishonesty, assault, harassment, or sexual misconduct. The College Judicial Committee 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 College Judicial Committee, 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 which is destroyed at the time of the students 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 5- 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, Pittinger, 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, at 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 memor-

ial 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 reserved for single-sex housing. 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 while 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 the Philip T. Sharples Dining Hall. Students living off campus may purchase the board plan if they wish or a \$400 debit card 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 which can be used at Sharples for a meal 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 Cappucino Bar at Kohlberg. 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 which are open to any member of the College community.

The Black Cultural Center, located in the Caroline Hadley Robinson House, provides a library, class room, computer room, tv lounge, kitchen, all-purpose room, a living room/gallery, two study rooms and administrative offices. The Center offers programming and activities designed to stimulate and sustain the cultural, intellectual and social growth of Swarthmore's Black students and community. Further, the Center functions as a catalyst for change and support to the College's effort to achieve pluralism. The Center's programs are open to all members of the College community. The Center and its programs are guided by the director, Tim Sams, with the assistance of a committee of Black students, faculty, and administrators.

The Intercultural Center (IC) is a multipurpose center devoted to developing greater awareness of Asian/Asian American, Latino/Hispanic, Gay/ Lesbian/Bisexual 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 IC provides academic resources, support services and programming that address the needs of students based in the IC and the entire college community.

The director, interns, and associate interns 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, Delta Upsilon and Phi Omicron Psi, 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 seven percent of male students have decided to affiliate with one of the fraternities.

RELIGIOUS ADVISORS

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

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

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

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 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.

The medical facilities of the College are available to students who are ill or who are injured in athletic activities or otherwise, but the College cannot assume additional financial responsibility for medical, surgical, or psychological expenses which are not covered by an individual's health insurance. We expect most students to be insured through family or other plans. For those who have no health insurance, we offer a new and more comprehensive plan at a cost of \$357. Students on financial aid may have the cost of the premium defrayed. Please remember that students and family are responsible for medical expenses incurred while students are enrolled at 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 or the Health Center administrative assistant.

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 are willing to coordinate care with personal health care providers.

As a part of the matriculation process each student must submit a brief medical history and health certificate prepared by the family physician on a form supplied by the College. Pertinent information about such matters as medical problems, handicaps, allergies, medications, or psychiatric disturbances will be especially valuable to the College Health Service in assisting each student. All this information will be kept confidential.

Each student is allowed ten days in-patient care in the Health Center per term without charge. Students suffering from communicable disease such as chicken pox may not remain in their residence hall room and therefore must stay in the Health Center or go home for the period of their illness. Ordinary medications are furnished without cost up to a total of \$300 per semester. A charge is made for special medicines and immunizations, certain laboratory tests, and transportation when necessary to local hospitals.

The Health Center staff cooperates closely with the Physical Education and Athletics Department. Recommendations for limited activity may be made for those students with physical handicaps. Rarely are students excused entirely from the requirements of the Physical Education Department because adaptive programs are offered.

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 represents a

diverse group of psychological, social work, and psychiatric professionals. The director and staff are all part-time but 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 to 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 on Student Leaves of Absence, Withdrawal, and Readmission, pp. 72-73.

For more detailed information about our services, please check our pages on the World Wide Web @<http://www.swarthmore.edu/Admin/health/>.

STUDENT ADVISING

Each first-year student is assigned to a faculty member or administrator who acts as course adviser until this responsibility falls to the chair, or the chair's designate, of the student's major department at the end of the sophomore year. Requests for a change of adviser should be addressed to the associate dean and will be freely granted, subject only to equity in the number of advisees assigned to individual faculty members.

The deans hold overall responsibility for the advising system. They are themselves 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.

Career Planning and Placement

The Career Planning and Placement Office works with students to help them develop knowledge of themselves and of careers, to advance their career planning and decision-making abilities, and to help them develop job-finding and application skills. Individual coun-

College Life

seling sessions and group workshops are designed to help students expand their career options through exploration of their values, skills, interests, abilities, and experiences. Programs are open to 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 in finding worthwhile employment during their time away. Assistance is provided in helping students locate and secure appropriate jobs, internships, and volunteer opportunities, and efforts are made to help students learn 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, on-site field trips, 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 Resources Library includes many publications concerning all stages of the job search process. The office hosts on-campus recruiting by representatives from business, industry, government, nonprofit organizations, and graduate and professional schools. Notices of job vacancies are collected, posted, and included in the office's newsletter. Credential files are compiled for interested students and alumni to be sent to prospective employers and graduate admissions committees.

Academic Support

A program of academic support is available to help all students with difficulties they might encounter in their courses. Recent innovations include a Student Academic Mentoring program open especially to first-year students as well as upperclass students, and a January Academic Skills Workshop. Additional pro-

grams include time management workshops; test-taking workshops; special review sections and clinics attached to introductory courses in the natural sciences, philosophy, and economics; a mathematics lab; an expository writing course; a reading and study skills workshop; and tutors. These programs are overseen by the Deans in cooperation with the academic departments. There are no fees required for any of these supportive services.

To meet the needs of writers who would like to get assistance or feedback, a Writing Center has been established. The center is staffed by writing associates, students trained to assist their peers with all stages of the writing process. The center is located in Trotter Hall and operates on a drop-in basis. Writing associates are assigned on a regular basis to selected courses.

STATEMENT OF SECURITY POLICIES AND PROCEDURES

Swarthmore College is a coeducational institution founded in 1864 by members of the Religious Society of Friends. It occupies approximately 300 acres of privately owned land adjacent to the borough of Swarthmore in Delaware County, Pennsylvania. There were 1,396 undergraduate students enrolled for the 1998-99 academic year with approximately 1,281 occupying college housing. Approximately 649 nonstudent personnel are employed on campus either in a part-time or full-time capacity.

The Department of Public Safety is primarily responsible for the overall security of the campus. Its mission is to "protect persons and property, to preserve the peace, to deter crime, to apprehend criminal offenders, to recover lost and stolen property, to perform services as required, to enforce appropriate college regulations, and to maintain a sense of community security and confidence in the department." It endeavors to accomplish this task through a department comprising a director, assistant director, lieutenant, three sergeants, one corporal, five full-time and four part-time patrol officers. All full-time patrol officers undergo a thorough background check, psychological screening and physical examination before hir-

ing. They are subsequently sworn in as special officers after completing a recognized Pennsylvania State Police Training Academy course for Municipal Police Officers. These officers may exercise full police powers on Swarthmore College property. Local jurisdiction is shared with Swarthmore Borough Police Department with whom a close working relationship is maintained. Campus officers also enforce college rules and regulations. Swarthmore College is considered private property, and trespassers are escorted off campus or arrested.

Additionally, current certification in cardiopulmonary resuscitation, obstructed airway, and standard first aid is minimally required. Many officers have advanced medical certifications. Ongoing training after the Police Academy is provided for all full-time officers.

The Department of Public Safety maintains a 24-hour Communications Division. Trained staff members perform a variety of tasks including operating the college's telephone console and dispatching calls over the mobile radio system. Criminal incidents and other emergencies can be reported directly by dialing x8333 from any college telephone. Nonemergency matters should be reported on extension x8281. These numbers are conspicuously placed on or near all college phones. They are also prominently listed in the college telephone directory and included on the department's printed publications and correspondence. The information received by the Communications staff is broadcast to on-duty patrol officers who respond to the problem. Swarthmore Borough Police vehicles are equipped with transceivers and may also respond. Other appropriate assistance is summoned by the College Communications Officers.

The Department of Public Safety notifies one of the College's student deans in the event of any serious incident involving a student. The dean may mobilize any number of support options for victims of a crime. The Worth Health Center (x8058) is professionally staffed 24 hours a day, seven days a week, while classes are in session. Psychological Services (x8059), the Equal Opportunity Office (x8061), and Resident Assistants round out available on campus options. Women Against Rape (WAR) maintain active chapters near Swarthmore and a 24-hour hot line (566-4342). An up-to-date listing of local therapists including clinical psy-

chologists, social workers, and psychiatrists in private practice is available in the Health Center on request. College employees may use a free, confidential Employee Assistance Program (ACORN) that provides professional counseling to cope with a variety of issues. They can be contacted 24 hours a day by calling (800) 223-7050 or (610) 664-8350.

Public telephones are located on the campus. These are connected to a countywide 911 network for toll-free connection to Delaware County Communications Center which would dispatch Swarthmore Borough fire or police departments to a campus incident.

Significant criminal incidents, arrests by campus police, and suspicious activity are reported to Swarthmore Borough Police on a regular basis. Similarly, criminal events occurring in Swarthmore Borough that could impact the College community are transmitted to the Department of Public Safety. The College does not have any off-campus organizations.

The College community is kept apprised of security matters in a number of ways. Serious incidents are detailed in flyer form and are immediately posted in residence halls, libraries, dining areas and other key locations throughout the campus. Information is also sent via electronic mail to all faculty, staff, and students. A Resident Assistant phone tree system assists in the rapid dissemination of critical information as does the College's radio station (WSRN 91.5 FM). The Office of News and Information works closely with the local news media when any significant College event transpires. Less serious criminal activity is published weekly in the *Phoenix* (the student newspaper).

Signs are posted on all College buildings so as to restrict all others but students, employees, and invited guests. These facilities are locked on a flexible schedule dictated by the College calendar.

The possession and use of alcoholic beverages on the campus is regulated by state law and limited to those areas of the campus that are specified by the Student Council and the dean. The observance of moderation and decorum with respect to drink is a student obligation. Disorderly conduct is regarded as a serious offense. The College's alcoholic beverage policy can be found in its entirety within the annual

publication of the *Student Handbook*.

The College's drug-free campus policy is available in the *Student Handbook* and in the Human Resources office for employees. It is also included in the staff Employee Handbook, as Appendix E and is distributed annually to all students, faculty, and staff.

The use or possession of firearms or other dangerous weapons is not permitted by students, staff, or College Public Safety officers. Known criminal records of students and employees are taken into consideration before admission and/or hiring.

Swarthmore is primarily a residential college in recognition that the close association of students and instructors is an important element in education. Most students live in College residence halls. Single, double, and group rooms are available. There are no graduate or married housing accommodations. Many members of the faculty and staff live on or near the campus and are readily accessible to students.

New students are assigned to rooms by the Office of Residential Life. Efforts are made to follow the preferences indicated by the students and to accommodate special needs. Other students choose their rooms in an order determined by lot or by invoking special options. Requests for room changes can be made by notifying the Director of Residential Life of room preferences under guidelines distributed by the Residential Life Office throughout the year.

Students are permitted guests in College housing so long as their resident assistants and housekeepers are duly notified. Guests of the College are housed separately in facilities apart from the main campus. Residence Halls (except Parrish Hall) are normally locked 24 hours a day. Automatic locks on outside residence hall doors are supplemented by posted warnings that these facilities are private property, and access is restricted. Students' residence hall room doors are individually keyed. Cores are changed in response to any significant security breach such as a stolen room key. Residence hall room doors are augmented with safety chain locks. Residence hall windows are equipped with screens and locking devices to deter unauthorized entry. Regular interior and exterior patrols are made by College Public Safety officers. Resident assistants are selected

to serve in all residence halls and have on-site responsibility for security, fire protection, and general safety. A review of security concerns, procedures, and services are published yearly in the *Swarthmore College Student Handbook*.

The Department of Public Safety operates under the philosophy that it is preferable to prevent crime from occurring than to react to it after the fact. The principal instrument for accomplishing this goal is the College's Crime Prevention program. It is based upon the dual concepts of eliminating or minimizing criminal opportunities whenever possible and encouraging community members to be responsible for their own security and the security of others. The following is a listing of the Crime Prevention programs and projects employed by Swarthmore College.

Swarthmore College Shuttle Bus: A student operated, radio equipped van transports students free of charge in and around the main campus during the evening and early morning hours.

Tricollege Shuttle Bus: Free transportation is provided to students traveling between Haverford, Bryn Mawr and Swarthmore colleges. This service is available from approximately 7 a.m. to 2 a.m.

Escort Service (Garnet Patrol): The Student Garnet Patrol program provides a deterrent to assault on campus and increases security consciousness in the College community. Members escort people after dark, notice and report to Public Safety suspicious strangers or incidents, increase the Public Safety Department's awareness of students' concerns, and increase the level of traffic along key walkways on campus.

Crime Prevention Publicity: Articles and material are routinely published and distributed. Fire and Crime Prevention films are shown to R.A.'s and student groups on request.

Electronic Alarm Systems: A proprietary electronic alarm system monitors a network of intrusion detection and duress alarm systems.

Security Surveys: Comprehensive security surveys are made for a number of campus offices and facilities each year.

Operation Identification: This community venture into property identification works to deter thefts and assist in the recovery of stolen items.

Bicycle Registration: The Department of Public Safety encourages bicycle owners to register their bikes. Decals and engraving are part of

this free program. High-security bike locks are carried by the college Bookstore.

Rape Awareness, Education, and Prevention: Presentations and publications are made each year to members of the college community.

Crime statistics and rates for the most recent three-year period are available on request from the Department of Public Safety.

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 (c), and the Federal "Crime Awareness and Campus Security Act." For 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; (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 ten 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 formal 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 Sarah Ioannides, 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 Early Music Ensemble*, directed this year by guest 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.

Instrumentalists and singers can also participate in the chamber music coaching program coordinated by Dorothy Freeman. 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,

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performs frequently at the College and elsewhere.

We offer academic credits in conjunction with studios to support private instrumental and vocal lessons for qualified students; please refer to pp. 76-83 (Awards and Prizes and Fellowships) and p. 253 (Music Department, 048).

The Orchestra each year sponsors a *Concerto Competition*, open to all Swarthmore College students. Auditions for the competition are normally held right 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 sixteen 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 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 Professor Sharon Friedler, strives to foster a cooperative atmosphere in classes and performance situations.

The Swarthmore College Dancers 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, 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.

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 Department of Physical Education and Athletics sponsors a coeducational performance group in Folk Dance.

Theatre

Associate Professor Allen Kuharski is Director of the Theatre Studies Program. Interested students should consult the departmental statement for Theatre Studies.

The Theatre Studies Program 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 (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 LPAC staff office is another potential source of theatre-related student employment. For information, contact Susan Smythe. Professional internships are strongly recommended to Theatre Studies majors and minors and are available at theatres throughout the Philadelphia area and around the country. See Professor Kuharski for details.

Athletics

Swarthmore's athletic policy is based on the premise that any sports program must be justified by the contributions which 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. TRIO/Upward Bound 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, Michael Robinson.

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 294, connects community-articulated needs with students, faculty, and staff interested in making a difference; and promotes student leadership in development and implementation of community-based initiatives. The office coordinates community-based service and learning initiatives of students, faculty and staff and is a liaison between the College and community partners. The office is staffed by Director Patricia James and Assistant Deborah Higgins.

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.

Community Service Advisory Board (CSAB). CSAB comprises students, faculty, staff, and community partners; fosters dialogue between the College and the larger community; guides development of new and current programs; and supports the office to provide information, advice, mentoring, training, evaluation, and opportunities for reflection and appreciation for individual students, groups, and faculty in-

volved in service learning.

Swarthmore Foundation. The foundation, administered by the office, provides grants of up to \$3,000 for students, faculty, and staff to conduct community service and social change projects. Grants support program and living expenses and are offered three times per year. The office supports the work of *Lang Scholars*, and coordinates the *Lang Opportunity Open Competition*, which provides one or two grants of up to \$10,000 to conduct more substantive service and social change projects.

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. *Adolescents Promoting Excellence (APEX)* works with young people at the Chester YWCA.
2. *ALEAP (Asian Literacy Education Advocacy Project)* tutors adult immigrants in Philadelphia.
3. *Campus Coalition Concerning Chester (C4)* addresses environmental racism in Chester.
4. *Chester Tutorial* works one to one with middle school students in weekly tutoring and home work enrichment sessions.
5. *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.
6. *CHOP Kids* facilitates student volunteerism at the Children's Hospital of Philadelphia.
7. *Learning for Life* pairs trained students with college staff to work on literacy, math, computer, history, and creative writing skills.
8. *Positive Alternatives* in Chester works with girls at the YWCA in Chester.
9. *Science for Kids* introduces science to fourth

graders at Stetser Elementary School in Chester.

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

11. *Students Promoting Environmental Equity in Chester (SPEEC)* helps kids in Chester discover the connections among themselves, their community, and their natural environment.

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

13. *Swarthmore Adult Literacy Tutoring (SALT)* provides one-to-one and small-group adult literacy tutoring to adults.

The Swarthmore Foundation

The Swarthmore Foundation provides grants three times 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 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.

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, the Alumni Council, 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 the Office of Career Planning and Placement 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 gives staff support also to regional alumni and parent groups, called Connections, in Philadelphia; Pittsburgh; New York City; Boston; Washington, D.C., and Baltimore; North Carolina; Chicago; San Francisco; and Seattle.

There are 17,316 alumni: 8,917 men, 8,399 women, and 1,278 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.

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.

The Office hires students to write routine press releases and perform clerical duties.

COLLEGE PUBLICATIONS

The Publications Office creates a variety of printed communications for the College community. The quarterly *Swarthmore College Bulletin* is 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, 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 and the Internet. The office publicizes campus events, programs, and research and works to

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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. 75), but variation in this term, particularly as a result of Advanced Placement credit, is possible (see p. 23).

The selection of a program will depend upon the student's interests and vocational plans. The purpose of a liberal arts education, however, is not primarily to provide vocational instruction, even though it provides 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, insight, and discrimination.

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 advisor.

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 which provide opportunities for further exploration. During the senior year many departments offer a spe-

cially designed Senior Honors Study for Honors majors and minors to encourage enhancement and integration of the Honors preparations. At the close of the senior year, candidates for Honors will be evaluated by visiting examiners.

The program for Engineering students follows a similar basic plan, with certain variations which are explained on p. 143. Courses outside the technical fields are distributed over all four years.

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

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 towards 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 before graduation.
2. Take at least three credits in each of the three divisions of the College (listed below), the third credit of which can be AP credit or credit awarded for work done elsewhere.
3. Of the 3 credits in each division, take at least 2 credits which are in different departmental subjects and are also designated primary distribution courses. This will make a total of six primary distribution courses, each in different departments, 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,

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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.

Nondivisional: Courses listed by only interdisciplinary concentrations do not satisfy the divisional distribution requirement.

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 which 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 in a division (with the exception of English Literature courses numbered 001A, 001B, 001C; Music courses numbered 040-049, and Dance, courses numbered 001-012 and 040) may be chosen as the third distribution course in that division, including AP credit or credit awarded for work done elsewhere. Some courses may be designated as qualifying for distribution (including primary distribution) within more than one division. One-credit courses so designated can be counted in only one of those divisions; multicredit courses so designated may be counted for distribution in two or more divisions.

A course cross-listed between departments, within or across divisions, will fulfill the distri-

bution requirement only for the department and division of the professor who offers the course. Unless designated otherwise, courses taught jointly or alternately by faculty members of departments in different divisions may not be used to satisfy distribution requirements.

Students who have been granted credit and advanced placement 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 eight 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. 75). 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. 73.

Early in the sophomore year, the student should identify two or three subjects as possible majors, paying particular attention to departmental requirements and recommendations. In the spring of the sophomore year, each student will, with the guidance of his or her advisor, prepare a reasoned plan of study for the last 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 advisors assist students in preparing their academic programs, students themselves are individually responsible for planning and adhering to programs and for the completion of graduation requirements. Faculty advisors, department chairs, other faculty members, the deans, and the registrar are available for information and advice.

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 which 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 catalogue 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. In some areas, such as Biochemistry, Computer Science, Dance, Linguistics, and Psychobiology, in which special majors are done frequently, the departments 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 and can 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, omitting some of the breadth requirements of the major field; but 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. 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.

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;

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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. While 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, and include seminars, 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. (Double majors may participate in the Honors Program through three preparations in one major and one preparation in the other). 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 program or concentration.

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 to the Office of the Registrar a formal application for a specific program of Honors preparation. 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. Normally, Honors Programs may not be changed after December 1 of a student's senior year, depending on departmental policies. 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 upon 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.

At the end of the senior year the decision of the degree of Honors to be awarded the candidates is entirely in the hands of the visiting examiners. Upon their recommendation, successful candidates are awarded the bachelor's degree with Honors, with High Honors, or with Highest Honors.

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 Advanced Placement credits, perhaps combining them with extra work by special permission. In such cases students may qualify for advanced standing—they may become juniors in their second year. To qualify for advanced standing a student must

(1) do satisfactory work in the first semester; (2) obtain 14 credits by the end of the first year; (3) intend to complete the degree requirements in 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 three 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 are physically handicapped, 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; but 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. 24). 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 leave takers available through the College Venture Program is in the Career Planning and Placement Office.

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 five courses, or three courses, with special permission. College policy does not permit programs of fewer than three courses within the normal eight semester enrollment. Programs of more than five courses or fewer than four courses require special permission (see p. 24 on tuition and pp. 71-72 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 cred-

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its in another term. Students may do as many as two attachments each year.

Directed Reading and Tutorials

Directed reading and tutorials 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 tutorials. 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 focussed 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 December 1 (for the spring term) or May 1 (for the fall term) 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 providing 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 above 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 four 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 one 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, and 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 called Concentrations in Black Studies, Computer Science, Environmental Studies, Francophone Studies, German Studies, Interpretation Theory, Latin American Studies, Peace and Conflict Studies, Public Policy, and Women's Studies. Study in a Concentration can either be in combination with a student's regular major or prepared as a minor in the Honors Program. 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; that a considerable number of courses are cross-listed between departments; that each year some courses are taught jointly by members of two or more departments; and that 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-anthropology, in engineering and social sciences, or 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 Advisor to plan their programs. Specific requirements for each medical, dental, and veterinary school, along with much other useful information, are given in the following publications, which are available in the Health Sciences Office: *Medical School Admission Requirements*, *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 either the Course or the Honors Program and 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 Advisor meets periodically with students interested in health careers and is available to assist students in planning their programs in cooperation with students' own academic advisors. The Health Sciences Office publishes *Guide to Premedical (Pre dental and Preveterinary) Studies for First- and Second-year Students 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* con-

Educational Program

tains detailed information about the application process.

Further information on opportunities, requirements, and procedures can be obtained from the Health Sciences Advisor and from the Health Sciences Office's pages on the Swarthmore College Web site.

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, and Music and Dance.

COOPERATION WITH NEIGHBORING INSTITUTIONS

With the approval of their faculty advisor 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.

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 is 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 partici-

pants to the institution with which the exchange takes place.

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 advisor, 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 advisor 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 academic year following return to the College. All students who study abroad must complete the accreditation process immediately upon return.

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. Should there be places available, applications from students at other institutions are accepted. 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 direc-

tor. 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 October 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 which 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 comprised of 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 Foreign Study Office, along with the academic departments and programs of the College, will advise students on this. Information on foreign study programs is available in the Foreign Study Office.

Financial aid may be applied to study abroad, with the approval of the Foreign Study Office. 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 Foreign Study Office.

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 1993

Swarthmore College's six-year graduation rate, based on the 1992 new first-year student cohort, is 92 percent.

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

Instructors report to the Dean's and Registrar's Offices at intervals during the year upon the work of students in courses. 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; X means that 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 to indicate "In Progress." 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 preclude the completion of the work by this date, a grade of Incomplete (*Inc.*) may be assigned with the permission of the registrar. 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 (on consultation with the Committee on Academic Requirements) 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 (credit) and NC (no credit). 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 middle of the semester, students may reconsider and opt to receive a formal grade in the course. This course will count as one of the four optional Credit/No Credit courses. Repeated courses may not be taken Credit/No Credit. 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 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 Credit/No Credit 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. Letter grade equivalents only, for first semester freshmen courses only, may be provided to other institutions if requested by the student and absolutely required by the other institution.

Repeated Courses

Some courses can be repeated for credit; these are indicated in departmental course descriptions. For other courses, the following rules apply: Permission to repeat a course must be obtained from the Swarthmore instructor teaching the repetition. 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. For possible credit for such work done elsewhere, the chair's permission needs to be obtained as a part of the credit approval and validation processes.

For repeated courses in which the student withdraws before the midpoint of the semester, 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 applicable to the Swarthmore degree. Repeated courses may not

be taken Credit/No Credit.

Reports of grades are sent to students at the end of each semester. They are not routinely sent to parents or guardians, but such information may be released when students request it.

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, D- = 0.67). Grades of Credit/No Credit 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 advisors. Fines are imposed for late or incomplete registration or enrollment.

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

Applications for late entrance into a course or for withdrawal (with deleted course registration) must be delivered to the Registrar's Office within the first two weeks of the semester. Applications involving withdrawal from a course (with the permanent grade notation W) must be received not later than the middle of the semester, or the midpoint of the course if it meets for only one-half a semester. After the midpoint of the semester, or of the course if it meets for part of a semester, late withdrawals are recorded on the student's record with the notation NC (No Credit), unless the student withdraws from the College (see p. 72).

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

Faculty Regulations

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, announcement of which was made in advance, shall be given an examination at another hour only by special arrangement with the instructor in charge of the course.

No examination in absentia shall be permitted—instructors shall give examinations only at the College and under direct departmental supervision.

ACADEMIC HONESTY

Members of an academic community have an unequivocal responsibility to present as the result of their own work only that which is truly theirs. Cheating, whether in examinations or by plagiarizing the work of others, is a most serious offense, and one that strikes at the foundations of academic life.

The responsibility of the faculty in this area is threefold: to explain the nature of the problem to those they teach (the faculty's statement concerning plagiarism may be found in *The Student Handbook*), to minimize temptation, and to report any case of cheating to the Dean for action by the College Judiciary Committee.

The College Judiciary Committee will consider the case, make a finding of guilty or not guilty, and determine an appropriate sanction if a finding of guilt is reached. The order of magnitude of the penalty should reflect the seriousness of the transgression. It is the opinion of the faculty that for the first offense failure in the course and, as appropriate, suspension for a semester or deprivation of the degree in that year is not unsuitable; for a second offense the penalty should normally be expulsion. A full description of College judicial procedure may be obtained from the Office of the Dean.

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 prior to the deadline published each semester (usually December 1 and April 1). The form indicates 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 student may be required to withdraw by the College. After a considered review of the problematic behavior, this determination is made by 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. The Evaluation Committee 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 involuntarily, may apply for readmission by writing to

the dean of the College. In the case of mental health withdrawal, 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 will be required to provide appropriate documentation of increased ability to function academically and in a residential environment, and/or of decreased hazard to health and safety of self and/or others. 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 may include the completion of any outstanding "Incompletes" on record.

After such evidence has been provided, the materials will be forwarded to the Evaluation Committee. In the case of health-related withdrawals, the student will be required to be evaluated in person by the director of Worth Health Center and/or the director of Psychological Services, or designates as appropriate. 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.

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.

The College Venture Program

The College Venture Program, supported by Swarthmore College, Bates College, Brown University, Connecticut College, Hobart and William Smith Colleges, the College of Holy Cross, 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 Planning and Placement Office.

SUMMER SCHOOL WORK AND OTHER WORK DONE ELSEWHERE

Students desiring to receive Swarthmore College credit for work at another school are required to obtain preliminary approval and after the fact validation by the chair of the Swarthmore department or program concerned. Preliminary approval depends upon 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 upon evaluation of the materials of the course including syllabus, reading lists, written papers, and examinations by the Swarthmore department or program concerned after the work has been done. 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 accreditation.

Requests for credit must be made within the academic year 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.)

Faculty Regulations

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. At least an average grade of C in the Swarthmore courses counted for graduation. (See p. 71.)
3. Complied with the distribution requirements and have completed at least 20 credits outside the major. (See pp. 61-63.)
4. Fulfilled the foreign language requirement, having either: (a) passed three years or their equivalent (as determined by the provost) of one foreign language while in grades 9 through 12, (b) achieved a score of 600 or its equivalent in a foreign language on a standard achievement test, or (c) passed one year of a foreign language while at Swarthmore.
5. Met the requirements in the major and supporting fields during the last two years.
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. 73 and in statements of the Department of Physical Education and Athletics.
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 which admit candidates for the degree.

The tuition fee for graduate students who are candidates for the master's degree is \$23,964.

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 McCabe Engineering Award, founded by Thomas B. McCabe, 1915, is presented each year to the outstanding engineering student in the Senior Class. The recipient is chosen by a committee of the faculty of the department of Engineering.

Flack Achievement Award, established by Jim and Hertha Flack in 1985, is given to a deserving student who, during his or her first two years at the College, has demonstrated a good record of achievement in both academic and extracurricular activities and has leadership potential.

The Academy of American Poets awards \$100 each year for the prize poem (or group of poems) submitted in a competition under the direction of the Department of English Literature.

The Adams Prize of \$200 is awarded each year by the Department of Economics 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, given in memory of this member of the Class of 1974 by Shing-mei P. Altman '76, is awarded by the Department of Art 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 is judged by the Department of Chemistry to have the best performance in chemistry and overall academic achievement.

American Institute of Chemists Award is given to the student who is judged by the Department of Chemistry to have the second best record in

chemistry and overall academic performance.

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, which are given by the Music faculty each semester to approximately six to eight students, 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, honoring Brand Blanshard, Professor of Philosophy at Swarthmore from 1925 to 1945, has been established by David H. Scull, of the Class of 1936. The award of \$100 is presented annually to the student who, in the opinion of the Department, 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-Anthropology Department, and it carries a cash stipend.

The Heinrich W. Brinkmann Mathematics Prize, honoring Heinrich Brinkmann, Professor of Mathematics, 1933-1969, was established by his students in 1978 in honor of his 80th birthday. Awards of \$100 are presented annually to the student or students who, in the opinion of the Department of Mathematics and Statistics, 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, since entering College, the best record for scholarship, character, and influence.

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 to the student or students who, in the opinion of the Asian Studies Committee, submit the best essay on any topic in Asian Studies.

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

The Deans' Awards are given to the graduating seniors who, in the judgment of the deans, have made significant and sustained contributions to the building of community at Swarthmore.

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, 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 to support the essential costs of the study of

biological problems in a natural environment.

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, provides grants for travel outside the United States and Canada for students majoring in the Humanities.

The Arthur Fennimore Award. The Arthur Fennimore Award, named in memory of the distinguished pianist who lived in Swarthmore, is given each semester by the Music faculty to an outstanding pianist. The award subsidizes the entire cost of private lessons for the semester.

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 048 (Individual Instruction) program. The award subsidizes the entire cost of voice lessons for that semester.

Edwin B. Garrigues Music Awards. Naming Swarthmore as having one of the top four music programs in the Philadelphia area, the Edwin B. Garrigues Foundation established awards to subsidize the entire cost of private instrumental or vocal lessons for a limited number of gifted students, often incoming first-year students. These awards, which are given

Awards and Prizes

each semester by the Music faculty to approximately 10-15 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, bequeathed by Victor Gondos Jr. in honor of his wife, Class of 1930, is given every other year to a student of Swarthmore College who, in the opinion of a faculty committee, 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 will be given to essays based on works read in the original language. Awarding of the prize will be under the direction of the Literature Committee.

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 Department of English Literature. They are awarded to the two students who in the opinion of the Department submit the best critical essays on any topic in the field of literature.

The Jesse H. Holmes Prize in Religion of \$150, donated by Eleanor S. Clarke of the Class of 1918 and named in honor of Jesse Holmes, Professor of History of Religion and Philosophy at Swarthmore from 1899 to 1934, is awarded to the student who, in the opinion of the Department of Religion, 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 per-

sonal 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 Department of Biology.

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, established in her memory by family and friends, 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, established by his family and friends, is awarded by the Biology Department to a graduating senior

whose major is Biology and 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, 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 to support the essential costs of the study of biological problems in a natural environment.

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 Extemporaneous 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 of the Class of 1946, goes to that student who is judged to have submitted the best original poem in the annual competition for this \$200 award. The Fund also supports campus readings by visiting poets.

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 subsidi-

dize two-thirds of the cost of ten lessons, as part of the Music 048 program. For more information, please refer to Credit for Performance—Individual Instruction (Music 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 to that undergraduate who, in the opinion of the Committee of Award, 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 upon 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 faculty of the Department of Physical Education and Athletics to the senior woman who by her loyalty, sportsmanship, and skill in athletics has made a valuable contribution to Swarthmore College.

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 academic year 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 Department of Engineering to the outstanding student entering the junior class with a major in engineering.

The William Plumer Potter Public Speaking Fund, established in 1927, in addition to providing funds for the collection of recorded literature described on page 11, sponsors awards for the best student short stories, and is a major source

Awards and Prizes

of funds for campus appearances by poets and writers.

The Dinny Rath Award. The Rath Award 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. The Rath Award is administered by the Athletics Department.

Judith Polgar Ruchkin Prize Essay is an award for a paper on politics or public policy written during the junior or senior year. The paper may be in satisfaction of 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 Department of Political Science to be of outstanding merit based upon 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. Interns are selected by the coordinators of the Environmental Studies and Public Policy concentrations in alternate years.

The Frank Solomon Jr. Student Art Prize 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 in the view of the Dance faculty best exemplifies Hally Jo's dedication to the ideals of dance. It carries a cash stipend.

The Karen Dvonceh 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. At graduation time, 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 Office of the Provost.

The Melvin B. Troy Prize. The Melvin B. Troy Prize of \$250 is given each year for the best, most insightful paper in Music or Dance, or composition or choreography by a student, judged by the Music and Dance Department. The prize was established by the family and friends of Melvin B. Troy '48.

The P. Linwood Urban Jr. Prize, honoring Lin Urban, Professor of Religion at Swarthmore from 1957 to 1989, is awarded annually to a graduating senior planning to continue religious studies either in seminary or graduate school.

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 fund is administered by the Engineering Department.

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 to 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 award itself is to be made by the President 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

Three fellowships (the *Leedom*, *Lippincott*, and *Lockwood* Fellowships—see below) are awarded annually by the Faculty, and two fellowships (the *Mott* and *Tyson* Fellowships—see below) 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 which 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 which overall do not discriminate on the basis of sex. These fellowships are:

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, founded by the Somerville Literary Society and sustained by the contributions of Swarthmore alumnae. It is awarded each year to a woman senior who is to pursue advanced study in an institution approved by the Committee.

The Martha E. Tyson Fellowship, founded by the Somerville Literary Society in 1913 and sustained by the contributions of Swarthmore alumnae. It is awarded each year to a woman senior 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 below:

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, to be awarded to a graduating senior for the first year of graduate work, is intended to encourage outstanding scholars to pursue an

academic career. The recipient, who must be a United States citizen or permanent resident, will receive the amount necessary to cover tuition, fees, and subsistence allowance for study directed toward a Ph.D. 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 a graduate of the College, provides a grant toward the first year of study at the Harvard Business School. Yvonne and Thomas B. McCabe Jr. were for a time residents of Cambridge, Massachusetts, and Mr. McCabe received the 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 Ph.D. 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

Fellowships

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 \$2,500 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.

Teachers for Tomorrow Fellowships are offered to ten 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 that 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.

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 1953-70. 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. Blanshard 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. Upon recommendation of the Selection Committee, there may be a small additional grant 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. Upon recommendation of the Selection Committee, there may be a small additional grant 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, and up to four may be chosen. 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 support wholly or in part 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. 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 upperclass 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 1999.
 - 2 Absent on leave, spring 2000.
 - 3 Absent on leave, 1999-2000.
 - 4 Absent on administrative leave, 1999-2000.
 - 5 Fall 1999 (appointment that semester only).
 - 6 Spring 2000 (appointment that semester only).
 - 7 Joint appointment with Philosophy.
 - 8 Campus coordinator, Swarthmore Program in Grenoble, fall 1999.
 - 9 Campus coordinator, Swarthmore Program in Grenoble, spring 2000.
 - 10 Program director, Swarthmore Program in Grenoble, fall 1999.
 - 11 Program director, Swarthmore Program in Grenoble, spring 2000.
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Art

MICHAEL W. COTHREN, Professor of Art History
RANDALL L. EXON, Professor of Studio Art and Chair
CONSTANCE CAIN HUNGERFORD, Professor of Art History
T. KAORI KITAO, Professor of Art History²
BRIAN A. MEUNIER, Professor of Studio Art
MARIBETH GRAYBILL, Associate Professor of Art History²
SYDNEY L. CARPENTER, Associate Professor of Studio Art
CELIA B. REISMAN, Assistant Professor of Studio Art³
PAUL H. KING, Visiting Lecturer in Studio Art (part-time)
CAMARA DIA HOLLOWAY, Visiting Instructor of Art History and Minority Scholar in Residence
JUNE V. CIANFRANA, Administrative Assistant

2 Absent on leave, spring 2000.

3 Absent on leave, 1999-2000.

The Department of Art 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 which 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 six or seven 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 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 supports List Gallery exhibitions.

Donald Jay Gordon Visiting Artist; Heilman Artist: Each year the Department of Art 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 non-majors.

Lee Frank Lecture: See p. 15.

Benjamin West Lecture: See p. 15.

Jonathan Leigh Altman Scholarship: See p. 28.

Jonathan Leigh Altman Summer Grant:

See p. 76.

Frank Solomon Jr. Student Art Prize: See p. 80.

REQUIREMENTS AND RECOMMENDATIONS

Prerequisites: ARTH 001 is the prerequisite for most other art history courses in the Department. 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 Department approves a credit for Advanced Placement, grade 5 in Art History and Studio Arts (with submission of a portfolio), but it does not normally waive the prerequisite.

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 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 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.

The Course Major in Art History: Art History majors are required to take ARTH 001, 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.

The Course Major in Art: The combined program of the Course Major in Art consists of

four courses in Art History (ARTH 001, ARTH 002 or ARTH 003 or another course on art before 1700, and three elective credits) and seven courses in Studio Arts (including courses in drawing, another 2-D medium, and a 3-D 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.

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 guideline 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.

Each semester. Staff.

ARTH 002. Western Art

An historical introduction to the forms, meanings, functions, and contexts of Western art and architecture from ancient Mediterranean civilizations to the 20th century.

No prerequisite.

Fall 1999 and 2000. Kitao.

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.

No prerequisite; open to freshmen.

1 credit.

Spring 2000. Staff.

ARTH 004. Critical Study: Picasso

Sections of this course pursue the goals of Critical Study in the Visual Arts (ARTH 001) through case studies that principally focus on the art of Picasso.

No prerequisite.

Primary distribution course. 1 credit.

Spring 2000. Hungerford.

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, the efflorescence of monastic art under the Cluniacs and Cistercians, and the neoplatonic aesthetic that gave birth to the Gothic.

Prerequisite: ARTH 001.

1 credit.

Not offered 1999 and 2000. Cothren.

ARTH 017. Nineteenth-Century European Art

Art of the revolutions of 1789, 1830, and 1848 (David, Delacroix, Courbet); addresses to modern life by the Pre-Raphaelites and by Manet, Degas, and such Impressionists as Monet and Morisot; challenges to realism by Rodin, Cezanne, van Gogh, and Gauguin. The work of individual artists considered with reference to social, political, economic, and cultural factors and with reference to current theoretical debates regarding interpretation.

Prerequisite: ARTH 001 or ARTH 002.

1 credit.

Fall 1999 and 2000. Hungerford.

ARTH 018. Twentieth-Century Western Art

Painting and sculpture in Europe from artists such as Picasso, Matisse, Kandinsky, Mondrian, and the Russian avant-garde, through reactions to the Great War, as in Duchamp and the Surrealists; then in the United States from

Abstract Expressionism to the present. Consideration of relevant social, political, economic, and cultural factors and to the developing critical discourse.

Prerequisite: ARTH 001 or ARTH 002.

1 credit.

Spring 2000. Hungerford.

ARTH 025. Arts of Africa

1 credit.

Not offered 1999-2000.

ARTH 027. African-American Art

This course traces the history of art and visual culture produced by people of African descent in the United States from the nation's inception in the late 18th century up until the contemporary moment. Issues fundamental to the discussion of this material will include the definition and representation of race, the history of American race relations, the role of art and visual representation in American culture; and the identities that blacks invented for themselves.

No prerequisite.

1 credit.

Fall 1999. Holloway.

ARTH 029. Film: Form and Signification

Study of film as visual and iconic discourse as opposed to narrative text, dealing with the principles of framing, editing, and mise-en-scene understood as critical tools and as a historical evolution from the silent days to Godard and Bergman. Topics include: rise of photography; magic shows and the comic strip; silent comedy and the musical; cinema and painting, Renoir and Italian Neorealism, and Dreyer and semiotics of cinema. Two lectures and a screening session.

No prerequisite. Sophomore and above.

Limited to 20.

1 credit.

Not offered 1999-2000. Kitao.

ARTH 031. Traditional Japan

(Cross-listed as HIST 010)

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.

1 credit.

Spring 2001. Graybill and Li.

ARTH 032. Arts of the Buddhist Temple in Japan

A study of the architecture, sculpture, painting and decorative arts associated with the Buddhist Temple in Japan, from the 7th to 13th centuries.

1 credit.

Offered occasionally. Graybill.

ARTH 034. Japanese Painting and Prints, 1550-1850

The period covered in the course follows Japanese art from the heyday of military warlords to the rise of an urbane merchant class. Attention to aesthetics, techniques, and social contexts of castle murals, Zen ink landscapes, "Western-style" painting, and prints of actors, courtesans, and erotica for the mass market.

Prerequisite: ARTH 001 or ARTH 003 or permission of the instructor.

1 credit.

Fall 1999. Graybill.

ARTH 037. Approaches to Tibet

(Cross-listed as ASIA 041 and RELG 044)

An approach to Tibet from multiple disciplines, viewpoints, and historical time frames, in a reading/research seminar. Main themes include Tibet's historical and modern relations with India and China, and Tibetan Buddhism and its visual culture. The course will coincide with an exhibition on campus of Tibetan Buddhist art.

Prerequisite: ARTH 001 or 003 or 038.

1 credit.

Fall 1999. Graybill.

ARTH 038. Ritual and Image in the Buddhist Traditions

(Cross-listed as RELG 038)

An interdisciplinary exploration of the unity and variety of Buddhist traditions of Asia, within their historical development. Focus on Buddhist visual arts (narrative and iconic

sculpture and painting; shrine and monastic architecture) and material culture (shrines and their relics, pilgrimage places, and mummies and portraits) in relation to ritual practice.

Prerequisite: ARTH 001 or 003, or RELG 001, 008, 009 or 012. Counts toward a program in Asian Studies. Honors candidates may combine this course with ARTH 038A, a seminar attachment.

1 credit.

Spring 2001. Graybill.

ARTH 038A. Seminar Attachment to ARTH 038 for Honors Preparation

Prerequisite: Permission of the instructor.

1 credit.

Spring 2001. Graybill.

ARTH 038B. Buddhist Art: Icon, Narrative, and Sacred Space

A survey of the rich variety of Buddhist architecture, sculpture, and painting in South, Southeast, Central and East Asia.

1 credit.

Offered occasionally. Graybill.

ARTH 039. Meiji Japan: Ideology and Representation

(Cross-listed as EAST H290B at Haverford College)

An interdisciplinary study of the ideology of the construction of Japan as a modern nation.

1 credit.

Offered occasionally. Graybill and Mizenko.

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

(Also listed as Religion 29.) 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.

Prerequisite: ARTH 001.

1 credit.

Not offered 1999-2000. Cothren and Ross.

ARTH 047. Special Topics in Medieval Art

In a colloquium setting students will study in depth and from a variety of critical perspec-

tives a small set of medieval works of art. In Fall 1999 the focus will be on visual narrative.

Prerequisite: ARTH 001.

1 credit.

Fall 1999. Cothren.

ARTH 051. Renaissance Picture

Study of the picture as conceived and shaped in the Renaissance and further developed thereafter, examining topics of pictorial representation both in theory and in practice.

Prerequisite: ARTH 001 or 002.

1 credit.

Not offered 1999-2000. Kitao.

ARTH 053. Michelangelo and His Times

Michelangelo, his art and thought, his Quattrocento sources, and his relationship with Leonardo, Raphael, the Mannerists, and his patrons in 16th Century Italy.

Prerequisite: ARTH 001 or 002.

Not offered 1999-2000. Kitao.

ARTH 055. Rembrandt and His Times

(See description for ARTH 155.)

1 credit.

Not offered 1999-2000. Kitao.

ARTH 061. Everyday Things

Historical and cross-cultural study of artifacts in our everyday visual and physical environment, from paper clips and nails to furniture and appliances, as well as machines and apparel items—how they are conceived, made, seen, used, and interpreted; design theory and semiotics, handicraft and manufacture; standardization; marketing, packaging, and advertising.

Sophomore and above.

No prerequisite.

1 credit.

Not offered 1999-2000. Kitao.

ARTH 062. Streets and Passages

Historical and cross-cultural study of architectural and urban spaces in the light of semiotics and design theory. How spaces and their components are conceived, constructed, experienced, used, and interpreted.

No prerequisite. Sophomore and above.

1 credit.

Not offered 1999-2000. Kitao.

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.

Prerequisite: ARTH 001 and/or ARTH 061 or 062.

1 credit.

Fall 1999. Kitao.

ARTH 074. History of Photography

A look back at photography's existence from the medium's emergence in the early 19th century up to the present moment. We will examine the variety of photographic technologies, photography's key practitioners, and significant texts discussing the nature of the medium and its potential applications. Although the role that photography has assumed in society will be a fundamental concern, the emphasis of the course will center on photography's contribution to the arts and visual culture.

No prerequisite.

1 credit.

Spring 2000. Holloway.

ARTH 075. Special Studies in Cinema

Study of selected films in wide-ranging genre but with a special focus, encompassing semiotics and other critical theories and problems.

Prerequisite: ARTH 001 and/or ARTH 009.

1 credit.

Offered occasionally. Kitao.

ARTH 086. Architectural Theory

Special study on traditional and contemporary architectural thoughts: classicism, functionalism, systems design, semiotics, structure and decoration, and other topics.

Prerequisite: ARTH 061 or 064 and instructor's approval.

1 credit.

Offered occasionally. Kitao.

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 and three other credits in art history will be admitted to this course with the permission of the instructor.)

1 credit.

Spring 2000 and 2001. Cothren.

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.

1 credit.

Staff.

SEMINARS

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

ARTH 132. Arts of the Buddhist Temple in Japan

See description for ARTH 032.

2 credits.

Offered occasionally. Graybill.

ARTH 135. Eighteenth-Century Japanese Painting and Its Contexts

An exploration of intersections between the visual arts and the political, social, and intellectual history of 18th-century Japan.

2 credits.

Offered occasionally. Graybill.

ARTH 136. Japanese Popular Culture of the Edo Period: Sex, Lies, and Mass Marketing

A study of the performance and commodifica-

tion of gender and class in the literature, illustrated books and prints, *kabuki* theatre, and prostitution quarters of 17th- and 18th-century Japan.

2 credits.

Offered occasionally. Graybill.

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 A.D. 691 to A.D. 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 2000. Cothren.

ARTH 153. Michelangelo and His Times

See description for ARTH 053.

2 credits.

Not offered 1999-2000. Kitao.

ARTH 155. Rembrandt and His Times

Rembrandt, Dutch Painting, and the nature of picture making: Protestantism and mercantile milieu, portraiture and self-portraiture, the genre, optics and painting, the print as medium; and theatricality, narrative and realism.

2 credits.

Fall 1999. Kitao.

ARTH 164. Modern Art

The critical debate addressing artists such as Courbet, Manet, Degas, Gauguin, Cezanne, Picasso, and Pollock and the issue of "Modernism" in 19th- and 20th-century painting.

2 credits.

Fall 1999 and 2000. Hungerford.

Studio Arts

STUA 001. Foundation

A theoretical and practical exploration of the elements of visual thinking. Through weekly assignments, primarily in drawing, attention will be given to the following elements of pictorial and spacial design: value, color, perspective, proportion, figure/ ground and volume/ mass. (This course is a prerequisite for all other courses in studio art.)

1 credit.

Each semester. Staff.

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.

Not offered 1999-2000. Reisman.

STUA 004. Multimediu Sculpture

This course will cover a large range of traditional and contemporary sculptural concepts and techniques. Emphasis will be placed on the creation of singular sculptures integrating several different mediums. These techniques will include clay modeling, woodworking, and stone carving.

1 credit.

Spring 2000. Meunier.

STUA 005. Ceramics

A wide spectrum of approaches to clay for functional as well as sculptural expression. Students are encouraged to work towards developing their own vocabulary of design and form within a series of class projects while acquiring a fundamental understanding of processes, contemporary developments and traditions. Open to beginning, intermediate, and advanced students.

1 credit.

Spring 2000. Carpenter.

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 non-photographic composition.

Prerequisite: STUA 001, even for seniors.

1 credit.

Fall 1999. Meunier.

STUA 008. Oil Painting

Investigation in oil paint of pictorial structure and of the complex nature of color—how it can define surface, space, light, temperature and mood.

1 credit.

Fall 1999. Exon.

STUA 009. Life Modeling

This course will cover the principles and practice of life modeling through the study of the human form. Working in clay, we will explore a range of sculptural approaches, from the traditional study of anatomy, to the more contemporary use of the body form as abstraction.

1 credit.

Fall 1999. Meunier.

STUA 010. Life Drawing

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

1 credit.

Spring 2000. 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. There will be occasional field trips to locales other than the campus.

1 credit.

Not offered 1999-2000. Exon.

STUA 015. The Potter's Wheel

This class provides experience on the potter's wheel through intensive practice, demonstrations and slide lectures. Students gain proficiency as well as insights into the traditional and contemporary application of the art of the

potter. Weekly critiques of homework assignments encourage students to consider design and craftsmanship in their developing work. Open to beginning and intermediate students.
Spring semester. Carpenter.

STUA 019. Works on Paper

Investigations into printmaking and other materials that use paper as a support. Emphasis will be placed on drawing concepts. In addition to class assignments, students will be encouraged to work on independent projects.

1 credit.

Fall semester. Reisman.

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 above. 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 will enroll under the guidance of a professor in the chosen medium, to whom a written statement of purpose must be submitted at the time of pre-registration. In addition to individual conferences, a colloquium meeting may be scheduled every two or three weeks. During these gatherings the entire studio faculty, (and occasional visiting artists), all advanced study students, and art majors will critique and share issues of artistic intent.

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 021. African Pot

Traditional forms in a wide range of African pottery making will serve as models for this studio course in beginning ceramics. Students will learn coil building and surface treatments reflective of African stylistic and formal influ-

ences. Through exploration of technical, iconographic and aesthetic considerations, students will gain insight into the range of visual languages represented in this art form. Guest artists will present lectures and demonstrations.

1 credit.

Fall 1999. Carpenter.

STUA 025. Advanced Studies II

Continuation of STUA 020 on a more advanced level.

Prerequisite: STUA 020.

1 credit.

Each semester. Staff.

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 1999. Carpenter.

STUA 040. Senior Advanced Study

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. Students may choose advanced study credit for work completed for the comprehensive. 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 2000 and 2001. Staff.

Asian Studies

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

Faculty: **Praveen Chaudhry** (Political Science)^{5,6}
Maris Gillette (Sociology/Anthropology)⁵
Bruce Grant (Sociology/Anthropology)*
Maribeth Graybill (Art History)²
Steven Hopkins (Religion)
Haili Kong (Modern Languages and Literatures, Chinese)
Gerald Levinson (Music)
Lillian Li (History)
Jeanne Marecek (Psychology)^{2*}
Steven Piker (Sociology/Anthropology)*
Donald Swearer (Religion)
Larry Westphal (Economics)
Tyrene White (Political Science)
Thomas Whitman (Music)
Jen Gifford (Administrative Assistant)

2 Absent on leave, spring 2000.
5 Fall 1999 (appointment that semester only).
6 Spring 2000 (appointment that semester only).

* Affiliated faculty (do not teach courses on Asia but available for independent study projects).

Asian Studies is an interdisciplinary program that aims to introduce students to the immeasurably vast range of human experience, both historical and contemporary, on the Asian continent, from South Asia, to peninsular and insular Southeast Asia, to East Asia. Courses on Asia are offered by the Asian Studies Program and in the Departments of Art, Economics, History, Modern Languages and Literatures (Chinese), Music and Dance, Political Science, Religion, Sociology/Anthropology, and Theatre Studies. Asian Studies majors construct individualized programs of study, with a focus on a comparative theme or on a particular country or region. (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—to name only a few of the possibilities.) In all cases, however, 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 meet with the coordinator 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 to integrate study abroad into the major.

Language Study and Study Abroad

Although not required, majors are strongly encouraged to consider the study of an Asian language and a period of study abroad in Asia. At Swarthmore, we presently offer only Chinese, but it is possible to study Japanese at Haverford, and many other Asian languages can be studied at UPenn during the regular academic year, in summer language programs, or abroad. (Experience has shown, however, that off-campus language courses can create insurmountable scheduling difficulties; for that reason, most students elect the summer or study abroad option.) For languages offered at Swarthmore (Chinese), courses above the first-year level count toward the major. For Asian languages not offered at Swarthmore, courses at the entry level may be approved if at least the equivalent of 1.5 credits is successfully completed in a program approved by the Asian

Studies 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; and nonlanguage courses taken abroad may also be applied toward the major, if credit has been granted by the College, subject to the approval of the Asian Studies Committee. However, normally *at least half of the credits toward a student's Asian Studies major should be taken at Swarthmore.*

The Alice L. Crossley Prize in Asian Studies: See p. 77.

REQUIREMENTS

The Asian Studies major inherently makes greater demands than a departmental major, for the final responsibility falls on each student to make connections between courses that differ widely in content and method. When considering applicants to the major, therefore, the Asian Studies Committee looks for evidence of intellectual flexibility and independence as well as the demonstrated ability to do work at the B- level or above in at least two Asia-related courses, in different departments.

The Asian Studies Course Major

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

1. *Geographic Breadth:* Coursework must be completed concerning more than one of the regions of Asia (South, 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:* Classes must be taken in at least three different departments.
3. *Foundations:* For a broad background in Asian Studies, 2 credits must be taken from the following range of introductory courses:

Comparative Studies

ARTH 003 (Asian Art)

MUSI 008 (Music of Asia)

RELG 008 (Patterns of Asian Religions)

RELG 009 (The Buddhist Tradition)

SOAN 041 (Comparative Studies of China and Japan)

Focused on a Single Country or Region

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

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

HIST 009A (Chinese Civilization)

ARTH 031/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 6 credits of work must be completed at the intermediate or advanced level in at least two departments. This may include the study of an Asian language, to a maximum of four credits.
5. A 1- or 2- credit senior thesis in the student's area of specialization, followed by an oral exam. The thesis is not required for Honors majors, but they may write a 2-credit thesis for one of their exams. *Students must enroll for the thesis no later than fall semester of the senior year.*

The Asian Studies Honors Major

The Honors major in Asian Studies consists of a minimum of 10 credits (two foundation courses plus four preparations). To be admitted to the honors major, students should have completed at least two Asia-related courses, in different departments, at the level of B+ or above.

1. Geographic and disciplinary breadth requirements are the same as those for the course major.
 2. Because Asian Studies is 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.
 3. Honors preparations must represent at least two different disciplines. Careful advance planning is essential to make certain that
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the prerequisites and requirements established by separate departments and programs have been met.

4. Honors preparations in Asian Studies may consist of 2-credit seminars, designated pairs of courses, 1-credit attachments to designated one-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 and 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, 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 majors. SHS materials may be examined in regular written exams; they *must* be examined in oral exams.
3. An Honors minor in Asian Studies will submit one preparation, normally a 2-credit seminar, for examination. An encouraged alternative is a course and a 1-credit thesis, especially when the combination would allow for an interdisciplinary perspective on a particular issue or theme.
 4. 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 exams; they *must* be examined in oral exams.

COURSES

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

Art (Art History)

The Asian Studies Honors Minor

An Honors minor in Asian Studies consists of a minimum of 5 credits, in at least two departments. To be admitted to the Honors minor, students should have completed at least two Asia-related courses, in different departments, at the level of B+ or above.

1. Normally *at least one* of the five courses should come from the list of "foundation courses" (see above). Work from study abroad may be counted, if credit has been granted by the College, with the approval of the Asian Studies faculty.
 2. There are two "tracks" within the Minor:
 - 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 two credits of language study may be
- ARTH 003. Asian Art
 - ARTH 031. Traditional Japan
 - ARTH 032. Arts of the Buddhist Temple in Japan
 - ARTH 034. Japanese Painting and Prints, 1550-1850
 - ARTH 037. Approaches to Tibet
 - ARTH 038. Ritual and Image in Buddhist Traditions
 - ARTH 038A. Seminar Attachment to ARTH 038 for Honors Preparation
 - ARTH 038B. Buddhist Art: Icon, Narrative, and Sacred Space
 - ARTH 039. Meiji Japan (1868-1912): Ideology and Representation
 - ARTH 132. Arts of the Buddhist Temple in Japan
 - ARTH 135. Eighteenth-Century Japanese Painting and Its Contexts
 - ARTH 136. Japanese Popular Culture of the Edo Period: Sex, Lies, and Mass Marketing

Asian Studies

ASIAN STUDIES

ASIA 041. Approaches to Tibet

(Cross-listed as ARTH 037 and RELG 044)

An approach to Tibet from multiple disciplines, viewpoints, and historical time frames in a reading/research seminar. Main themes include Tibet's historical and modern relations with India and China, and Tibetan Buddhism and its visual culture. The course will coincide with an exhibition on campus of Tibetan Buddhist art.

Prerequisite: Sophomore standing or above.

1 credit.

Fall 1999. Graybill.

ASIA 096. Thesis

1 credit.

Fall 1999 and 2000. Staff.

ASIA 098. Directed Reading

0.5-1 credit

Each semester. Staff.

ASIA 180. Thesis

2 credits.

Fall 1999 and 2000. Staff.

Chinese Language and Literature

- CHIN 003B. Second-year Mandarin Chinese (first semester)
- CHIN 004B. Second-year Mandarin Chinese (second semester)
- 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
- 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

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. Modern China

Linguistics

- 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
- 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

Music and Dance

- DANC 021. History of Asian and African Dance*
- MUSI 008. The Music of Asia
- MUSI 049. Balinese Gamelan

Political Science

- POLS 009. State & Society in South & Southeast Asia
- POLS 055. China and the World
- POLS 062. Political Economy of the North-South Conflict*
- POLS 064. American-East Asian Relations*
- POLS 067. International Relations of South Asia
- POLS 108. Comparative Politics: Greater China

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 028. Ritual and Image in Buddhist Traditions
- RELG 030B. The Power of Images: Icons and Iconoclasts*

- RELG 031B. Religion and Literature: From the Song of Songs to the Hindu Saints*
- RELG 044. Approaches to Tibet
- 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 002. Nations and Nationalisms*
- SOAN 041. Comparative Study of China and Japan
- SOAN 093. Southeast Asia: Culture and History, Independent Study
- SOAN 102. History and Myth†

Theatre Studies

- THEA 015. Directing I/Performance Theory*

* *Cognate course*: Counts toward Asian Studies if all papers/projects are focused on Asian topics. No more than 2 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; does not count toward Honors minor.

Biology

SCOTT F. GILBERT, Professor³

MARK JACOBS, Professor and Chair

JOHN B. JENKINS, Professor²

RACHEL A. MERZ, Professor

TIMOTHY C. WILLIAMS, Professor

KATHLEEN SIWICKI, Associate Professor

AMY C. VOLLMER, Associate Professor

SARA HIEBERT, Assistant Professor

ROGER LATHAM, Assistant Professor³

COLIN PURRINGTON, Assistant Professor

ELIZABETH A. VALLEN, Assistant Professor¹

ERIC WIENER, Visiting Assistant Professor

DARLENE BRAMUCCI, Laboratory Instructor/Academic Coordinator

SHANE MURRAY, Laboratory Instructor

JOCELYNE MATTEI-NOVERAL, Laboratory Instructor

ANNE SEITZ TOKAZEWSKI, Laboratory Instructor

THOMAS VALENTE, Laboratory Instructor

MARIA MUSIKA, Administrative Assistant

1 Absent on leave, fall 1999.

2 Absent on leave, spring 2000.

3 Absent on leave, 1999-2000.

Students are introduced to biology by enrolling in BIOL 001 and BIOL 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 eight biology credits composing either the Honors or the course major: Introductory Chemistry, at least one semester of Organic Chemistry, and two semesters of college math-

ematics (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.

Special majors in biochemistry, psychobiology, bioanthropology, biostatistics, and environmental science are also offered. Students wishing to obtain secondary teacher certification in biology must successfully complete a major in biology which should include at least one course in plant science, in evolution, and in physics.

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 Orientation, Animal Physiology, Behavioral Ecology, Biomechanics, Cell Biology, Developmental Genetics, Human Genetics, Microbiology, Neurobiology, Plant Physiology, 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 1999. Staff.

BIOL 002. Organismal and Population Biology

Introduction to the study of organisms emphasizing morphology, physiology, behavior, ecolo-

gy, and evolution of whole organisms and populations.

One laboratory per week.

Primary distribution course. 1 credit.

Spring 2000. 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 1999-2000. Gilbert.

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 non-human examples.

One laboratory period per week.

Prerequisite: BIOL 001.

1 credit.

Spring 2000. Staff.

BIOL 014. Cell Biology

A study of the ultrastructure, molecular interactions and function of cell components.

One laboratory period per week.

Prerequisites: BIOL 001 and CHEM 022.

1 credit.

Spring 2000. Vallen.

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.

Biology

One laboratory period per week.

Prerequisites: BIOL 001 and CHEM 022.

1 credit.

Spring 2000. Vollmer.

BIOL 017. Microbial Pathogenesis and the Immune Response

A study of infectious agents and of the humoral and cellular mechanisms by which vertebrates respond to agents. Students may not take both BIOL 016 and 017 for credit.

One laboratory period per week.

Prerequisites: BIOL 001 and 002; CHEM 022 recommended.

1 credit.

Not offered 1999-2000. Vollmer.

GROUP II ORGANISMAL BIOLOGY (020-029)

BIOL 020. Animal Physiology

An examination of the principles and mechanisms of animal physiology ranging from the subcellular to the integrated whole animal. Possible topics include metabolism, thermoregulation, endocrine regulation, digestion, cardiovascular physiology, respiration, osmoregulation, and muscle.

Prerequisites: BIOL 001, BIOL 002, CHEM 010 recommended.

Primary distribution course.

1 credit.

Fall 1999. Hiebert.

BIOL 022. Neurobiology

A study of the basic principles of neuroscience, with emphasis on the electrical and chemical signalling 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.

Prerequisite: BIOL 001, CHEM 010.

1 credit.

Fall 1999. 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.

Not offered 1999-2000. 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.

Fall 1999. Merz.

BIOL 028. Plant Physiology

A study of the principle physiological processes of higher plants, including photosynthesis, gas exchange, water and nutrients transport, internal metabolism, plant hormone action, and environmental responses.

One laboratory period per week.

Prerequisites: BIOL 001, 002, CHEM 022 recommended.

1 credit.

Spring 2000. Jacobs.

GROUP III POPULATION BIOLOGY (030-039)

BIOL 030. Animal Behavior

An introduction to the biological study of animal behavior. Topics include Primate social systems, behavioral ecology, orientation and migration. Laboratory emphasizes field techniques.

One laboratory or field period per week.

Prerequisites: BIOL 002; STAT 002 or equivalent recommended.

1 credit.

Not offered 1999-2000. Williams.

BIOL 032. Field Ornithology

The biology of birds in their natural habitats. The course will emphasize the diversity of birds, their ecology, evolution, adaptive physiology and behavior. At least three Saturday or Sunday field trips are required.

Prerequisites: BIOL 002 or consent of instructor.

1 credit.

Fall 1999. Williams.

BIOL 032-A. Spring Ornithology

A field course in bird songs, identification, and behavior.

Prerequisite: BIOL 032.

0.5 credit.

Spring 2000. Williams.

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, with emphasis on evolutionary biology of plants.

Prerequisites: BIOL 001 and 002; BIOL 010 recommended.

Fall 1999. 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.

1 credit.

Fall 1999. Wiener.

BIOL 037. Systematic Botany

Principles and methods of plant systematics, the study of plant diversity, approached through the classification and identification of the major families of vascular plants.

One laboratory period per week.

Prerequisites: BIOL 002 or consent of instructor.

1 credit.

Not offered 1999-2000.

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 and one other Group III course.

1 credit.

Spring 2000. Merz.

BIOL 039. Marine Biology

Ecology of oceans and estuaries, including discussions of physiological, and structural and behavioral adaptations of marine organisms.

One laboratory per week; several all-day field trips.

Prerequisites: BIOL 001 and 002.

Fall 2000. Merz.

INDEPENDENT STUDIES

BIOL 093. Independent Study

A program of directed reading or laboratory or field work in a designated area of biology.

0.5 or 1 credit.

Fall or spring semester. Staff.

BIOL 094. Research Project

With the permission of the Department, qualified students may pursue a research program for course 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

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 1999. Staff.

Biology

HONORS STUDY

BIOL 199. Senior Honors Study

A interactive, integrative program to allow Honors students to finalize their research thesis spring semester. Staff.

SEMINARS

BIOL 110. Human Genetics

A seminar exploring the genetic analysis of the human genome. Nonhuman model systems will be examined along with human systems.

Laboratory Project.

Prerequisites: BIOL 010 or consent of instructor.

2 credits.

Not offered 1999-2000. Jenkins.

BIOL 111. Developmental Genetics

Seminar students will be reading current literature on the molecular bases of differential gene expression. Emphasis is on the formation of the embryonic axes of *Drosophila* and vertebrates. The laboratory will attempt to characterize the expression of newly isolated genes.

Prerequisites: BIOL 010, 014, 024, or consent of instructor.

One laboratory per week.

2 credits.

Not offered 1999-2000. Gilbert.

BIOL 114. Regulation of Cell Division

A study of events of the cell cycle necessary for cell division and the mechanisms of regulation which 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.

Not offered 1999-2000. Vallen.

BIOL 116. Microbial Processes and Biotechnology

A study of microbial mechanisms of adapta-

tion to natural and experimental stressors and their applications.

Independent laboratory projects.

Prerequisites: BIOL 016 or 017.

2 credits.

Fall 1999. Vollmer.

BIOL 120. Biological Rhythms

An examination of the properties of biological clocks, including the molecular basis of the clock, neural control, and the 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.

Not offered 1999-2000. 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 instructor.

2 credits.

Spring 2000. Hiebert.

BIOL 122. Developmental Neurobiology

Seminars focussing on cellular and molecular mechanisms of nervous system development and plasticity.

Independent laboratory projects.

Prerequisites: BIOL 022 or 111.

2 credits.

Not offered 1999-2000. Siwicki.

BIOL 123. Learning and Memory

Seminars focusing on the anatomy, physiology and molecular biology of neural systems underlying learning and memory.

Independent laboratory projects.

Prerequisites: BIOL 022 or permission of instructor.

2 credits.

Spring 2000. Siwicki.

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.

Spring 2000. Merz.

BIOL 128. Control of Plant Development

An examination of cellular, intercellular, and environmental control mechanisms operating in plant growth and development. Particular examples will be studied in depth, with an emphasis upon 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.

Fall 1999. Jacobs.

BIOL 130. Behavioral Ecology

The study of the evolution of behavior as an adaptation 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.

Spring 2000. Williams.

BIOL 134. Plant Defense

Seminars focusing on the selective pressures, and consequent genetic changes, associated with interactions of individuals from two or more species.

One seminar meeting each week and continuing, independent laboratory projects.

Prerequisites: BIOL 001 and 002, and BIOL 034; STAT 002 and BIOL 010 recommended.

2 credits.

Spring 2000. Purrington.

BIOL 135. Forest Ecology

Plant ecology within temperate and tropical forests with a focus on trees. Implications for the conservation, restoration, and management of forest resources are examined.

Prerequisites: BIOL 002, 036, or equivalent.
2 credits.

Fall 1999. Wiener.

BIOL 137. Biodiversity

The ecology of patterns in species diversity and their causes at global, regional and local scales. Readings and presentations also encompass problems in paleobiology, systematics, biogeography, geology, macroevolution, extinction, and ethical, cultural and economic issues pertaining to biodiversity and its conservation. Attendance is required on several all-day field trips (returning as late as 7 p.m.). Students form small research groups; each group designs and implements an independent field research project or a component of a larger project conducted by more than one group.

Prerequisites: BIOL 002 and BIOL 036 or equivalent.

2 credits.

Not offered 1999-2000. Latham.

Black Studies

- Coordinator: **SARAH WILLIE** (Sociology/Anthropology)
Jen Gifford (Administrative Assistant)
- Committee: **Timothy Burke** (History)
Syd Carpenter (Art)
Yvonne Chireau (Religion)
Allison Dorsey (History)³
Charles James (English Literature)
Colin Leach (Psychology)³
Micheline Rice-Maximin (Modern Languages)
Peter Schmidt (English Literature)¹
-

1 Absent on leave, fall 1999.

3 Absent on leave, 1999-2000.

The aims of the Black Studies Program are twofold: to make available to students an interdisciplinary structure of study of Black people in Africa, the Americas and elsewhere in the diaspora; and to provide sites where the various fields of study intersect and where students may explore variable approaches to an emergent discipline.

All majors may add the concentration to their program of study or include Black Studies as the focus of their minor in the External Examination Program by fulfilling the requirements stated below. Applications for admission to the concentration are normally made in the spring term of the sophomore year. All programs must be approved by the Committee on Black Studies.

REQUIREMENTS

All candidates for the concentration in Black Studies are expected to take BLST 015 and BLST 091 plus three additional courses for a total of five courses. Two of the three courses must be outside the major and each be in separate departments. (Members of the class of 2000 and 2001 may substitute HIST 007, RELG 010, or ENGL 057 for BLST 015.)

BLST 091, Special Topics in Black Studies, may take the form of a tutorial (if there are three or fewer students in any given class) or a seminar (if there are four or more students), with all senior concentrators and minors par-

ticipating. 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 concentration must receive advanced approval from the Black Studies Committee and the major department in the fall of the senior year.

The Honors Minor

All students participating in the Honors Program are invited to add the minor in Black Studies by defining a 2-credit preparation in the concentration. Normally this preparation will be based on two units of credit chosen from the courses approved by the Black Studies Program or it may take the form of a 2-credit thesis written under Program supervision. All minors must otherwise meet the requirements of the concentration as noted earlier.

The Honors minor may pair Black Studies courses together. Such course combinations could include, say, HIST 008B and LING 037 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 and senior years. In the spring of the senior year, the student will be examined with a written and oral exam by an outside examiner.

The 2-credit Honors thesis option must clearly fall within the topic of Black Studies and include substantial work (at least 50 percent)

outside of the student's major discipline. The proposal for either the 2-credit Honors thesis or the Honors course combination must be approved by the Black Studies Committee in the fall of the senior year. In the case of the thesis, a Black Studies Committee faculty advisor 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 video or audio tape of a creative performance activity in dance or music, or other approved creative work.)

Courses in the Black Studies concentration are listed below. 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 *College Bulletin*) 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.

COURSES*

*Find descriptions of courses listed in the bulletin with the appropriate departments.

Art

ARTH 67. African-American Art

STUA 021. African Pot

Black Studies

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 examines the movement from the more object-centered Africana Studies to subject- and agent-oriented Black Studies that occurred in the United States as a result of the civil rights and anticolonialist movements in the United States, 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.

Spring 2000. Willie.

BLST 091. Special Topics in Black Studies (Thesis)

Dance

DANC 009. Music and Dance of Africa

DANC 021. History of Asian and African Dance

DANC 043. African Dance I

DANC 053. African Dance II

Economics

ECON 071. Labor Economics

ECON 073. Women & Minorities in the Economy

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. The Contemporary African American Writer

ENGL 079. Fiction from the Black Atlantic

ENGL 121. The Harlem Renaissance and the Jazz Age

French

FREN 012L. Introduction à l'analyse littéraire

FREN 033. Le Monde francophone: résistances et expressions littéraires

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

FREN 076. Femmes écrivains

Black Studies

FREN 077. Prose francophone: littérature et société

FREN 078. Théâtre d'écritures françaises

FREN 93. French Caribbean Literature in Translation

FREN 110. Écritures françaises hors de France: Fiction et réel

History

HIST 001I. First Year Seminar: African American Women

HIST 007A. History of the African American People, 1619-1865

HIST 007B. History of the African American People, 1865-Present

HIST 008A. Africa in the Era of the Slave Trade, 1500-1850

HIST 008B. Modern Africa, 1880 to Present

HIST 053. Topics in African American Women's History

HIST 060. Cultural Constructions of Africa: Images, Inventions, and Ideologies

HIST 063. History of Southern Africa

HIST 067. Race in Latin America

HIST 069. Debates in African Studies

HIST 137. African American History

HIST 140. The Colonial Encounter in Africa

Linguistics

LING 037. Languages of Africa

LING 052. Historical and Comparative Linguistics

Literature

LITR 070F. Caribbean and French Civilization and Cultures

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

Music

MUSI 003. Jazz History

MUSI 005. Music as Social History

MUSI 061. Jazz Improvisation

Political Science

POLS 033. Race, Ethnicity and Public Policy

POLS 058. African Politics

POLS 110. Comparative Politics: Africa

Psychology

PSYC 045. Psychology of Oppression and Resistance

Religion

RELG 010. African American Religion

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 015. Introduction to Race and Ethnicity

SOAN 016. Sociology through African American Women's Writings

SOAN 030. Spirits in Exile: Afro-Latin Religions in the Americas

SOAN 030A. Cuba and Puerto Rico: "The two wings of a single bird?"

SOAN 043. 20th Century Black Political Thought

SOAN 050. Constitution of Knowledge

Chemistry

ROBERT F. PASTERNAK, Professor
JUDITH G. VOET, Professor and Acting Chair
ROBERT S. PALEY, Associate Professor and Chair³
THOMAS A. STEPHENSON, Professor
KATHLEEN P. HOWARD, Assistant Professor
AHAMINDRA JAIN, Visiting Assistant Professor
PAUL R. RABLEN, Assistant Professor
SHERYL A. HEMKIN, Visiting Assistant Professor
MICHAEL R. WEDLOCK, Visiting Assistant Professor
VIRGINIA M. INDIVERO, Lecturer
MARY E. ROTH, Lecturer and Director of Introductory Laboratories
DONNA T. PERRONE, Laboratory Instructor
CHARLOTTE VELOSKI, Laboratory Instructor
BRENDA L. WIDO, Laboratory Instructor
KAY MCGINTY, Administrative Assistant

3 Absent on leave, 1999-2000.

The aim of the Chemistry Department is to provide sound training in the fundamental principles and basic techniques of the science and to provide interested students with the opportunity for advanced work in the main subdisciplines of modern chemistry.

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 normally 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 nine 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 in their programs a fourth semester of mathematics and at least two additional credits in chemistry. Accreditation by the American Chemical Society (ACS) is useful for those who intend to pursue a career in chemical industry and requires a year of independent research through CHEM 094, 096, or 180. Further, proficiency in reading scientific German, Russian, or French is an asset to the practicing chemist.

Students desiring teacher certification in chemistry must complete BIOL 001, 002 in addition to the Chemistry major program. All candidates for teacher certification are required to assist in the instruction of the laboratory of an introductory chemistry course on one afternoon per week for two semesters.

Research opportunities with individual staff members are available through CHEM 094, 096, and 180. Majors are encouraged to consult the staff about current research problems under investigation.

BIOCHEMISTRY SPECIAL MAJOR

In collaboration with the Department of Biology, the Department of Chemistry also offers a Special Major in Biochemistry (see discussion of Special Major, p. 63), which provides the student with the opportunity 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 lab) and a biochemically related advanced Biology seminar (with lab), or (2) two biochemically related, sophomore-level Biology courses (with labs). The term "biochemically related" is defined here to include 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

In collaboration with the Physics and Astronomy Department, the Chemistry Department also offers a special major in chemical physics (see discussion of Special Major, p. 63), which provides the student with the opportunity to gain a strong background in the study of chemical processes from a microscopic and molecular point of view. 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 between 10 and 12 cred-

its. 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 by the end of the sophomore year: (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); (4) MATH 016 and 018. An example of a Major in Chemical Physics follows: CHEM 022, 034, 045A/B, 046, 050, 104; PHYS 007, 008, 014, 050, 111, 113.

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 two 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; 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, 0108 (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 Honors majors in Chemistry 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 comprise the Honors Program, 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 wishing to minor in Chemistry, with the exception of the Research Thesis. All minors must meet the same prerequisite requirements for seminars established by the 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 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 into the philosophical and public policy aspects of these problems as well as the chemistry will be encouraged. Assigned reading material will be non-mathematical and emphasize organic and biochemistry as well as general chemical principles.

One laboratory period every second week.

Primary distribution course. 1 credit.

Spring 2000. Wedlock.

CHEM 010. General Chemistry

A study of the general concepts and basic principles of chemistry; 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.

One laboratory period weekly.

Primary distribution course. 1 credit.

Fall 1999. Pasternack, Hemkin.

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.

Open to first-year students only.

One laboratory period weekly.

Prerequisites: A score of at least 4 on the Advanced Placement Chemistry exam or at least 6 on the International Baccalaureate Advanced Chemistry exam or equivalent performance on the departmental placement exam or permission of the instructor.

Primary distribution course. 1 credit.

Fall 1999. Jain.

CHEM 022. Organic Chemistry I

An introduction to the chemistry of some of the more important classes of organic compounds; nomenclature, structure, physical and spectroscopic properties, methods of preparation and reactions of aliphatic and aromatic hydrocarbons, halides and monofunctional

oxygen compounds, with an emphasis on ionic reaction mechanisms.

One laboratory period weekly.

Prerequisite: CHEM 010.

1 credit.

Spring 2000. Jain.

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 bioorganic chemistry.

One laboratory period weekly.

Prerequisite: CHEM 022.

1 credit.

Fall 1999. Rablen.

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, PHYS 003, 004 (or 007, 008).

1 credit.

Fall 1999. Wedlock.

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 2000. Jain.

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, MATH 018.

0.5 credit.

Spring 2000, first half. Stephenson.

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, MATH 018.

0.5 credit.

Spring 2000, second half. Hemkin.

CHEM 045C. Biophysical Chemistry

Continued discussion of the principles introduced 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, 038.

0.5 credit.

Spring 2000, 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 2000. 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 1999. Howard, Voet.

SEMINARS

The following single credit seminars may be taken for credit towards 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 below.

CHEM 102. Topics in Modern Organic Chemistry

This course will address selected advanced topics of current interest in the fields of synthetic and physical organic chemistry. Materials will be drawn both from textbooks and from the current research literature, and will cover such topics as methods for forming carbon-carbon bonds, control of relative and absolute stereochemistry, applications of stoichiometric and catalytic organometallic chemistry in synthesis, self-assembly, mechanisms of complex or unusual reactions, experimental methods for determining reaction mechanisms, and molecular orbital theory.

Prerequisite: CHEM 032.

1 credit.

Alternate years, Fall 1999. Jain, Rablen.

CHEM 104. Chemical Kinetics and Reaction Dynamics

An examination of the theories and experimental techniques that explore chemical reactivity, focusing on microscopic and macroscopic time-resolved phenomena. Examples will be drawn from solution and gas-phase systems, ranging from atmospheric chemistry and molecular beam scattering to electron transfer and chemical substitution reactions in solution.

Prerequisites: CHEM 045B, MATH 018;

CHEM 038 or 046 recommended.

1 credit.

Fall 1999. Pasternack, Stephenson.

CHEM 105. Theory and Applications of Spectroscopy

An examination of topics in molecular spectroscopy, beginning with quantum mechanical principles and extending to chemical applications of NMR, electronic and ro-vibrational spectroscopies.

Prerequisites: CHEM 045B, MATH 018.

1 credit.

Alternate years, Spring 2000. Not offered 1999-2000. Howard, Wedlock.

CHEM 106. Topics in Bioinorganic and Organometallic Chemistry

Topics at the interface of inorganic, bio- and organic chemistry, including bonding theory for transition metal complexes, physical methods for their study, mechanistic and synthetic aspects of Werner and organometallic complexes, self-assembly processes, and bioinorganic chemistry.

Prerequisites: CHEM 032, 046.

1 credit.

Alternate years, Fall 1999.

Not offered 1999-2000. Paley, Pasternack.

CHEM 108. Topics in Biochemistry

Physical methods used to study high resolution biomacromolecular structure will be discussed, using examples from the primary literature. Techniques used to measure the forces stabilizing intramolecular and intermolecular interactions, and their application to proteins, 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, BIOL 001. Prior or concurrent enrollment in BIOL 010 or 014 or 016 or 017 and/or CHEM 045 A/B or A/C is recommended.

1 credit.

Spring 2000. Voet, Howard.

CHEM 110. The Physical Basis of Biomolecular Structure and Function

(Cross-listed as PHYS 139)

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, or CHEM 010 and PHYS 014, or permission of the instructors.

1 credit.

Spring 2000. Stout and Howard.

STUDENT RESEARCH

All students who enroll in one or more research courses during the academic year are required to attend weekly colloquium meetings and to 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. Whereas 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:

- i. A minimum of two credits of CHEM 096 to be taken during the last three semesters of the student's residence at Swarthmore.
- ii. A thesis based upon the student's research activity to be submitted prior to 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

GILBERT P. ROSE, Professor¹

WILLIAM N. TURPIN, Professor and Chair

ROSARIA V. MUNSON, Associate Professor

GRACE M. LEDBETTER, Assistant Professor⁷

ROBERT J. SKLENAR, Visiting Assistant Professor (part-time)

FRANCESCA GIEGENGACK, Administrative Assistant

1 Absent on leave, fall 1999.

7 Joint appointment with Philosophy.

Classics is the study of the ancient Greeks and Romans, who produced some of the world's greatest literature and influenced the entire subsequent course of 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 the works of such authors as Homer, Sappho, Aeschylus, Sophocles, Euripides, Plato, Thucydides, Herodotus, Cicero, Tacitus, Catullus, Horace, and Virgil.

The ancient languages are studied in courses numbered from 001 to 019 and in seminars. Courses (not seminars) 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. The courses specifically in 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 both majors and nonmajors to spend a semester, usually during their junior year, at the Intercollegiate Center for Classical Studies in Rome. Here students from many American colleges may 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 and the Susan P. Cobbs Prize Fellowship for study abroad or for intensive beginning language study in the summer (see pp. 37 and 81).

The Classics Department participates in the Medieval Studies Program, the Women's Studies Program, the Comparative Literature major, and a Special Major in Linguistics.

REQUIREMENTS FOR A MAJOR

Greek, Latin, or Ancient History may be a student's major subject in either the Course or the Honors Program, and a minor in the latter program. Those who intend to major or minor in Greek or Latin should complete courses numbered 011 and 012 (or their equivalent) as early as possible.

A major in Greek or Latin consists of at least eight credits beyond GREK 001-002 or LATN 001-002, and includes three or four seminars. A major in Ancient History consists of CLAS 031, 032, 042, 044, a 1-credit attachment to any of the above (see pp. 65-67, Formats of Instruction), and a second one-credit attachment or else another course in Classical Civilization. One of the following seminars is also required for Ancient History: LATN 102, LATN 105, GREK 113.

In their last semester, majors who are not in the Honors Program take a comprehensive examination.

Classics

THE HONORS PROGRAM IN CLASSICS

For a major in Greek or Latin, preparation for Honors exams will normally consist of three seminars (students may take a fourth seminar in the major, but not for external examination). A student minoring in Greek or Latin will take one external examination based on one seminar. Minors are, however, strongly encouraged to take more than one seminar, in order to be adequately prepared for the examination.

For a major in Ancient History, one 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 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 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 all 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. There is no assumption that students have studied

Latin.

Primary distribution course, Humanities.
1.5 credits.

Year course 1999-2000. Ledbetter.

GREK 009, 010. Greek Prose Composition

Extensive translation of English into Greek. Meets 1 hour per week.

0.5 credit.

Not offered 1999-2000.

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 1999. Sklenar.

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 2000. 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 relationship to the culture of fifth-century Athens and the Sophistic movement in particular.

Prerequisite: GREK 011 or equivalent.

1 credit.

Fall 1999. Turpin.

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 all 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.

Primary distribution course, Humanities.
1.5 credits.

Year course 1999-2000. Turpin.

LATN 009, 010. Latin Prose Composition

Extensive translation of English into Latin.
Meets one hour per week.

0.5 credit.

Not offered 1999-2000.

LATN 011. Introduction to Roman Poetry

After a review of grammar, students read and discuss major lyric and epic poets of the Golden Age of Roman literature (e.g., Catullus and Virgil). The course emphasizes both language skills and literary criticism, eliciting 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 1999. Munson.

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 primarily from the *Satyricon* of Petronius and Apuleius' *Metamorphoses*.

Prerequisite: LATN 011 or equivalent.

1 credit.

Not offered 1999-2000.

LATN 013. Literature of the Augustan Age

A portrait of the Age of Augustus from the viewpoint of one or more contemporary poets, such as Ovid, Virgil, Horace, and Propertius, who contributed to the greatness of the period while often questioning its assumptions.

Prerequisite: LATN 011 or equivalent.

Primary distribution course, Humanities. 1 credit.

Not offered 1999-2000.

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.
Spring 2000. Munson.

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.

Fall 1999. Sklenar.

LATN 016. Republican Prose: Cicero

Cicero stood at the political and cultural center of the late Roman Republic. Readings are chosen from his speeches. 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 1999-2000.

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 1999-2000.

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.

Classics

CLAS 031. History of Greece

A study of the political and social history of the Greek cities from the Mycenaean or Bronze Age to the end of the classical period. Topics include the growth of the city-states, the development of democracy, the period of Athenian political and cultural leadership, and Athens' rivalry with Sparta.

Primary distribution course, Social Sciences.

1 credit.

Not offered 1999-2000.

CLAS 032. The Roman Republic

A study of 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 and the tensions it created; and the social and political structures of the Republic.

Primary distribution course, Social Sciences.

1 credit.

Not offered 1999-2000.

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.

Fall 1999. Munson.

CLAS 044. The Early Roman Empire

A detailed study, using primary sources, 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).

Primary distribution course, Social Sciences.

1 credit.

Not offered 1999-2000.

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 concentrates on Christianity in the second and third centuries of the Common Era and its relationship with Judaism, Hellenistic philosophies, state cults and mystery religions, and the various pagan responses to Christianity, from conversion to persecution. Ancient texts may include Apuleius, Lucian, Marcus Aurelius, Porphyry, Justin, Origen, Lactantius, Eusebius, and the *Acts of the Christian Martyrs*.

There is no prerequisite, 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 2000. 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.

Spring 2000. Ledbetter.

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 1999-2000.

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 1999-2000.

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 upon subsequent literature and other arts. This course examines selected myths in such major works of Greek and Latin literature as the *Iliad* and the *Odyssey*, the tragedies of Aeschylus, Sophocles, and Euripides, and Ovid's *Metamorphoses*. Myths are treated both as traditional tales about gods and heroes and as evolving narratives, subject to the influences of political, social, and sexual ideologies.

1 credit.

Fall 1999. Sklenar.

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. There is special emphasis on such important sites as Knossos, Mycenae, Delphi, Olympia, and Athens.

Primary distribution course, Humanities. 1 credit.

Not offered 1999-2000.

CLAS 060. Dante and the Classical Tradition

This course explores the ways in which Dante and other fourteenth-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.

Spring 2000. Munson.

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 A.D., 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) are included.

2 credits.

Fall 1999. Turpin.

LATN 103. Latin Epic

This seminar usually focuses on Virgil's *Aeneid*, although it may include other major Latin epics.

2 credits.

Not offered 1999-2000.

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 include Lucretius, Catullus, Cicero, and Sallust.

2 credits.

Not offered 1999-2000.

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*, especially 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.

Classics

2 credits.

Spring 2000. Sklenar.

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.

Not offered 1999-2000.

GREK 112. Greek Epic

This seminar studies either the entirety of Homer's *Odyssey* in Greek or most of the *Iliad*.

2 credits.

Not offered 1999-2000.

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.

Fall 1999. Munson.

GREK 114. Greek Drama

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

2 credits.

Spring 2000. Rose.

Comparative Literature

Coordinator: **CAROLYN LESJAK** (English Literature)

Committee: **Alan Berkowitz** (Modern Languages and Literatures)
Elizabeth Bolton (English Literature)¹
Thompson Bradley (Modern Languages and Literatures)
Marion Faber (Modern Languages and Literatures)
John Hassett (Modern Languages and Literatures)
George Moskos (Modern Languages and Literatures)³
Gil Rose (Classics)
Philip Weinstein (English Literature)²
Hansjakob Werlen (Modern Languages and Literature)

1 Absent on leave, fall 1999.

2 Absent on leave, spring 2000.

3 Absent on leave, 1999-2000.

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*.

In planning a Comparative Literature major, students should look at course listings in the Classics, English and Modern Languages departments. Of courses in Classics and Modern Languages and Literatures, only courses in the original language numbered 011 or above are counted as constituents of the Comparative Literature major. Of English courses numbered 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 which sets forth the courses and/or seminars to be taken and the principle of coherence on that the program of study is based. The student will also submit a 6- to 10-page writing sample from a previously completed course. The committee will 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 FOR A 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, 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 advisors from appropriate departments. In some cases, the committee may ask that the thesis be written in whole or in part in the language of a literature studied other than English.

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.

Comparative Literature

REQUIREMENTS FOR A 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 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 3-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 advisors.

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 below.

SAMPLE: COMPARATIVE LITERATURE COURSE MAJOR

Focus: The Black Atlantic

ENGL 005R: Fictions of Identity

FREN 012L: Introduction à l'analyse littéraire

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

ENGL 079: Fiction from the Black Atlantic

FREN 110: Écritures françaises hors de France (Caribbean)

ENGL 086: Postcolonial Theory and Lit.
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, Professor³

JAMES MARSHALL, Visiting Assistant Professor

LISA MEEDEN, Assistant Professor and Program Director

TIA NEWHALL, Instructor

JOAN M. McCAUL, Administrative Assistant

Committee: **Charles Grinstead** (Mathematics)

Bruce Maxwell (Engineering)

Sharon Friedler (Music & Dance)

a student to be selected

3 Absent on leave, 1999-2000.

Computer Science is the study of algorithms and the issues involved in implementing them. 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 offerings in computing that can be tailored to satisfy interests in various areas and at several levels of depth. 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. There are three entry points to the Computer Science curriculum at Swarthmore.

CPSC 010: Great Ideas in Computer Science is designed for Freshmen with little or no experience in computer science. It is an introduction that emphasizes breadth of coverage over depth or skill building. Most appropriate for first or second year students who lack confidence in their abilities in Computer Science.

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 be able to write programs. It is for students who are comfortable with computers. This is

the usual first course for Computer Science Majors and Concentrators. 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. The language used is a dialect of LISP. For students who intend to be Computer Science majors, minors, or concentrators and are fluent in a language like C and feel comfortable about their abilities, this is the best first course.

Students or advisors 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 Program offers special majors, majors and minors in the Honors Program, and concentrations. Students interested in any of these options are encouraged to meet with the director of the computer science program as early in their Swarthmore years as possible. The concentration 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 concentration will possess a number of intellectual skills useful in many disciplines.

Computer Science

SPECIAL MAJOR IN COMPUTER SCIENCE

The requirements for a Special Major in Computer Science consist of:

Two mathematics courses numbered above 008 (MATH 009 and MATH 016 recommended)

Each of CPSC 021, CPSC 022, CPSC 023, CPSC 035, CPSC 046, CPSC 097

Three of CPSC 040, CPSC 041, CPSC 043, CPSC 063, CPSC 075, CPSC 081, MATH 072, ENGR 021, ENGR 024, LING 050, or LING 108

CONCENTRATION IN COMPUTER SCIENCE

The Concentration in Computer Science can be combined with any major in the College. It provides students with a well-rounded background in computer science sufficient to develop significant, creative applications and to keep up with the rapid changes in the field. Students interested in a Concentration in Computer Science should submit a concentration proposal for approval by the Computer Science Committee, preferably by the end of their sophomore year. If this proposal is not part of the sophomore paper, it should include a copy of the sophomore paper with it. Both the student's major advisor and the director of the Computer Science Program should be consulted when writing such a proposal. Although some flexibility is possible, the requirements for the Concentration in Computer Science will consist of six courses including a comprehensive experience. The six courses should be selected as follows:

Each of CPSC 021, CPSC 022, MATH 009, CPSC 035, CPSC 097

One of CPSC 023, CPSC 041, or CPSC 046

The comprehensive experience will ordinarily be satisfied by completing CPSC 097: Senior Conference. In some cases, a thesis or project may be used to satisfy some other department's comprehensive experience and also the Computer Science requirement. In such cases, specific approval of the Computer Science Program and the other department must be obtained before embarking on the project.

JOINT SPECIAL MAJORS

Students desiring to integrate computer science with another discipline in a more formal manner are encouraged to develop a Special Major combining computer science and another area. Such special majors require the approval of the Computer Science Committee and the other department involved. Special majors should be designed in consultation with the director of the Computer Science Program as early in the student's program as possible. Approval of a special major is not guaranteed. It will depend upon 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, and a minor preparation.

The following will be submitted to external examiners to be evaluated as described in more detail below:

A. Two 2-credit preparations to be selected from the combinations of courses listed below. Each of these 2-credit preparations will be examined by a 3 hour written exam and an oral exam.

B. One 2-credit research report or thesis to be read by an external examiner and examined orally.

We expect that all Computer Science examiners will meet together to discuss honors recommendations for Computer Science majors and minors.

C. Senior Honors Study portfolio.

DETAILS

A. Currently approved papers for part A.

Preparation	Course Combination
Algorithms	Two of CPSC 041 Algorithms, CPSC 035, or MATH 072 Combinatorial Optimization
Algorithms & Theory	CPSC 041 Algorithms CPSC 046 Theory of Computation
Artificial Intelligence & Robotics	CPSC 081 Building Intelligent Robots CPSC 063 Artificial Intelligence
Compiler Design & Theory	CPSC 046 Theory of Computation CPSC 075 Compiler Design & Construction
Computer Architecture	ENGR 021 Digital Logic Design CPSC 023 Computer Architecture
Programming Languages	CPSC 043 Programming Languages CPSC 075 Compiler Design & Construction

Selections to satisfy part A must include 4 distinct courses. In certain circumstances, the Computer Science Program may be willing to consider other groupings of courses, seminars, or courses with attachments. In all cases the Computer Science Program must approve the student's plan of study.

B. At a minimum, this will involve a review of one or more scholarly papers from the primary literature of computer science and the writing of a scholarly scientific paper. We hope that 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 ground work will be completed before the fall semester senior year either by one credit of work in the spring semester Junior year or full-time summer work. Students will register for at least one credit of thesis work in the fall of the senior year to complete the work and write the paper. It is expected that the paper will be completed by the end of the fall semester.

C. Senior Honors Study will consist of full participation in CPSC 097 Senior Conference with course students in the spring semester of the senior year.

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 023 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 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 of CPSC 023 and CPSC 046, and in addition CPSC 093, and CPSC 097.
-

HONORS MINOR IN COMPUTER SCIENCE

One 2-credit preparation to be selected from combinations of courses listed in A above. An examiner will set both a 3 hour written exam and an oral exam for the preparation.

Computer Science

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 023 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:
 - 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 concentrate or major in Computer Science may opt to study abroad for one semester or a whole year. Because advanced courses in Computer Science are offered only in alternate years, some selections will be unavailable to some students. A course of study abroad should be agreed upon with the Program before it is taken. The Computer Science Program will give credit for appropriate courses taken abroad. The program determines credit earned by students on their return to Swarthmore on the basis of evidence presented by the student. Depending on the resources available to the program, independent study and/or reading courses may occasionally be offered to accommodate students who are unable to take desired offerings because of study abroad.

GRADUATE STUDY

Students interested in graduate study in Computer Science will be well prepared by a Special Major in Computer Science. 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 director of the Computer Science Program.

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 as early as possible with the director of the program in order to be sure of taking the mathematics and computing courses necessary to be prepared for graduate work in Computer Science.

COMPUTER SCIENCE COURSES

(Courses numbered above 040 will be offered in alternate years.)

CPSC 010. Great Ideas in Computer Science

This course will introduce a number of fundamental ideas in computer science. Topics to be covered include: 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. Nonetheless, much of the material will be encountered in laboratory sessions in addition to the lecture-discussion sessions.

Lab work required. It is designed for freshmen, and they will be given enrollment preference. Prerequisite: None.

Primary distribution course. 1 credit.

Each semester. Staff.

CPSC 021. The Imperative Paradigm: Unix and C

This course introduces students to fundamental aspects of the field of computing, focusing 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, Emacs editor, 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, informal verification using loop invariants, elementary Unix tools (such as grep, sort, tr), introduction to shell scripts.

Lab work required. Prerequisites: None.

Primary distribution course. 1 credit.

Each semester. Knerr, Newhall.

CPSC 022. Structure and Interpretation of Computer Programs

This course is a serious introduction to the study of computer programs; and, through programs, some central ideas in computer science. By studying programs that make repeated and deep use of abstraction, students will learn how to generate precise specifications from vaguely formulated and perhaps partially understood descriptions. This is a skill that 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. Marshall, Meeden.

CPSC 023. Computer Architecture

(Cross-listed as ENGR 022).

An in-depth tour of current computer technology, including selected RISC and CISC microprocessor instruction sets and addressing modes, superscalar architectures, interrupts and DMA, peripherals, memory system hierarchy, virtual memory, and computer networks. Fundamental operating system concepts. Parallel and distributed computer systems. The laboratory will include studies of specific machines from microcontrollers to workstations.

Lab work required. Prerequisites: CPSC 021, some experience with UNIX and C, or permission of instructor.

1 credit.

Spring semester. Maxwell.

CPSC 035. Algorithms and Object Oriented Computing

This course completes the broad introduction to computer science begun in CPSC 021 or CPSC 022. It provides a general background for further study in the field. Topics to be covered include: object-oriented programming in Java or C++, advanced data structures (trees, tries, graphs, etc.) and algorithms, software design and verification, and parallel and distributed algorithms. Students will be expected to complete a number of programming projects illustrating the concepts presented.

Lab work required. Prerequisites: CPSC 021 or permission of instructor. MATH 009 recommended.

1 credit.

Spring 2000. Newhall.

CPSC 040. Computer Graphics

(Cross-listed as ENGR 026)

Techniques used to model and display three-dimensional scenes. Topics include 2D and 3D transformations, clipping, scan conversion, projections, coordinate systems, rendering, ray tracing, representing curves/surfaces/solids, color, lighting, and software and hardware for graphics systems. A laboratory will involve programming user-interface systems and images using the X11 package, an interactive X toolkit, and PEX.

Lab work required. Prerequisites: CPSC 021, extensive familiarity with C, or permission of instructor. Linear algebra and some calculus is helpful.

1 credit.

Fall 2000. Maxwell.

CPSC 041. Algorithms

The study of algorithms found to be useful in many diverse areas. Considerable attention is paid to correctness and time and space resources required. Topics to be covered include: abstract data types, trees (including balanced trees), graphs, searching, sorting, and the impact of several models of parallel computation on the design of algorithms and data structures.

Lab work required. Prerequisite: CPSC 035.

1 credit.

Spring 2000. Newhall.

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. Prerequisite: CPSC 035.

1 credit.

Fall 1999. Marshall.

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.

1 credit.

Fall 1999. 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 and, for those problems that can be solved, a means of classifying them with respect to how difficult they are to solve. 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.

Next offered spring 2001.

CPSC 063. Artificial Intelligence

The unifying theme of this course is the concept of an intelligent agent. Based on this perspective, the problem of AI is seen as describing and building agents that receive perceptions from an environment and perform appropriate actions based on them. 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. Prerequisite: CPSC 035.

1 credit.

Next offered fall 2000.

CPSC 075. Principles of Compiler Design and Construction

This course presents an introduction to the design and construction of language translators for imperative, procedure oriented programming languages. Topics covered include: formal grammars, lexical analysis and finite automata, syntax analysis and pushdown automata, LL and LR parsing, semantic analysis and table handling, error detection and recovery, code generation and optimization, compiler writing tools.

Lab work required. Prerequisite: CPSC 035.

1 credit.

Fall 1999. Meeden.

CPSC 081. Building Intelligent Robots

This course addresses the problem of controlling robots that will operate in dynamic, unpredictable environments. In laboratory sessions, students will work in groups to build small, lego-based mobile robots and to program them to perform a variety of simple tasks such as obstacle avoidance and light following. 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 063 or permission of instructors.

1 credit.

Spring 2000. Maxwell and Meeden.

CPSC 091. Special Topics in Computer Science

In general, subject matter for CPSC 091 is dependent on a group need or individual interest. Normally restricted to senior students and only offered when staff interests and availability make it practicable to do so.

CPSC 093. Directed Reading and/or Research Project

With the permission of a staff member who is willing to supervise it, a qualified student may undertake a program of extra reading and/or a project in an area of computer science.

CPSC 097. Senior Conference

This course provides senior concentrators and special majors an opportunity to delve more deeply into a particular topic in computer science synthesizing material from previous courses. Recent topics have been evolutionary computation (1998, 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 or concentrator.

Spring 2000. Newhall.

SEMINARS**CPSC 199. Senior Honors Study**

Economics

JOHN P. CASKEY, Professor²
STEPHEN S. GOLUB, Professor
ROBINSON G. HOLLISTER JR., Professor
MARK KUPERBERG, Professor¹
STEPHEN A. O'CONNELL, Professor
BERNARD SAFFRAN, Professor
LARRY E. WESTPHAL, Professor
AMANDA BAYER, Associate Professor¹
PHILIP N. JEFFERSON, Associate Professor¹
ELLEN B. MAGENHEIM, Associate Professor and Chair
THOMAS DEE, Assistant Professor
PEGGY dePROPHETIS, Visiting Lecturer
MARY ANNE STEWART, Administrative Assistant

1 Absent on leave, fall 1999.

2 Absent on leave, spring 2000.

3 Absent on leave, 1999-2000.

The courses in economics have three main goals: (1) to provide insight into the processes and accompanying institutions through which productive activity is organized; (2) to develop a set of tools for analyzing economic processes and institutions; and (3) to build a foundation for reaching informed judgments on issues of public policy.

ECON 001 or its equivalent is a prerequisite for all other work in the department. In addition, all majors in economics must satisfy a theory requirement by taking ECON 011 (Intermediate Microeconomics) and ECON 021 (Intermediate Macroeconomics). They must also satisfy a statistics requirement by taking ECON 031 (Statistics for Economists) or its equivalent or STAT 053 (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.

To read the literature in economics critically, a knowledge of elementary calculus is extremely useful. The department very strongly recommends that students take MATH 005 and either MATH 006A and 006C (basic calculus) or the series of MATH 006A and 006B and

MATH 018. MATH 016 (Linear Algebra) and MATH 018 (Several Variable Calculus) are valuable for those intending to focus on the more technical aspects of economics. Students planning to attend graduate school in economics should give serious thought to taking additional mathematics courses such as MATH 030 (Differential Equations) and MATH 047 (Introduction to Real Analysis).

Students contemplating careers in business or law may wish to take accounting. In turn, students contemplating careers in international economics or business are strongly urged to have a mastery of at least one modern foreign language.

To graduate as a major, a student must: have at least 8 credits in economics; meet the theory and statistics requirements; and, in the 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 exam, course students are 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" (avail-

able in the department office) for additional information regarding the details of the 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 1999 and spring 2000. Staff.

ECON 003. The World According to Economics

This course explores, from an economic perspective, the economic content of subjects addressed by other disciplines throughout the College. 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 1999-2000.

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 and educational expenditure in the U.S. and the relationship between them. It studies what is known about 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.

Not offered 1999-2000.

ECON 006. The U.S. Economy and Economic Thought: Roosevelt Through Clinton

The course will examine the development of the U.S. economy since the 1920s. There will be two major themes: How did economic analysis respond to changing economic problems, and what effect did the new analysis have on the economic policies that the government pursued?

1 credit.

Not offered 1999-2000.

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 format is seminar-like. Reading material includes the economic and financial pages of current periodicals, reports of think tanks, and other current literature.

1 credit.

Fall 1999. 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 1999. Westphal.

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

Economics

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.

Not offered 1999-2000.

ECON 021. Intermediate Macroeconomics

Intermediate-level macroeconomics. Models are developed of the determination of output, interest rates, prices, and other aggregate variables in closed and open economies. Students analyze conflicting views of business cycles, stabilization policy, inflation/unemployment tradeoffs, and fiscal and trade deficits. Extensive problem-solving stresses the application of theoretical tools to policy issues.

1 credit.

Spring 2000. 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 1999. Caskey.

ECON 031. Statistics for Economists

Focus 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 from real data sets will be stressed in recitation sections. Majors may satisfy the department's statistics requirement by taking an equivalent course such as STAT 053, or ECON 035.

1 credit.

Fall 1999 and spring 2000. Hollister.

ECON 032. Operations Research

(Cross-listed as ENGR 057)

The principles of operations research as applied in defining optimal solutions to engineering and economic problems to assist deci-

sion 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 1999. McGarity.

ECON 033. Accounting

This course surveys financial and managerial accounting. Covered are 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. Recent changes in accounting methods such as those stimulated by manufacturing advances are examined, as are concerns about ethical standards. (This course can not be used to satisfy the College's distribution requirements.)

1 credit.

Spring 2000. 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 policies.

Prerequisite: ECON 031 or equivalent; or instructor's permission.

1 credit.

Fall 1999. Hollister.

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 2000. Dee.

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 1999-2000.

ECON 043. Public Policy and the American Family

The American family has undergone tremendous change over the last century: family size has decreased, mothers of young children have entered the labor market in large numbers, the divorce rate and the rate of births to single mothers have risen, and relationships between generations within a family have grown more distant. This course will examine these and related changes and attempt to understand what their causes and effects are and the role that public policy plays in causing the changes or responding to them. This course may be counted toward concentrations in Public Policy and Women's Studies.

1 credit.

Not offered 1999-2000.

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.

Not offered 1999-2000.

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 concentra-

tion in Public Policy.

Prerequisite: ECON 011 or ECON 021;
Recommended: both.

1 credit.

Spring 2000. Golub.

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 GATT/WTO, foreign debt and default, the role of the state in economic development, international financial markets, the history of the international monetary system.

Prerequisite: POLS 004 and ECON 001.

1 credit.

Not offered 1999-2000.

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.

Recommended: ECON 011.

1 credit.

Fall 1999. Magenheim.

ECON 071. Labor Economics

Labor market operations are the focus. Topics covered include determinants of wage and benefit levels, growth in inequality of earnings, employment, unemployment, the changing role of unions, discrimination on the basis of race and gender, the effects of immigration, and returns to education. This course may be counted toward concentrations in Black Studies and Women's Studies.

Recommended: ECON 011.

1 credit.

Not offered 1999-2000.

Economics

ECON 073. Women and Minorities in the Economy

This course focuses on the roles of gender, race, and diversity in economic systems. Topics include the economic status of women and minorities; sources of race and gender 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.

Not offered 1999-2000.

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.

Not offered 1999-2000.

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 2000. 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 as well as programs in Black Studies and Asian Studies.

1 credit.

Fall 1999. O'Connell.

ECON 082. Political Economy of Africa

A survey of 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 Black Studies and Public Policy.

1 credit.

Not offered 1999-2000.

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. A major paper on an Asian economy is required. This course may be counted toward a concentration in Public Policy as well as a program in Asian Studies.

1 credit.

Spring 2000. Westphal.

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 101A. Economic Theory: 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.

1 credit.

Spring 2000. Bayer.

ECON 101B. Economic Theory: Advanced Macroeconomics

Subjects covered include microfoundations of macroeconomics, monetary and fiscal policy with multiple assets, dynamic aggregate supply and demand, growth theory, rational expectations, and New Classical and New Keynesian macroeconomics. Techniques used include comparative statics with linear algebra and economic dynamics with differential equations

Prerequisites: ECON 021 and at least one of the following: MATH 016, MATH 018, or MATH 030.

1 credit.

Spring 2000. O'Connell.

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 1999. Caskey.

ECON 135. 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 policies. Studies applying econometric methods to major economic issues are critiqued by students. A substantial individual empirical

research project is required.

Prerequisite: ECON 031, equivalent, or permission of the instructor.

2 credits.

Fall 1999. Hollister.

ECON 141. Public Finance

This seminar focuses on the analysis of government expenditure, tax, and debt policy. This course may be counted toward a concentration in Public Policy.

Prerequisite: ECON 011. Recommended: ECON 021.

2 credits.

Spring 2000. Saffran.

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.

Spring 2000. Golub.

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; and economic regulation and deregulation. This course may be counted toward a concentration in Public Policy.

Prerequisite: ECON 011.

2 credits.

Fall 1999. 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;

Economics

determinants of income inequality; government policies with respect to health, education, and welfare. This course may be counted toward a concentration in Public Policy (1 credit) and Black Studies.

Recommended: ECON 011.

2 credits.

Spring 2000. 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.

Fall 1999. O'Connell.

ECON 198. Thesis

With consent of a supervising instructor, honors majors may undertake a senior thesis for double credit.

Fall 1999 and spring 2000. Staff.

ECON 199. Senior Honors Study

Senior Honors Study consists of a seminar taken in the second semester of senior year. Majors rewrite and present one seminar paper from each of their three preparations. Minors rewrite and present a seminar paper from their one preparation. These rewritten seminar papers will be sent to the examiner who is examining that preparation. Majors receive 1 credit and minors 0.5 credit.

Education

K. ANN RENNINGER, Professor³
EVA F. TRAVERS, Professor and Program Director
LISA SMULYAN, Associate Professor
DIANE ANDERSON, Assistant Professor
ROBERT GROSS, Dean of Students
KEVIN KUMASHIRO, Visiting Instructor and Minority Scholar in Residence
MARIA ONG WENBOURNE, Visiting Instructor³
ELAINE BRENNEMAN, Visiting Assistant Professor⁶
KAE KALWAIC, Administrative Assistant

3 Absent on leave, 1999-2000.

6 Spring 2000 (appointment that semester only).

5 Fall 1999 (appointment that semester only).

The Program in Education 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. Courses in the Program in Education are intended to be integral to the College's academic offerings. 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 necessarily draw on the distinctive approaches of Psychology, Sociology, Anthropology, Political Science, Philosophy, and History. Because students major in one of the traditional 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 their own. There is a limit of four field-based Education credits (currently EDUC 016, 017, 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 Education, but Special Majors with Linguistics, Political Science,

Psychology, and Sociology/Anthropology are regularly approved, and Special Majors with other fields can be developed. Special Majors involving Education usually include ten to twelve credits, generally six credits in the primary department and four in Education or at least five in each of the two disciplines. A thesis or a comprehensive examination integrating work in the two fields is required. Both departments collaborate in advising students pursuing Special Majors.

HONORS PROGRAM

Students may pursue the Honors Program in Education either as a part of a Special Major or as a Minor. *Special Major Honors Programs* will take one of the following forms: (1) two preparations in Education and two in the other discipline that is part of their special major; (2) three preparations in Education and one in the other discipline; or (3) two and a half preparations in Education and one and a half in the other discipline (or vice versa) when an integrative, 2-credit thesis receives 1 credit from both departments. All *Education Special Majors* in the Honors Program will complete a two credit thesis and will write an intellectual essay which will be included in a portfolio submitted to the honors examiner. *Education Minors* in the Honors Program will take either a 2-credit seminar or a course and attachment or write a 2-credit thesis to prepare for the external examination.

Education

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 Introduction to Education at Swarthmore. The Swarthmore course may be taken prior to study abroad or subsequent to it.

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 have established criteria for certification in Biology, Chemistry, English, French, German, Mathematics, Physics, Spanish, and Social Studies. Individual programs are developed in conjunction with departmental representatives and members of the Education staff. All students seeking certification must meet Swarthmore College's general requirements for course distribution and a major. A list of specific requirements for certification in each subject area are available in the Education Office as well as the relevant departmental office.

9th 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 and 017; they pay for a total of one course of tuition and student fees; and are not eligible for campus housing. Further information on the 9th semester option is available in the Education Office.

Elementary certification: Swarthmore College does not offer certification in elementary education. However, if students complete the Swarthmore courses listed below 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.

REQUIREMENTS FOR SECONDARY TEACHER CERTIFICATION

Students planning to seek secondary certification should take Introduction to Education, EDUC 014, by the end of their Sophomore year and enroll for Practice Teaching, EDUC 016 (a double credit course) and Curriculum and Methods Seminar, EDUC 017 in their senior year or during a ninth semester. In addition, they must complete the following sequence of courses:

- Educational Psychology, EDUC 021
- Adolescence, EDUC 023
- An additional elective course from the following:
 - a. Counseling: Principles and Practices, EDUC 025
 - b. Special Education Issues and Practice, EDUC 026
 - c. Educating the Young Learner, EDUC 042
 - d. Literacies and Social Identities, EDUC 045
 - e. Gender and Education, EDUC 061
 - f. School and Society, EDUC 063
 - g. Environmental Education, EDUC 065
 - h. Child Development and Social Policy, EDUC 066
 - i. Urban Education, EDUC 068

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 Introduction to Education. Students must attain at least a grade point average of C in courses in their major field of certification and at least a grade of C+ in Introduction to Education in order to student teach. In addition, students must be recommended by their major department, by their Cooperating Teacher in Introduction to

Education, and by members of the faculty in Education who have taught the student. Placement of students for practice teaching is contingent on successful interviews with the Director of the Education Program and with appropriate secondary school personnel.

COURSES

EDUC 001C. The Writing Process

(See ENGL 001C)

Fall semester. Blackburn.

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 first-hand experience in current elementary and secondary school practice. Field work 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 seeking secondary 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 course will consider theoretical and applied issues related to effective classroom instruction. It must be taken concurrently with EDUC 016.

1 credit.

Each semester. Staff.

EDUC 021. Educational Psychology

(Cross-listed as PSYC 021)

This course focuses on issues in learning and development which 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 which provides an introduction to the process of research.

1 credit.

Fall 1999. Wenbourne.

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 2000. Smulyan.

EDUC 025. Counseling: Principles and Practice

An introductory course which 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 modelling exercises.

1 credit.

Spring 2000. Brennehan.

EDUC 026. Special Education: Issues and Practice

This course explores current definitions and approaches to the field of Special Education, focusing mainly on the learning disabled and socio-emotionally troubled student populations. Classwork includes readings from both Education and Psychology. Field placement required.

1 credit.

Not offered 1999-2000.

Education

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 1999-2000. Anderson.

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. Field work is required.

1 credit.

Fall 1999. Anderson.

EDUC 054. Oral and Written Language

(See LING 054)

1 credit.

Fall 1999. Napoli.

EDUC 061. Gender and Education

This course uses historical, psychological, and social frameworks to explore the role of gender in the educational process. It examines how gender influences experiences of teaching and learning and how schools both contribute to and challenge social constructions of gender.

1 credit.

Not offered 1999-2000. Smulyan.

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 1999. Kumashiro.

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.

Not offered 1999-2000.

EDUC 066. Child Development and Social Policy

This course provides students with an understanding of the implications of developmental psychology for social policy. Literature in child development and educational psychology is used to study particular educational problems and policies. Field research is required.

1 credit.

Not offered 1999-2000. Renninger.

EDUC 068. Urban Education

(Cross-listed as SOAN 068)

This course will focus on issues facing urban educators and policy makers, including desegregation, compensatory education, curricular innovation, community involvement, bilingual education, standardized testing, school restructuring and multiculturalism. The special problems and challenges faced by urban schools in meeting the needs of individuals and groups in a pluralistic society will be examined using the approaches of psychology, sociology, anthropology, and politi-

cal science. Current issues will also be viewed in historical perspective. Field work is required.

1 credit.

Spring 2000. Travers.

EDUC 069. Savage Inaccuracies: The Facts and Economics of Education in America

(Cross-listed as ECON 005)

This course investigates the relationship between issues of resource allocation and educational attainment. It examines the facts about student achievement and educational expenditures in the U.S. and the relationship between them. 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.

Prerequisites: ECON 001 and any statistics course (or the consent of the instructor). EDUC 014 is strongly recommended.

1 credit.

Not offered 1999-2000. Kuperberg.

EDUC 070. The Arts as Community Service/ Social Change

(See DANC 070)

1 credit.

Spring semester. Sepinuck.

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 which 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

One or two credits, normally in conjunction with a Special Major.

1 or 2 credits.

SEMINARS

EDUC 121. Child Psychology and Practice

Selected topics in child psychology will be read and their implications for theory, method and practice will be considered. Students will be involved in (a) developing an understanding of the relation between change and development through study of the constraints and conditions necessary for learning; (b) designing a tutorial setting which responds to the needs of students, parents and the school; and (c) articulating links between issues in cognitive science and topics in education.

Prerequisites: EDUC 014 and 021.

2 credits.

Not offered 1999-2000.

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.

2 credits.

Not offered 1999-2000. 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 topics, including finance and equity, school governance, the standards movement, school choice, systemic reform, curricular reform, early childhood education, immigrant and bilingual education, special education, and school-to-work reforms from the perspectives of several social science disciplines and political perspectives. Field work in a policy-related educational organization is required.

Education

2 credits.

Fall 1999. Travers.

EDUC 180. Honors Thesis

A two-credit thesis is required for students completing Special Honors Majors including Education. The thesis may be counted for two credits in Education or for one credit in Education and one credit in the other discipline in the student's Honors program.

2 credits.

Each semester. Staff.

Engineering

NELSON A. MACKEN, Professor
ARTHUR E. MCGARITY, Professor
FREDERICK L. ORTHLIEB, Professor
FARUQ M.A. SIDDIQUI, Professor and Chair
ERIK CHEEVER, Associate Professor
ERICH CARR EVERBACH, Associate Professor
LYNNE A. MOLTER, Associate Professor²
BRUCE A. MAXWELL, Assistant Professor
HOLLY A. CASTLEMAN, Administrative Assistant

2 Absent on leave, spring 2000.

The professional practice of engineering requires creativity and confidence in applying scientific knowledge and mathematical methods to the solution of 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 potential economic and social consequences that may follow from resolving significant and analytically well-defined technical issues. A responsibly educated engineer must, therefore, 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.

Mission of the Engineering Program: As stated in the introduction to 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 and responsible and able to adapt to new technical challenges, communicate effectively, and collaborate well with others.

Objectives of the Engineering Program: 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 leading to the degree of bachelor of science in Engineering 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. About half of our majors pursue either a concentration or a double major leading to two degrees, the bachelor of science in Engineering and a bachelor of arts in a second academic discipline within their four-year course of study. Departmental approval of a double major requires a B average among courses in Mathematics, Science, and Engineering.

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 mechanics, fossil and solar energy conversion, acoustics, nonlinear dynamics, and environmental water and air pollution control. Within these laboratories is a wide variety of modern

measurement equipment configured for computer-assisted data acquisition and process control; data files are directly accessible from the college computer network. A workstation laboratory with high performance color graphics and industry-standard engineering design, analysis, and graphics software is also part of our departmental facilities. Electronics, metal, and woodworking shops that support our courses and laboratories are also available for student use.

Courses Readily Available to Nonmajors

High Performance Composites (001), Exploring Acoustics (002), Problems in Technology (003), and Art and Science of Structures (007) are designed chiefly for students contemplating only an introduction to engineering. Mechanics (006) is primarily for prospective majors, but other interested students, particularly those preparing for a careers in architecture or biomechanics, are encouraged to enroll. Introduction to Environmental Protection (032), Operations Research (057), Solar Energy Systems (035), Water Quality and Pollution Control (063), Swarthmore and the Biosphere (064), Environmental Systems (066), and Environmental Policy (068) appeal to many students majoring in other departments, particularly those pursuing the Environmental Studies concentration. Students interested in computers, including those in the Computer Science concentration, may wish to consider Digital System Design (021), Principles of Computer Architecture (022), Computer Graphics (026), Computer Vision (027) and Robotics (028). Students majoring in the physical sciences or mathematics may enroll routinely in advanced engineering courses. Students may major or minor in the Honors Program in the Engineering Department by taking appropriately related advanced engineering courses in preparation for external examinations. Department faculty also support concentrations in Computer Science and Environmental Studies and a special major with the Linguistics Program.

Program for Engineering Majors

General departmental requirements fall into three categories: successful completion of at least (1) 12 engineering courses, (2) 4 courses in the sciences, which must include PHYS 003 and 004 or 007 and 008 (taken or begun in the freshman year) and CHEM 010 (or a more

advanced chemistry course), and (3) 4 courses in mathematics, including MATH 005 and 006 (to be taken in the first year), MATH 018, and MATH 030 (normally taken in the sophomore year). No courses intended to satisfy these departmental requirements, except those taken fall semester in the first year, may be taken Credit/No Credit. The unspecified science course in category (2) should be chosen to complement the student's overall program of study; only courses acceptable for credit toward a minimal major in the offering department are admissible toward an Engineering major. Computer Science courses are not eligible for inclusion in category (2).

Within category (1), the following core courses are required of all students: Mechanics, Physical Systems Analysis I and II, Experimentation for Engineering Design, Thermofluid Mechanics, and Engineering Design. Of these, the first four are normally taken as follows: Mechanics in the spring semester of first year, Physical Systems Analysis I in the fall semester of sophomore year, and the next two in the spring semester of sophomore year. Thermofluid Mechanics is normally taken in the fall of junior year, and Engineering Design, the culminating experience for engineering majors, must be taken in the spring of senior year. Submission and oral presentation of the Final Project Report in Engineering Design constitutes the comprehensive examination for majors in Engineering.

Elective Program for Course Majors: In consultation with his or her advisor, each student devises a program of advanced work in the department. These programs, normally including six courses, are submitted for departmental approval as part of the formal application for a major in engineering during the spring semester of sophomore year.

A student's elective program may or may not conform to some traditional or conventional area of engineering specialization (e.g., electrical, mechanical, and civil). Thus, for each plan of advanced work, the department requires a coherent, well-justified program that, in its judgment, meets the student's stated educational objectives.

Typical elective program plans include the following

1. *Electrical engineering group:* Electronic Cir-

cuit Applications, Physical Electronics, Electrodynamics, Communication Systems, and Control Theory and Design. Students having an interest in digital systems might replace one or more of these courses with Digital System Design, Principles of Computer Architecture, or Computer Graphics.

2. *Computer engineering group*: Digital System Design, Principles of Computer Architecture, Computer Graphics, Computer Vision, and Robotics. Students with an interest in computer hardware may include Electronic Circuit Applications, Physical Electronics, 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.

Note that High Performance Composites, Exploring Acoustics, Problems in Technology, Art and Science of Structures, Introduction to Environmental Protection, Swarthmore and the Biosphere, and Environmental Policy are not admissible as technical electives within an Engineering major but may be taken as free electives subject to the 20-Course Rule.

Honors Program in Engineering: Students with a B+ average among courses in engineering, science, and mathematics may apply to stand for Honors in engineering. Honors majors must complete all of the regular math, science, and core engineering requirements and accumulate at least 12 full course credits in engineering; an Honors thesis taken in the fall of senior year may substitute for one of the usual six engi-

neering electives. One of the three engineering preparations required for every honors degree in engineering must include ENGR 090. Examination is normally offered for 2-credit preparations in areas listed following the course descriptions; others are possible by special arrangement.

More specific information about Honors and Course programs is distributed by the department to prospective engineering majors in December of each year.

COURSES

ENGR 001. High-Performance Composites

Introduction to the structure, properties, and performance of modern composites in sports equipment, automotive, and aerospace applications. Simple models of material behavior are developed and used to examine products like ski poles, fishing rods, tennis racquets, radial tires, and human-powered aircraft. Labs include making and testing a number of polymer and ceramic matrix composites, plus a research project of the student's choice. Primarily for students not majoring in engineering.

Recommended: High school physics.

Primary distribution course. 1 credit.

Spring 2000. 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 2000. Everbach.

ENGR 003. Problems in Technology

For students not majoring in science or engineering. This year, the course will concentrate on the automobile and its impact on society. Technical, political, and socioeconomic aspects will be discussed. Class members will also work on teams with engineering students in

Engineering

designing, building, and testing a hybrid electric car. Enrollment limited.

Primary distribution course. 1 credit.

Fall 1999. Macken.

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 only in an introduction to engineering. Although ENGR 005 is not required of prospective engineering majors, it is strongly recommended. Offered in the fall semester.

0.5 credit.

Fall 1999. 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.

Prerequisite: PHYS 003 or equivalent.

Primary distribution course. 1 credit.

Spring 2000. Siddiqui/Orthlieb.

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.

1 credit.

Offered when demand and staffing permit.

ENGR 011, 012. Physical Systems Analysis I and II

The study of engineering phenomena that may be represented by a linear, lumped-parameter model. ENGR 011 is oriented mainly toward electrical devices and the development of mathematical techniques for the analysis of their linear behavior. ENGR 012

is more concerned with mechanical, thermal, and fluid systems. Includes laboratory. Credit may be given for either semester or both.

Prerequisites: MATH 006 and PHYS 004 (or equivalent) or permission of the instructor. ENGR 011 offered in the fall semester. ENGR 012 offered in the spring semester.

1 credit.

ENGR 011: Fall 1999. Molter.

ENGR 012: Spring 2000. Cheever/Maxwell.

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.

Prerequisites: ENGR 011 and ENGR 012. Offered in the spring semester.

1 credit.

Spring 2000. McGarity/Macken.

ENGR 021. Digital System Design

This course covers digital system design. Topics include Boolean logic, digital representations, and techniques for design of combinational, sequential, and asynchronous circuits. We also study I/O interfaces, communication protocols, and microcontroller architecture. Labs focus on CAD techniques, VHDL (very high speed integrated circuit hardware description language), and programmable logic devices.

Prerequisites: CPSC 021, ENGR 011, or permission of the instructor. Offered in the fall semester every year.

1 credit.

Fall 1999. Maxwell.

ENGR 022. Principles of Computer Architecture

(Cross-listed as CPSC 023)

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, ENGR 021, or permission of the instructor. Offered in the spring semester every year.

1 credit.

Spring 2000. Maxwell.

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 graphics primitives, 2D and three-dimensional matrix transformations, projective geometry, 2D and 3D 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 3D hierarchical modeling system that incorporates realistic lighting models and fast hidden surface removal.

Prerequisites: ENGR 012, CPSC 021, or permission of the instructor. Recommended: Linear algebra and some calculus. Offered fall semester, alternate years.

1 credit.

Fall 2000. 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.

Prerequisites: ENGR 012, CPSC 021, or permission of the instructor. Recommended: Math background at the level of MATH 016 or MATH 018. Offered fall semester, alternate years.

1 credit.

Fall 1999. Maxwell.

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. Offered on demand.

1 credit.

Spring 2000. Maxwell.

ENGR 032. Introduction to Environmental Protection

Primarily for those not majoring in engineering, this course focuses on solutions to environmental problems in the areas of water supply, water pollution, air pollution, and energy supply. Local and global pollution control and solar energy technologies are examined. Public policy developments and alternative perspectives are explored. Methods of computer-based systems analysis are introduced for developing economically effective environmental protection policies.

1 credit.

Spring 2000. Everbach.

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.

Prerequisites: ENGR 012 or equivalent or consent of the instructor.

1 credit.

Engineering

Fall 1999. McGarity.

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.

Prerequisites: ENGR 012 and ENGR 014 (or equivalent background). Offered in the fall semester.

1 credit.

Fall 1999. 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. Prerequisites: elementary linear algebra. Offered in the fall semester.

Primary distribution course (natural sciences only; and only if enrolled for ENGR 057).

1 credit.

Fall 1999. 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.

Prerequisite: ENGR 012 or equivalent. Offered in the spring semester.

1 credit.

Spring 2000. Cheever.

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 theo-

ries. Includes laboratory.

Prerequisite: ENGR 06 or equivalent. Offered in the fall semester.

1 credit.

Fall 1999. 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.

Prerequisite: ENGR 059 or permission of the instructor. Offered in the spring semester.

1 credit.

Spring 2000. 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.

Prerequisite: ENGR 006 or permission of the instructor. May be taken concurrently with ENGR 059. Offered in the fall semester, alternate years.

1 credit.

Not offered 1999-2000.

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.

Prerequisite: ENGR 060. Offered in the fall semester.

1 credit.

Fall 1999. Siddiqui.

ENGR 063. Water Quality and Pollution Control

Elements of water quality management and treatment of wastewaters. Measurement of water quality indicators. Analysis of wastewater treatment processes. Sewage treatment plant design. Computer modeling of the effects of waste discharge on rivers and estuaries.

Environmental impact assessment. Laboratory and field studies included.

Prerequisite: ENGR 012 or equivalent or consent of instructor. Offered in the fall semester, alternate years.

1 credit.

Not offered 1999-2000.

ENGR 064. 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. The selected topic is explored from various perspectives by student project groups, 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. Classes meet once weekly for lectures, student progress reports, and project planning. Cross-listed in the instructors' departments.

1 credit.

Offered when demand and staffing permit.

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.

Prerequisite: ENGR 057, or equivalent. Offered in the spring semester, alternate years.

1 credit.

Not offered 1999-2000.

ENGR 068. Environmental Policy

(Cross listed as POLS 043)

Topics in environmental analysis, policy formulation and pollution regulation.

1 credit.

Offered when demand and staffing permit.

ENGR 071. Discrete Time Systems

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. Provides an introduction to architecture and programming of Digital Signal Processors. Laboratory included.

Prerequisite: ENGR 012.

1 credit.

Spring 2000. Staff.

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.

Prerequisite: ENGR 011 or PHYS 008. Offered in the fall semester.

1 credit.

Fall 1999. Cheever.

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 non-engineering 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.

Prerequisite: ENGR 011 or PHYS 008. Offered in the fall semester.

0.5 credit.

Fall 1999. Cheever.

ENGR 073. Physical Electronics

Physical properties of semiconductor materials, semiconductor devices, and simple circuits. 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 photodetectors. Modeling and fabrication processes. Includes laboratory.

Prerequisites: ENGR 011 or PHYS 008. Offered in the spring semester.

1 credit.

Not offered 1999-2000.

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, and other current technologies. Laboratories for both courses will be oriented toward optical applications using lasers, fiber and integrated optical devices, modulators, nonlinear materials, and solid state detectors.

Prerequisite: ENGR 012 or equivalent. ENGR 075 or Physics equivalent is a prerequisite for ENGR 076. 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.

1 credit.

Not offered 1999-2000 (ENGR 075 and 076).

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. Prerequisite: ENGR 011 or PHYS 008.

1 credit.

Fall 1999. Cheever.

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.

Prerequisite: ENGR 012 or equivalent. Offered in the spring semester.

1 credit.

Not offered 1999-2000.

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.

Prerequisite: ENGR 041. Offered in the spring semester, alternate years.

1 credit.

Spring 2000. Macken.

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.

Prerequisite: ENGR 059 or permission of the instructor. Offered in the fall semester, alternate years.

1 credit.

Fall 1999. Orthlieb.

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.

Prerequisite: ENGR 041. Offered in the spring semester, alternate years.

1 credit

Not offered 1999-2000.

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.

Prerequisite: ENGR 041. Offered in the fall semester, alternate years.

1 credit.

Not offered 1999-2000.

ENGR 090. Engineering Design

Students work on a design project that is the culminating exercise for all senior Engineering majors. Under the guidance of a faculty member, students investigate a problem of their choice in an area of interest to them. A comprehensive written report and an oral presentation are required. Offered in the spring semester.

1 credit.

Spring 2000. Staff.

ENGR 091. Special Topics

Subject matter dependent on a group need or individual interest. Normally restricted to seniors.

1 credit.

Offered only when staff, interest, and availability make it practicable.

ENGR 093. Directed Reading or Project

With the permission of the Department and a willing faculty supervisor, qualified students may do special work with theoretical, experimental, or design emphasis in an area not covered by regular courses.

1 credit.

Offered only with department approval and faculty supervision.

ENGR 096. Honors Thesis

With approval of the department and a faculty advisor, an Honors major may undertake, in addition to ENGR 090, an Honors thesis in the

fall semester of the senior year. 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.

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

Communication Systems

Electromagnetic Theory

Computer Design

Principles of Computer Architecture

Computer Graphics

Continuum Mechanics

Mechanics of Solids

Fluid Mechanics

Control Theory and Digital Laboratory Applications

Computer Graphics

Control Theory and Design

Digital Systems

Digital System Design

Principles of Computer Architecture

Electronics

Electronic Circuit Applications

Semiconductor Devices and Circuits

Electromagnetic Theory

Electromagnetic Theory I and II

Environmental Systems

Operations Research

Environmental Systems

Materials Engineering

Mechanics of Solids

Engineering Materials

Engineering

Perception

Computer Vision

Robotics

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

Thermal Energy Conversion

Heat Transfer

Visual Information Systems

Computer Graphics

Computer Vision

Water Quality and Supply Systems

Water Quality and Pollution Control

Environmental Systems

English Literature

NATHALIE ANDERSON, Professor

THOMAS H. BLACKBURN, Professor

CHARLES L. JAMES, Professor and Chair

PETER J. SCHMIDT, Professor¹

PHILIP M. WEINSTEIN, Professor

CRAIG WILLIAMSON, Professor

ABBE BLUM, Associate Professor³

ELIZABETH BOLTON, Associate Professor

BEN YAGODA, Visiting Associate Professor (part-time)⁵

LISA COHEN, Visiting Assistant Professor and Mellon Postdoctoral Fellow

RAIMA EVAN, Visiting Assistant Professor (part-time)

NORA JOHNSON, Assistant Professor

CAROLYN LESJAK, Assistant Professor

EMILIE PASSOW, Assistant Professor (part-time)²

PATRICIA WHITE, Assistant Professor

MICHELLE HERMANN, Visiting Instructor and Minority Scholar in Residence

FRANK K. SARAGOSA, Instructor

CAROLYN ANDERSON, Administrative Assistant

NANCY BECH, Administrative Assistant (part-time)

THEATRE STUDIES

LEE DEVIN, Professor

ALLEN KUHARSKI, Associate Professor, Resident Director, and Director of Theatre Studies

WILLIAM MARSHALL, Associate Professor and Resident Designer²

URSULA NEUERBERG DENZER, Instructor

ABIGAIL ADAMS, Visiting Lecturer (part-time)

CARLA BELVER, Visiting Lecturer (part-time)

1 Absent on leave, fall 1999.

2 Absent on leave, spring 2000.

3 Absent on leave, 1999-2000.

5 Fall 1999 (appointment that semester only).

This department offers courses in English literature, American literature, African and Caribbean literatures, and Asian-American literatures, Gay and Lesbian literatures, theatre, film, some foreign literatures in translation, creative writing, and critical theory. 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. In addition, the Theatre

Program offers both practical and theoretical courses in performance studies.

ENGLISH LITERATURE REQUIREMENTS AND RECOMMENDATIONS

Any introductory course—ENGL 005A through 005Y—is the prerequisite for all other courses in literature. (Exempted from this prerequisite are seniors, juniors, and students who wish to take only studio courses.) Introductory courses attempt in a variety of ways to reflect the diversity of interests—with respect to subject matter, theoretical approach, literary

English Literature

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 upon 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; they are primary distribution courses. Enrollment will be 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 AP scores of 4-5 in English Literature and/or English Composition 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. Students planning to qualify for teacher certification in English are reminded that work in American literature, in linguistics or the history of the English language, and in theatre or film is required in addition to other requirements of the major. Non-majors who wish to be certified in English must meet all the course requirements noted above (e.g., requirements for the

major except for the Senior Essay, plus the additional courses required for certification) as well as maintaining a grade point average of 2.5 or better in courses taken in the English Department.

Students wishing to study abroad should consult with the Departmental Chair far enough in advance of such study to effect proper planning of a major or minor. In determining which courses of study abroad will meet Department criteria for requirements or to receive credit toward a major or minor, the Department will rely both on its experience in evaluating the work of students returning from these programs and on careful examination of course descriptions, syllabi, and schedules. Students may 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.

Major in the Course Program: 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 *), three in literature written after 1830, and one unit featuring critical theory (such courses are marked with a **). Courses marked with a *** may be counted as pre-1830 or post-1830 but not both. Courses marked with a */** may be counted as pre-1830 or critical theory 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 Department Office.

Major in the Honors Program: 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 gener-

al major requirement of three units of credit in literature written before 1830 and three units of credit in literature written after 1830 as well as a course or seminar that features critical theory. The departmental requirements for Honors, including instructions about Senior Honors Study, are spelled out in detail in a departmental handout.

Students who wish 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 one-credit workshop plus a one-credit Directed Creative Writing Project. For further information, including deadlines for Directed Creative Writing proposals, see rubric under ENGL 070K.

Minor in the Honors Program: Minors must do a single, two-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 regular or honors majors—must complete three units of creative writing in addition to the usual departmental requirements of pre-1830 and post-1830 units and the critical theory requirement. The creative writing credits will normally consist of two workshops and ENGL 070K, the Directed Creative Writing project. Students may count towards the program no more than one workshop offered by departments other than English Literature. Admission into the program will depend upon the quality of the student's written work and the availability of faculty to supervise the work. Students who are interested in the program are urged to talk both with the Department Chair and with one

of the Department faculty who regularly teach the workshops.

The English Department Curriculum

The English Department courses are grouped together by historical period, genre, or course level as follows:

- 001A, B, C: Special Courses which do not count toward the major
- 005A, B, C, etc.: Introductory Courses: all primary distribution courses (PDCs)
- 010-099: Advanced Courses
- 010,011: Survey Courses in British Literature
- 014-019: Medieval
- 020-029: Renaissance and 17th Century
- 030-039: Restoration, 18th Century, Romantic
- 040-049: Victorian to Modern
- 050-069: American (including African American and Asian American)
- 070A, B, C, etc.: Creative Writing 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 only with approval of the Department Chair)

001: SPECIAL COURSES

These courses are special writing intensive courses which 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. Thinking and Writing Analytically (Workshop)

What writing strategies can generate powerful ideas, solid support, coherent organization, and

English Literature

clear syntax? ENGL 001A, Thinking and Writing Analytically, helps students acquire a conceptual grasp of the writing process applicable across the curriculum. Short assignments in response to a range of readings and frequent conferences with the instructor allow students to improve specific elements of their own styles.

Does not meet distribution requirements or count toward the major.

1 credit. May be repeated for 0.5 credit.

Fall 1999. Passow.

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.

Does not meet distribution requirements or count toward the major.

1 credit.

Fall 1999. Blackburn.

005: 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 005A. Technology and the Text

In this course, we will explore the changing nature of literary texts and our conceptions of them from what we might call the “zero technology” of the oral tradition, through the age of manuscript transmission, into the age of print and the development of printing technologies and the publishing industry, and

beyond into our own new world of electronic texts and hypertexts. Our reading will range from *Beowulf* to Shakespeare, to Dickens and out into the contemporary world of fictions and hyperfictions.

Primary distribution course. 1 credit.

Spring 2000. Blackburn.

ENGL 005B. Science and the Literary Imagination

An introduction to the critical reading of literature, using texts (in prose and verse from the 16th century to the present) that are concerned with or reflect the impact of science and scientific thinking on individual and society.

Primary distribution course. 1 credit.

Fall 1999. Blackburn.

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 1999. 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, Kingston, and Morrison. Theoretical essays may also be assigned.

Primary distribution course. 1 credit.

Not offered 1999-2000. Weinstein.

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 1999-2000. Williamson.

ENGL 005H. Portraits of the Artist

We will study a wide variety of works portraying artists in different cultures and contexts and media. Writers will tentatively include Dante, William Blake, Salman Rushdie, and Judith Ortiz Cofer. The syllabus also contains movies.

Primary distribution course. 1 credit.

Spring 2000 and Fall 2000. 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.

Fall 2000. James.

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.

Not offered 1999-2000. Bolton.

ENGL 005L. Writing 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.

Fall 2000. Bolton.

ENGL 005M. Ways of Seeing

A study of the cultural codes by which we "see" and locate ourselves in the world—from love at first sight to cyborg vision; siting home to revisioning gender/sexuality; from "classic" to "popular" texts. Works include *A Midsummer Night's Dream*, *Do Androids Dream of Electric Sheep*, *Bladerunner*, *Love Medicine*, *Kindred*, *The Simpsons*, classic *Seinfelds*; shorter works: Jen, Berger, Haraway, Russ; poetry by Soto and Olds.

Primary distribution course. 1 credit.

Fall 2000. Blum.

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.

Fall 1999 and Fall 2000. Johnson.

ENGL 005P. Writing Red: Native American Literature

This survey course is designed to acquaint students with a range of Native American (primarily U.S.) literatures. We will question and think critically about mass-mediated images of Native Americans as well as examine the ways in which "Indianness" is performed, constructed, contested, and embodied in a variety of literary texts and contexts: poetry, film, autobiography, fiction, and photography. Authors will include Drew Hayden Taylor, Gerald Vizenor, Maria Campbell, Tiffany Midge, Sherman Alexie, Ray A. Young Bear, and D'Arcy McNickle.

Primary distribution course. 1 credit.

Spring 2000. Hermann.

ENGL 005Q. Subverting Verses

Once history, biography, fiction, philosophy, and even science could be written in verse

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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.

Fall 1999. Anderson.

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, Hitchcock, and others.

Primary distribution course. 1 credit.

Fall 2000. White.

ENGL 005T. The Mask of Love

This course will examine the relationship between love and performance. How does the search for a loved one involve the creation of a mask or persona? What is the mask's relation to the self? Can this character be repeatedly performed and sustained? How is the mask a response to the desired Other? Selected authors: Shakespeare, Hwang, Pinter, Wharton, and Walker. Films by Nunn and Wenders. Versions of *Cinderella* and *Beauty and the Beast*.

Primary distribution course. 1 credit.

Fall 1999 and 2000 and Spring 2001. Evan.

ENGL 005V. Literature and Poverty

How do literary genres influence our perceptions of poverty? This course explores the pastoral, romanticism, realism, and magic realism while we talk about how representations of poverty are related to the historical phenomenon.

Primary distribution course. 1 credit.

Not offered 1999-2000. Johnson.

ENGL 005W. American Dreams

The various visions and ideas of "America"—as a haven of freedom, as a land of opportunity, even as promised land—will be the focus of this course. We will examine a range of literary texts from the 17th to the 20th century, representative of various literary forms, in order to think about the dreams, aspirations, contestations, and negotiations which have informed our sense of America and American national identity.

Primary distribution course. 1 credit.

Fall 1999, Fall 2000, and Spring 2001. Saragosa.

ENGL 005Y. Reading and Writing the Body

In this class, we will analyze a range of texts (fiction, poetry, and essays), paying particular attention to the ways they represent various bodily events (including eating, illness, sex, and dress) in order to ask how they define both the body and the act of reading. We will ask what it means to represent bodies as subject to and the subjects of history, and we will investigate the body as both a physical and a textual entity. Authors studied include Jamaica Kincaid, Nella Larsen, Franz Kafka, Susan Sontag, William Shakespeare, and Gertrude Stein.

Primary distribution course. 1 credit.

Fall 1999. Cohen.

010-099: 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 2000. 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.

Spring 2000. Lesjak.

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.

1 credit.

Spring 2001. Williamson.

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—and 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.

Spring 2000. Williamson.

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 1999 and 2000. Johnson.

ENGL 021. Shakespeare and Critical Theory: "Our Shakespeares"*/**

Who or what is "Shakespeare" as the plays are approached today? An intensive study of *Macbeth*, *Twelfth Night*, *Henry V*, *Hamlet*, and one play performed in the Philadelphia area in the context of current critical approaches including deconstruction, performance studies, gender, feminist and queer studies, New Historicism and cultural materialism, treatments of nationalism, race, and class.

1 credit.

Not offered 1999-2000. Blum.

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.

Spring 2000. Johnson.

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 2001. Johnson.

ENGL 024. Inscriptions of the Feminine in 16th and 17th Century England*/**

Writings about and by English women when very few women published or had rooms of their own. Works from sonnets to closet dramas, spiritual narratives to fiction by (among others) Queen Elizabeth, Elizabeth Cary, Aphra Behn, Aemilia Lanier, Shakespeare, John Milton, Thomas Middleton, and Virginia Woolf. Close reading of texts; class, gender, nationalism, and sexuality in historical and cultural contexts.

1 credit.

Not offered 1999-2000. Blum.

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 1999-2000. Johnson.

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, socio-political, and literary contexts; just as important, we will look at how the plays have been and continue to be performed.

1 credit.

Fall 2000. Blum.

ENGL 028. Milton*

Study of Milton's poetry with particular emphasis on *Paradise Lost*.

1 credit.

Spring 2000. Blackburn.

030-039: RESTORATION, 18TH CENTURY, ROMANTIC

ENGL 030. Restoration Drama*

The restoration of the monarchy reopened London theatres and brought actresses to the English stage for the first time. We'll explore the new forms produced in this historical context—heroic drama, comedy of manners, farce, the drama of sentiment—along with the audiences, theatres, players, and critics that helped shape those forms.

1 credit.

Spring 2001. Johnson.

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. Specific topics: The Haunting of the Public Sphere (1999) and Transatlantic Conversations (2001).

1 credit.

Not offered 1999-2000. Bolton.

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 2001. 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 1999-2000. Bolton.

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 1999-2000. Lesjak.

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.

Spring 2001. Bolton.

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, children's literature)—in and through which ideas of gender, sexuality, domination, and violence are approached.

1 credit.

Not offered 1999-2000. Lesjak.

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 1999-2000. Anderson.

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.

Not offered 1999-2000. 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.

Spring 2001. Anderson.

ENGL 046. Stein and Woolf

This course is an intensive consideration of two icons of modernism and of some of the current critical writing on their work. As we investigate these writers' formal experimentation and their attempts to delineate modern subjectivity, we will analyze the representation of gender, sexuality, and national identity in their work, and we will pay explicit attention to the history of their status as "icons of modernism"—to their places in the canon. Texts include Stein's *QED*, *Three Lives*, and *Tender Buttons*, and various "portraits," and Woolf's *Jacob's Room*, *Mrs. Dalloway*, *To the Lighthouse*, and *Orlando*.

1 credit.

Spring 2000. Cohen.

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

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explore the political implications of the supposedly personal. This course considers a variety of poetic styles and stances employed by women writing in English today—feminist or womanist, intellectual or experiential, lesbian or straight, and mindful of ethnic heritage or embracing the new through artistic experimentation.

1 credit.

Spring 2000. Anderson.

ENGL 049. Contemporary Irish Poetry

Ireland's complicated historical divisions have provided fertile ground for extraordinary poetry, both in the Republic and in the North. This course will consider poetry by Heaney, Boland, Carson, McGuckian, Muldoon, and ní Dhomnaill (among others) within the socio-political contexts of contemporary Ireland.

1 credit.

Spring 2001. Anderson.

050-069: AMERICAN (INCLUDING AFRICAN AMERICAN AND ASIAN AMERICAN)

ENGL 051. Fictions in American Realism

This course considers some basic and probably unanswerable questions about late 19th century relationships between art and conscience, when rapid national expansion and social dislocations rendered American romance obsolete. The chosen narratives portray individuals confronted by hardships or moral dilemmas peculiar to early modernism. Writers include W. D. Howells, Henry James, Kate Chopin, Theodore Dreiser, Stephen Crane, Edith Wharton, and Charles Chesnut.

1 credit.

Spring 2000. James.

ENGL 052A. Studies in American Prose

A study of 19th and 20th century American narratives exploring the consequences of forbidden border crossings—cultural, racial, sexual. Nineteenth century texts: a feminist look at the Puritans and Indians (*Hobomok*); Douglass' *The Heroic Slave*; Hawthorne's *Scarlet Letter*; 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 Bharati Mukherjee's *Holder of the World*.

1 credit.

Not offered 1999-2000. Schmidt.

ENGL 052B. American Fiction: Melville and Pynchon

A study of two writers with many shared ambitions, interests, and compulsions, with emphasis on their work in shorter forms as well as the epic-length novel. Melville readings will include "Bartleby the Scrivener" and "Benito Cereno" and the short novel *Israel Potter* as well as *Moby-Dick*. Pynchon readings will be "Entropy," "The Secret Integration," *The Crying of Lot 49*, and *Mason & Dixon*.

1 credit.

Not offered 1999-2000. Schmidt.

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; María Amparo Ruiz de Burton, *Who Would Have Thought It?* (1872); 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 1999-2000. Schmidt.

ENGL 053. American Poetry

A study of the poetry and prose of selected U.S. writers, including Whitman, Dickinson, Williams, Stevens, Hughes, and H.D.

1 credit.

Spring 2000. Schmidt.

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 towards aesthetic criteria attentive to both racial dynamics and formal achievement.

1 credit.

Fall 1999. Weinstein.

ENGL 057. The African American Writer

This century-long overview considers the way

African American writers frame their double-faceted culture, foreground their history and heritage, and portray their community's way of knowing itself. Writers range from Chesnut to Morrison and may include J.W. Johnson, W.E.B. DuBois, Jean Toomer, Richard Wright, Langston Hughes, or Alice Walker.

1 credit.

Not offered 1999-2000. 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 2001. 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.

Fall 2000. James.

ENGL 061. Earlier Native American Literature**

In 1969, Kiowa writer N. Scott Momaday was awarded the Pulitzer Prize for *House Made of Dawn*, a novel set on the Jemez Pueblo in New Mexico. This event sparked what Kenneth Lincoln has termed a literary "Native American Renaissance," and in its wake, there has been a surge in both the production of and interest in Native American literature. Overlooked in the focus on contemporary literature, however, has been earlier Native American literature. This course will examine literature produced by Native Americans in English from the 18th to the mid-19th centuries primarily. Genres will include spiritual narratives, letters, autobiographies, and fiction.

1 credit.

Fall 1999. Hermann.

ENGL 062. Native American Autobiography

This course is designed to acquaint students with the varieties of self-life-narration in native North America. We will examine issues, such as the construction of Native American images, 'Indianness', literary nationalism, violence, contemporary storytelling, and notions of the 'self'. We will be reading critical and cultural theory alongside primary texts to understand the ways in which Native American personal narratives are read and discussed in the academy and in tribal communities.

1 credit.

Not offered 1999-2000. Hermann.

ENGL 063. Asian American Literature

This course is designed to introduce you to the common texts and critical issues in the study of Asian American literature in the context of the various and changing circumstances of Asian immigration to the United States. We will think about such issues as "authentic" identity, assimilation, remembering or imagining a homeland, and how these issues may be influenced by differences in generation, gender, and sexuality.

1 credit.

Not offered 1999-2000. Saragosa.

ENGL 064. The Asian American Miscegenation

The historical circumstances of Asian immigration to America, and American and European involvement in Asia, will be occasions to think about how the representation of interracial romance is deployed to mediate broader cultural fears. We will examine the sexual stereotypes of Asian men and women; we will think about how the people concerned maneuver within a very loaded cultural minefield; and we will look at political racial mixing, thinking about the possibilities for cross-racial coalition building.

1 credit.

Not offered 1999-2000. Saragosa.

ENGL 065. Self-Formation and Minority Literature

This course will be organized around the

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notion of "self-formation," and we will think about autobiography and the novel as forms through which model, or normative, subjectivities are produced. In this context, we will think about the notion of "minor" literature (as opposed to "major" or canonical literature), how this relates to the construction of "minority" literature, and how works by women and people of color revise and contest notions of self-formation and normative subjectivity.

1 credit.

Spring 2001. Saragosa.

ENGL 066. Oriental Visions and Asian Eyes: Asians on Stage and Screen**

The history of representations of Asians will provide the basis for our interrogation of race in the popular American imagination. We will, however, spend more time on the recent history of Asian American theater, film, and performance. Topics will include racial performance and performance theory; representational strategies of containment and resistance; questions of production, distribution, and reception; and the viability of theater and film as locations from which to imagine an alternative political reality.

1 credit.

Spring 2001. Saragosa.

ENGL 067. (Asian) Ethnicity and (Hetero)Sexual Normativity**

In this class, we will examine a variety of literary texts and performance pieces to think about how ideas of sexual normativity are deployed to police not only gender identity, but a whole range of political identifications. While we will be looking at these issues in the specific context of Asian American ethnicity, the theoretical issues we raise will have implications in our broader understanding of race and ethnicity.

1 credit.

Not offered 1999-2000. Saragosa.

ENGL 068. Chicano/a Literature

We will examine Mexican American literary production in the context of the Chicano rights movement. This will entail an examination of cultural production and movimiento and post-movimiento politics. Our texts will be literature, film, performance, and visual art, and the artists will include (among others)

Tomas Rivera, Richard Rodriguez, Guillermo Gomez-Pena, Sandra Cisneros, and Cherrie Moraga. Issues examined will include borderlands/border theory; ethnic and national identity; gender and sexuality en la movimientto; and the place of the ethnic intellectual.

1 credit.

Spring 2000. Saragosa.

070: CREATIVE WRITING WORKSHOPS

Regular creative writing workshops are limited to 12 and require the submission of writing samples 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 (Studio course)

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 2000: Anderson. Spring 2001: Schmidt.

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 others' 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 2000 and 2001. Bolton.

ENGL 070C. Advanced Poetry Workshop (Studio course)

Intensive volumes of poetry often represent their authors' conscious statements, made through selection, organization, and graphic presentation. This course is intended as an advanced workshop for students who have taken the Poetry Workshop or have completed a substantial body of work on their own. Limited to 12. Admission and credit are granted at the discretion of the instructor.

1 credit.

Fall 2000. Anderson.

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 and 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.

Fall 2000. Williamson.

ENGL 070E. Lyric Encounters#

Matthew Arnold called it "a criticism of life"; 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.

Fall 1999. Anderson.

ENGL 070F. Journalism Workshop

This course will consider a variety of journalistic genres—the hard-news article, the investigative story, the profile, the feature, the work of literary journalism—historically, theoretically, and practically as well as examining how they are variously adapted for newspapers, magazines, and books. Students will produce a substantial work of journalism, or a series of shorter pieces that address different aspects of the same subject. Periodically, professional journalists with a range of interest and expertise will visit the class.

1 credit.

Fall 1999. Yagoda.

ENGL 070K. Directed Creative Writing Projects

Students—whether regular 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 receipt of written applications are the second Monday in November and the first Monday in April. Normally limited to juniors and seniors who have taken an earlier workshop in the Department.

For creative writing projects in the Honors Program, 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. Staff.

071: GENRE STUDIES

See also ENGL 081. *Theory of the Novel*.

ENGL 071A. Tragedy***

A study of tragedies from the Greeks to the postcolonial world. We'll examine the history of the genre, theories of the tragic, and the ongoing effort to rewrite tragedy in changing historical circumstances.

Note: By arrangement with the professor, this

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course may be countered as either pre-1830 or post-1830, but not both.

1 credit.

Not offered 1999-2000. Johnson.

ENGL 071B. The Lyric in English***

A history of the lyric poem in English from its origins in Old and Middle English to contemporary poetry, with emphasis on comparing particular lyric genres like the elegy, the love poem, and the pastoral lyric.

Note: By arrangement with the professor, this course may be countered as either pre-1830 or post-1830, but not both.

1 credit.

Fall 2000. 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; the refutation of time and mortality.

1 credit.

Fall 2000. Bolton.

ENGL 071E. Autobiographical Acts

What compels the act of writing the self? What do the acts have in common across race, culture, or gender? This course examines impulses to testify and considers a range of ethnic and cultural instances in its questioning, but examples will vary from time to time.

1 credit.

Not offered 1999-2000. James.

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 1999-2000. Bolton.

ENGL 071G. Satire: Spirit and Art

This course speculates about the nature and

aims of satire and its problematical standing. How valid are claims to moral purpose? To power or influence? We will question whether satires ranging from toasts in verse to narratives in fiction and film are 'open' or 'closed' forms. Authors will include Atwood, Huxley, Charles Johnson, Pope, Ishmael Reed, Swift, John Kennedy Toole, and Nathanael West.

1 credit.

Not offered 1999-2000. James.

ENGL 071H. Science Fiction

An exploration of origins, genres, themes, and contexts in a dozen or so works of science-based speculative fiction from several ages. We will be concerned not only with the workings of the literary imagination in these novels (and a few plays), but also with shifting ideas about what science is, of the relation of science to human affairs (religious, political, economic, and even psycho-sexual); and of the perceptible shape of the universe itself. Authors may include Bacon, Swift, Mary Shelley, Verne, Wells, Stapledon, Asimov, Clarke, Brunner, Gibson, LeGuin, Piercy, etc.

1 credit.

Not offered 1999-2000. Blackburn.

ENGL 071J. Cherchez la femme: The "Mystery" of Women 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, Barbara Wilson.

1 credit.

Not offered 1999-2000. Anderson.

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 2000. 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 1999-2000. Schmidt.

ENGL 71N. Narratives of Spiritual Quest***

A study of how writers from the 16th century to the present explore spirituality and unlock the conscience within through particular forms—from allegory to lyric, fiction to autobiography. Works by Spenser, Milton, Herbert, Dickinson, Merton, Kerouac, Tolstoy, Goldberg, Morrison, Butler, Hillesum, Hooks, and others. Popular film and TV may include *The Rapture*, *Buffy Vampire Killer*, *Touched by an Angel*, and the *X-Files*.

Note: By arrangement with the professor, this course may be counted as either pre-1830 or post-1830, but not both.

1 credit.

Spring 2001. Blum.

ENGL 071R. Feminist Theatre

Feminist playwrights have used the stage to critique a patriarchal discourse founded upon woman as spectacle. At the same time, they have created a new theatrical language devoted to staging women as subjects. We will start our readings with a backward glance at the modern drama canon, then focus upon 20th century playwrights and performance artists, such as Glaspell, Johnson, Churchill, Terry, Fornes, Shange, Kennedy, Duras, Yamauchi, Wong, Smith, Hughes, and Split Britches.

1 credit.

Spring 2000. Evan.

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.

Spring 2000. Weinstein.

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.

Spring 2001. Weinstein.

ENGL 073A. Mapping the Modern

(Crosslisted 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 1999-2000. Weinstein and Wagner-Pacifi.

English Literature

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.

Fall 2000. Weinstein.

ENGL 075. Studies in Comparative Fiction

This course will explore the relationships between desire and law, as well as the social construction of identity, in a range of 19th- and 20th-century novels. Writers will include Flaubert, Dostoevsky, Tolstoy, Kafka, Faulkner, and Morrison.

1 credit.

Not offered 1999-2000. Weinstein.

ENGL 076. Studies in Modern Drama

The course will focus on selected modern playwrights who have been instrumental in reconceiving dramatic form and in shaping the modernist (or post-modernist) tradition. Major topics may include: text and subtext, realism and expressionism, theatre as self-reflexive form, acting and acting out, language and silence, and ideas of the spectacular. Major authors will include Ibsen, Pirandello, Brecht, Beckett, Pinter, and Churchill.

1 credit.

Not offered 1999-2000. Williamson.

ENGL 077. Literature of the Asian Diaspora

The political and economic circumstances of immigration and exile have produced a rich body of literature in English by Asians in England, Canada, and the United States. As we read these texts, we will think about how they address common concerns of national and transnational identity, themes of exile and return, and visions of home and homeland. Authors we will read will include Salmon Rushdie, Anchee Min, and Teresa Hak Kyung Cha.

1 credit.

Fall 1999. Saragosa.

ENGL 078. The Black African Writer

The texts in this course challenge outworn perceptions of monolithic African cultures and—through imaginative narratives and poetry by selected writers—reflects the shared need of women and men to come to terms with a past usurped by colonial regimes and traditions tested by modernist visions. These writers meditate on the national present 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 others.

1 credit.

Fall 1999. James.

ENGL 079. Fictions From the Black Atlantic

This course focuses on a 'black Atlantic culture' whose themes and techniques complicate and enrich our understanding of Western 'modernism'. Works range from Equiano and Delaney to Morrison and Baldwin.

1 credit.

Not offered 1999-2000. James.

080-096: CRITICAL THEORY, FILM AND MEDIA STUDIES

*Courses in critical theory are also listed elsewhere and are noted by **.*

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 post-colonial theory, raising questions of subjectivity, difference, ideology, representation, methodology, and cultural politics.

1 credit.

Not offered 1999-2000. White.

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.

Spring 2000. Lesjak.

ENGL 082. Representations of Women's Identity **

(Cross-listed as PSYC 052)

A study of the ways that psychology, literature, film, and literary theory illuminate women's identity and self-expression. By examining psychological case studies, prose narratives by male and female authors, psychological and literary theory, we will identify ways women have been represented in our culture, the consequences of this representation, and possibilities for self-awareness and expanding creativity.

Prerequisite: an introductory course in English.

1 credit.

Not offered 1999-2000. Blum and Maracek.

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.

Spring 2000. Lesjak.

ENGL 084. Lesbian Representation**

Using the framework of feminist theory, we will explore models of lesbian representation in literature and film and the construction of subjectivity and desire in texts authored by lesbians. Works by Radclyffe Hall, Audre Lorde, Chantal Akerman, and others will be read and viewed in the context of psychoanalysis, modernist and postmodern aesthetics, feminist politics, gay history, and popular culture.

1 credit.

Not offered 1999-2000. White.

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.

Spring 2001. Schmidt.

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 1999-2000. Lesjak.

ENGL 087. American Narrative Cinema**

Introduction to film as narrative form, audiovisual medium, industrial product, and social practice, emphasizing the emergence and dominance of classical Hollywood as a national cinema, with some attention to independent narrative traditions such as "race movies." Genres, such as the western, the melodrama, and film noir, express aspirations and anxieties about race, gender, class, and ethnicity in the United States. Auteurist, formalist, marxist, feminist, and psychoanalytic methods will be explored.

1 credit.

Fall 1999 and 2000. White.

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 1999-2000. Sharon Ullman (History, Bryn Mawr) and Patricia White.

English Literature

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.

Spring 2000. White.

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.

Fall 2000. White.

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.

Spring 2001. White.

ENGL 092. Film Theory and Culture**

A survey of major paradigms in classical and contemporary film theory and historiography: realism, montage, authorship, genre, narratology, semiotics of image and sound, the cinematic apparatus, spectatorship, feminism, and cultural studies. Directors include Eisenstein, Vertov, Welles, Ophuls, Godard, Akerman,

Lanzman, Jarman, Trinh. Background in film studies required.

1 credit.

Fall 1999 and Spring 2001. White.

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*. The art of Pinter on stage and screen.

1 credit.

Not offered 1999-2000. Williamson.

097-099: INDEPENDENT STUDY AND CULMINATING EXERCISES

ENGL 097. Independent Study

Students who plan an independent study must consult with the appropriate instructor and submit a prospectus to the Department by way of application for such work before the beginning of the semester during which the study is actually done. Deadlines for the receipt of written applications are the second Monday in November and the first Monday in April. Normally limited to juniors and seniors.

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 one (40-50 pages) or two (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 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 1999: Blackburn. Fall 2000: Blum.

Spring 2000 and 2001: Johnson.

ENGL 102. Chaucer and Medieval Literature*

A survey of English literature, primarily poetry, from the 8th to 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.

Fall 1999. Williamson.

ENGL 104. Milton*

Study of Milton's works in relation to questions of authorial identity, canon formation, gender and genre politics, spiritual and social revolu-

tion and containment. Special emphasis on *Paradise Lost*, and some attention to works by Milton's male and female contemporaries.

2 credits.

Not offered 1999-2000. Blackburn or Blum.

ENGL 106. Renaissance Epic*

The two major English epics of the period, Spenser's *Faerie 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 1999-2000. Blackburn.

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 1999-2000. Johnson.

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. Topics may include revolution, theatricality, hauntings, class conflict, orientalism, and empire.

2 credits.

Spring 2000. Bolton.

Group II (Post-1830)**ENGL 111. Victorian Literature and Culture****

This seminar will treat novels, non-fictional 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 revolu-

English Literature

tion, 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 1999. Lesjak.

ENGL 112. Women and Literature**

A. Issues of agency and subjectivity as set out by contemporary women writers in current fiction, autobiography, feminist, and womanist theory. Topics include body image, narratives of race, nation and strategic essentialism, gender and sexuality, feminist science fiction, and spirituality. Works by Erdrich, Morrison, Tiptree, Allison, Suleri, Sapphire, Winterson, Moraga, Shikeguni, Butler, among others.

2 credits.

Not offered 1999-2000. Blum.

B. Women's Poetry of the 20th Century: "Tell it slant," Emily Dickinson advises, and women poets—whether or not they have read her work—have typically taken her subversive advice to heart. How women "slant" their truth, and how their poetic methods differ—if at all—from those of their male counterparts will form the center of this inquiry into Modernist and post-Modernist feminist aesthetics.

2 credits.

Fall 2000. Anderson.

ENGL 115. Modern Comparative Literature

The fall semester will focus on fiction responsive to colonial and postcolonial conditions. Writers will include Conrad, Forster, Achebe, Emecheta, Faulkner, García-Márquez, Morrison, Silko, Erdrich, and Rushdie.

The spring semester will focus on Modernism: theory and practice. Drawing on a range of authors writing between the 1850s and the 1930s, 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: Marx, Baudelaire, Dostoevsky, Nietzsche, Rilke, Kafka, Freud, Joyce, Eliot, Proust, Woolf, Faulkner, and Hurston. Secondary readings will include essays by Simmel, Lukacs, Benjamin, Adorno, Bakhtin, and De Certeau.

2 credits.

Fall 1999 and 2000; Spring 2000 and 2001.
Weinstein.

ENGL 116. American Literature

Advanced work in U.S. literary history. Students who enroll in this course should nominate one to 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 2000. Schmidt.

ENGL 117. Ethnic Studies in Literature

If feminist politics has taught us that the "personal" is the "political," in what ways is it also the "critical"? This course will be an intensive exploration into how "identity"—racial, ethnic, gender, and sexual—has come to be used as an organizing principle in the construction of literary traditions and as a point of entry into various critical practices. In particular, we will interrogate how literary and cultural criticism take up such forms of identity, how critical practices based on gender and sexuality are often in a troubling relationship to those based on race, and how contemporary challenges to identity politics force us to reconsider the utility of such identitarian models.

2 credits.

Fall 2000. Saragosa.

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.

Fall 1999 and Fall 2000. Anderson.

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 2000. 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 1999-2000. James.

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 80-100 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.

THEATRE STUDIES

The Theatre Studies 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 program address

the processes of play production, especially as they involve collaborative making; all production for performance in the program is part of course work.

Theatre Studies 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.

Since in practice, public performance engages theatre artists for less time and is less complicated than rehearsal and other preparations, it receives proportionally less attention in this curriculum. Since all work in theatre eventually issues in a public occasion, classes are usually open to visitors.

REQUIREMENTS AND RECOMMENDATIONS

Planning a program in Theatre Studies can be complicated. First and second year students thinking about a Theatre Studies major should read these Requirements and Recommendations closely, and should consult with the Director of Theatre Studies early and often. Leave schedules, study abroad, a wide variety of intern and apprentice programs, and the importance of course sequences make long-range planning essential.

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. Thus, the prerequisite for THEA 012 (Acting II) is THEA 002 (Acting I); for THEA 035 (Directing II), THEA 015 (Directing I), and so on throughout the program.

Some advanced courses carry additional prerequisites that are listed in the course descriptions.

For those majors who intend a career in professional theatre, whether academic, not-for-profit, or commercial, internships in professional theatres are strongly recommended. Because of

Theatre Studies

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 is 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.

Major in the Course Program: Ten credits of work including THEA 002 (Acting I), THEA 004A (Design IA: Set Design), THEA 004B (Design IB: Lighting Design), THEA 015 (Directing I), THEA 016 (Playwright's Lab), THEA 106 (Theatre History Seminar), and THEA 099 (Senior Company). 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 Theatre History. Special arrangements will be made for students who seek secondary school certification. Prospective majors should consult with the Program Director 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 to the reading list and course work; (2) an oral examination on the essay and related subjects by Theatre Studies faculty.

Major in Honors: Honors students majoring in Theatre Studies will make three preparations as follows.

1. Theatre History Seminar, 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 from a script. 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 instructor will supervise these activities appropriately, on the model of a special

project in Theatre Studies. The external examiner will visit this project several times (depending on schedule and available funds). These visits (to rehearsals or planning sessions) 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 they relate to the production. The second oral will concern the student's assessment of the entire process as a part of his or her undergraduate education and future plans. The student will support both interviews with an extensive production journal.

Design from a script. The student will prepare all research, sketches, and preliminary writing for a production in a designated venue. He or she will make renderings, working drawings, and a model, and will prepare detailed budgets, schedules, etc. In addition to the model, the student will supervise the construction of a buildable portion of the design. The local instructor will supervise these activities appropriately, on the model of a special project in Theatre Studies. The external examiner will receive copies of all materials as the student generates them, and will pay special attention to the way in which the project develops under continual revision. During the Honors weekend, the examiner will see the full-sized portion and the model. The examination proper will be an extensive presentation by the student, of the entire project, with special attention to processes of development and revision. During this presentation, the examiner (probably a professional designer, not necessarily an academic) will question the student, on the model of advanced classes in architecture.

Dramaturgy. This project will be associated with Dramaturgy Seminar, Directing, or Playwright's Lab. 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. This student, with the advice of an advisor, will select and prepare a role from an appropriate script. The Program will hire a professional actor for 50 hours of rehearsal, which the student will supplement with practice and other acting "homework." The advisor will assist in this work on a regular basis. The external examiner will attend as many rehearsal sessions as possible, in order 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 Theatre Studies. 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, Theatre History Seminar; fall of senior year, THEA 099 and project planning; spring of senior year, thesis and production project.

Double majors taking three examinations in Theatre will also follow that schedule.

For double majors taking one examination and comps in Theatre Studies, the examination may be a production project, depending on available resources.

Minor in Honors. Theatre Studies minors are required to take either THEA 015 (Performance Theory and Practice) and THEA 106 (Theatre History Seminar) or THEA 016 (Playwright's Lab) and THEA 121 (Production Dramaturgy Seminar). Minors may petition at the end of the junior year to enroll in THEA

099 (Senior Company) if they have otherwise completed the prerequisites for the course.

SEMESTER ABROAD IN POLAND. The Programs in Theatre Studies and Dance are jointly developing a new semester-abroad program for interested Swarthmore students based at the Silesian Dance Theatre (Śląski Teatr Tańca) 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 theatre company for credit. Participating students would be housed in Bytom along with attending weekly tutorials in Cracow. Intensive study of Polish while in the country will be required of all participating students. Although details of the program are still being finalized as the College catalog goes to press, it is expected that students will be able to participate in the program beginning in Spring 2000. 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. Beyond credits in Theatre Studies, 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, Director of Theatre Studies, as early as possible for advising purposes and updated information on the status of the program. See course listings in both the Theatre Studies Program and the Music and Dance Department for types of academic credit being offered.

A separate but parallel semester abroad option in Cracow, Poland, is being offered through the Engineering Department and the Environmental Studies Concentration. Interested students should contact Professor Arthur McGarity in the Engineering Department for details.

Co-curricular and extra-curricular work in Theatre, although not specifically required, is

Theatre Studies

strongly recommended for majors. Opportunities include paid and volunteer staff positions with the Theatre Studies Program, in-house projects for various classes, production work in The Eugene M. and Theresa Lang Performing Arts Center, and Drama Board production.

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.

INTRODUCTORY COURSES

THEA 001. Making Theatre

How theatre is made in the United States: commercial, not-for-profit, and academic. Theatre professionals (schedules permitting) meet with the class for discussion and workshops. How to make theatre locally, using collaborative ensemble techniques and available space and material. Weekly lab sessions leading to in-house performance of original work. Short papers based on reading, local rehearsals and performances, and class projects.

Primary distribution course. 1 credit.

Fall 1999. Denzer, Devin.

THEA 002. Acting I

Work on the self through fundamental exercises in acting: vocal and physical warm-up; focus and release; sense and affective memory; journals. Work toward collaborative models and the use of improvisation as a tool for invention and discovery. Short papers on local rehearsals and performances. This class meets 6 hours a week.

1 credit.

Fall 1999: Denzer, Devin. Spring 2000: Devin.

THEA 004A. Design IA: Set Design

This course is intended to introduce students to the artistic world of theatre design. It includes projects in rendering, model making, and computer-aided design. Students will survey selected set designers from the Renaissance to the 20th century. Text: *Designing and Painting for the Theatre* by Lynn Pecktal; Software:

KeyCAD Complete by Softkey.

1 credit.

Fall 1999. Marshall.

THEA 004B. Design IB: Lighting Design

This is an exploratory class in the complexities of lighting design. The course objective is to introduce lighting concepts and how to express them. It is intended to demystify an enormously powerful medium. This course will culminate in a full-scale lighting design for a public performance of a Directing III project. Text: *Designing with Light* by J. Michael Gillette; Software: *Power CADD* and *MacLux Pro-C*.

1 credit.

Spring 2000. TBA.

THEA 006. World Performance Traditions

A comparative and cross-cultural survey of classical, modern, and contemporary approaches to theatrical performance. The course will combine the classroom study of theatre history, performance theory, and production dramaturgy with practical exercises in acting, playwrighting, directing, and so forth. Assigned materials will include a variety of plays and videotapes as well as historical and theoretical texts relating to performance. A variety of writing required, ranging from playwrighting exercises to critical and research papers.

Primary distribution course. 1 credit.

Spring 2000. Denzer.

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. This course meets 6 hours a week.

Prerequisite: THEA 002.

1 credit.

Fall 1999: Belver. Spring 2000: Denzer.

THEA 014. Design II: Scenographic Design

The development of a scenic design in response to a play's symbolic expression. This course will focus on the creative and artistic

processes of the scenic designer. It is centered around a project for a major production design. Work will be conducted in areas of research, perspective drawing, model making, and mechanical drawing with computer-aided design programs. Text: *Designing and Painting for the Theatre* by Lynn Pecktal; Software: *PowerCADD*. Required readings include *Sceno-Graphic Techniques* by Owen Parker, and *Theory and Craft of the Scenographic Model* by Darwin Payne.

Prerequisite: THEA 004A or 004B.

1 credit.

Fall 1999. Marshall.

THEA 015. Directing I: 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 or THEA 006 highly recommended but not required.

1 credit.

Fall 1999. Kuharski.

THEA 016. Playwright's Lab

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 or THEA 006 highly recommended but not required.

1 credit.

Fall 1999 and Spring 2000. Adams.

THEA 021. Production Dramaturgy

Dramaturgy as a part of play production. Exercises in playscript conception, analysis, and preparation; discovery of given circumstances and support materials; conception and analysis of rehearsal process. Weekly lab

sessions.

Prerequisite: THEA 001 or THEA 006 highly recommended but not required.

1 credit.

Fall 1999. Devin.

THEA 035. Directing II

This course focuses on the theatre 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 002, 004B, and 015.

1 credit.

Fall 1999. Kuharski.

ADVANCED COURSES

THEA 052. Acting III

An advanced scene study studio; given circumstances and dramaturgy; vocal and physical character making.

Prerequisite: THEA 002 and 012.

1 credit.

Spring 2000. Belver.

THEA 054. Design III: Designing for Performance/The Design Firm

As a foundation for The Firm, this course calls on the teachings of Jo Mielziner and Frank Lloyd Wright. The objective of the course is to create what Jo Mielziner called a "harmony of style." This is accomplished by bringing together theatre design students in a studio-workshop much like those of the Renaissance. Students will develop and design the scenography for the Senior Company class (THEA 099). Text: *Designing and Painting for the Theatre* by Lynn Pecktal; Software: *PowerCadd*.

Prerequisites: THEA 004A, 004B, and 014.

1 credit.

Fall 1999. Marshall.

Theatre Studies

THEA 055. Directing III

Requires students to apply the exercises from Directing II (THEA 035) to a variety of scene assignments. These will address a variety of theatrical genres (farce, epic theatre, 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 002, 004B, 015, and 035.
1 credit.

Spring 2000. Kuharski.

THEA 073. Arts Administration for Performance

(Cross-listed as DANC 073)

Available to students enrolled in the College's semester abroad in Poland. Students enrolled are encouraged to extend their stay in Poland through early July 2000 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 2000.

THEA 074. Scenography for Dance Theatre Performance

(Cross-listed as DANC 074)

Available to students participating in the semester abroad in Poland. Students enrolled are encouraged to extend their stay in Poland through early July 2000 to participate in the Annual International Contemporary Dance Conference and Performance Festival hosted by Silesian Dance Theatre in Bytom.

By arrangement with Bill Marshall.
Prerequisites: Theatre 004B and 014.
Spring 2000.

THEA 076. Polish Theatre and Drama

Available to students participating in the semester abroad in Poland. No reading knowledge of Polish required.

By arrangement with Allen Kuharski.
Prerequisite: THEA 015 or consent of Program Director.
Spring 2000.

THEA 092. Off-Campus Projects in Theatre

Residence at local arts organizations and theatres. Fields include management, financial and audience development, community outreach, as well as stage and house management.

Prerequisite: Appropriate preparation in the major.

1 credit.
Fall 1999 and Spring 2000. Staff.

THEA 093. Directed Reading

1 credit.

THEA 094. Special Projects in Theatre

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 theatre company. Work with an audience in performance of a single project, or a series of projects.

This course is required of all Theatre Studies 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. Non-majors and Honors minors may petition to enroll, provided they have met the prerequisite.

Prerequisite: Completion of one three-course sequence in Theatre Studies.

1 credit.
Fall 1999. Devin.

SEMINARS

THEA 106. Theatre 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 performances within specific cultural contexts, and their relevance to contemporary theatrical practice. Readings will include, but not be limited to, dramatic texts as one form of artifact of the theatrical event. The Spring 2000 seminar will focus on the work of Ariane Mnouchkine and the Théâtre du Soleil in France.

Prerequisite: THEA 015.

2 credits.

Spring 2000. Kuharski.

THEA 121. Production Dramaturgy Seminar

Fundamentals of dramaturgy, including script preparation and analysis, given circumstances and ongoing life, education and outreach, as well as occasional writing. As way opens, the class will work with local professionals on planning and production.

Prerequisite: THEA 016 or the instructor's consent.

2 credits.

Not offered 1999-2000. Devin.

THEA 180. Honors Thesis

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 advisor in Theatre Studies.

Fall and spring semester each year. Staff.

THEA 181. Honors Thesis

Credit for Honors thesis projects in directing, scenography, acting, and so on. By arrangement with the student's faculty advisor in Theatre Studies.

Fall and spring semester each year. Staff.

Environmental Studies

- Coordinator: **CARR EVERBACH** (Engineering)
Holly Castleman (Administrative Assistant)
- Committee: **Wendy Horwitz** (Psychology)
Roger Latham (Biology)³
Arthur McGarity (Engineering)
Rachel Merz (Biology)
Carol Nackenoff (Political Science)
Hans Oberdiek (Philosophy)
Frederick Orthlieb (Engineering)
Michael Speirs (Sociology and Anthropology)
Don Swearer (Religion)
Richard Valelly (Political Science)
Mark Wallace (Religion)³
-

3 Absent on leave, 1999-2000.

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 that 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, all of which 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.

A Concentration in Environmental Studies consists of an integrated program of five courses plus a capstone seminar that a student takes in addition to a regular major.

Concentrators must take five courses from the list below, including at least one course in

Environmental Science/Technology, at least one course in 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 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. One of the courses may be independent work or a field study (in the U.S. or abroad) supervised by a member of the Committee (Environmental Studies 90). In addition to the five courses, each concentrator will participate in the Capstone Seminar in Environmental Studies (Environmental Studies 91) 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 which emphasize tech-

niques 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 121. Physiological Ecology

BIOL 130. Behavioral Ecology

BIOL 137. Biodiversity

ENGR 032. Introduction to Environmental Protection

ENGR 063. Water Quality and Pollution Control

ENGR 066. Environmental Systems

GEOL 103 (Bryn Mawr College).
Environmental Geology

COURSES IN ENVIRONMENTAL SOCIAL SCIENCES/HUMANITIES

The Environmental Social Science/Humanities category includes courses which are central to Environmental Studies and which 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

ENGR 068/POLS 043.
Environmental Policy

POLS 222 (Bryn Mawr College).
Introduction to Environmental Issues

PSYC 057. Psychology and Nature

RELG 022. Religion and Ecology

SOAN 064. Seeds of Change: The Environmental Consequences of the Agricultural Revolution in Prehistory

ADJUNCT COURSES

There are other courses that are relevant to Environmental Studies and which can be included in the five courses required for the concentration but are not central enough to justify their inclusion in the preceding groups.

ASTR 009. Meteorology

BIOL 016. Microbiology

BIOL 026. Invertebrate Zoology

BIOL 027. Crop Plants

BIOL/ECON 226E (Haverford College).
Agricultural Biotechnology in Developing Economies

ENGR 003. Problems in Technology

ENGR 035. Solar Energy Systems

ENGR 064. Swarthmore and the Biosphere

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

Francophone Studies

Coordinator: **JEAN-VINCENT BLANCHARD*** (French) (Fall 1999)
BRIGITTE LANE* (French) (Spring 2000)¹⁰
Eleonore Baginski (Administrative Coordinator)

Committee: **Robert DuPlessis*** (History)
James Freeman (Music)
Bruce Grant (Sociology/Anthropology)
Cynthia Halpern (Political Science)
Sally Hess (Dance)
Constance Hungerford* (Art History)
Tamsin Lorraine (Philosophy)¹
George Moskos* (French)³
Micheline Rice-Maximin* (French)¹¹
Mark Wallace (Religion)³
Philip Weinstein (English)
Colette Windish (French)

*Members of the Steering Committee.

1 Absent on leave, fall 1999.

3 Absent on leave, 1999-2000.

10 Program director, Swarthmore Program in Grenoble, fall 1999.

11 Program director, Swarthmore Program in Grenoble, spring 2000.

The concentration 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 concentration 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 better to understand the complex relations and reciprocal influences between "centers" and "peripheries."

Through the study of an important transnational culture, the Concentration 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 Modern Languages and Literatures Depart-

ment, students will have the opportunity of using French-language materials in many of the courses and seminars offered by other departments.

General Requirements: A concentration in Francophone Studies consists of 5 credits from courses designated below. *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 concentration. 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 concentrators, one 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 concentrator will complete a 15- to 20-page independent, interdisciplinary Senior Paper. The initial pro-

posal 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.

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 wherever possible.

Courses and seminars that may be offered for a Francophone Studies Concentration (+ indicates courses that cover Francophone material outside of France and/or multicultural material) are the following:

CORE COURSES AND SEMINARS
(75 percent to 100 percent Francophone content): *At least 3 credits required.*

Courses in Disciplines Other Than French

ARTH 017: Nineteenth-Century European Art

HIST 022: Early Modern France and the Francophone New World⁺

HIST 027: To the Barricades: The European Revolutionary Tradition

HIST 030: France Since 1789: Revolutions, Republics, and Empires

Seminars in Disciplines Other Than French

ARTH 145: Gothic Art and Architecture

ARTH 160: Eighteenth-Century Western Art

ARTH 164: Modern Art Seminar

PHIL 145: Feminist Theory Seminar

THEA 106: Theatre History Seminar

French Courses Numbered 12 and Above

FREN 012C: Literature and Culture of Quebec⁺

FREN 012C: France "Year 2000": Introduction socioculturelle à la France actuelle⁺

FREN 012L: Introduction à l'analyse littéraire

FREN 022: Le Cinéma français

FREN 023: Topics in French Civilization: Multicultural France⁺

FREN 024: Société et littérature: Cultures de l'exil⁺

FREN 025: Centers and Peripheries in the Francophone World⁺

FREN 028: Franco/Ciné: Francophone Film⁺

FREN 030: Topics in 17th- and 18th-Century Literature: L'invention de la modernité féminine en France (16e-18e)

FREN 033: Le Monde francophone: Résistances et expressions littéraires⁺

FREN 036: Poésie d'écritures françaises⁺

FREN 037: Ville et exclusion⁺

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: La Poésie de Baudelaire à Apollinaire

FREN 067: Nineteenth- and 20th-Century French Theater

FREN 070: Théâtre Moderne: Beyond Realism: Meta-Theater in French and European Drama

FREN 070F: Caribbean and French Civilizations and Cultures⁺

FREN 071F: French Critical Discourse: From Barthes to Baudrillard

FREN 072: Le Roman du 20ème siècle

FREN 073: Roman et cinéma

FREN 075F: Haïti and the French Antilles and Guyane in translation⁺

FREN 076: Femmes écrivains⁺

FREN 077: Prose francophone: Littérature et société⁺

Francophone Studies

FREN 078: Théâtre d'écritures françaises: connaissance et société⁺

FREN 079F. Scandal in the Ink: Queer Traditions in French Literature

FREN 091: Special Topics (Counting as + depending on the topic of the year)

French Seminars

FREN 102: Baroque Culture and Literature

FREN 104: Stendhal et Flaubert

FREN 105: Proust

FREN 106: Poésie symboliste

FREN 108: Le Roman du 20ème siècle: Crises et Transformations

FREN 109: Le Romantisme

FREN 110: Ecritures françaises hors de France: Fiction et réel⁺

FREN 111: Espaces Francophones: La Ville réelle et imaginaire⁺

FREN 112: Ecritures Francophones: Fiction and History in the French-Speaking World⁺

FREN 113: Voyage et littérature: Exploration, nomadisme, et migration⁺

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 018: Twentieth-Century Western Art

ARTH 029: Film: Form and Signification

ARTH 064: Philadelphia and American Architecture

DANC 022: History of Dance: Europe's Renaissance Through 1900

DANC 036: Dance and Gender

DANC 037: The Politics of Dance Performance⁺

ECON 062: Political Economy of Africa⁺

ENGL 72: Proust, Joyce and Faulkner

HIST 008b: Modern Africa, 1880 to Present⁺

HIST 020: Official and Popular Cultures in Early Modern Europe

LITR 014: Modern European Literature

MUSI 004: Opera

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

POLS 052: The European Welfare State

SOAN 002: Nations and Nationalisms

SOAN 036: History of the Cultural 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

Note: Among all the courses listed previously, 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 concentration. This entails the completion of 5 credits and the writing of the Senior Paper. Candidates for an Honors minor will offer *a single 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

Coordinators: **MARION FABER** (German)
Eleonore Baginski (Administrative Coordinator)

Committee: **Richard Eldridge** (Philosophy)
James Freeman (Music)
Pieter Judson (History)²
James Kurth (Political Science)
Tamsin Lorraine (Philosophy)¹
Michael Marissen (Music)
Braulio Muñoz (Sociology/Anthropology)
Christopher Pavsek (German)¹
Sunka Simon (German)
Hansjakob Werlen (German)

1 Absent on leave, fall 1999.

2 Absent on leave, spring 2000.

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.

General Requirements: Students are required to take 5 credits from designated courses in German Studies, three 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 below.

German Studies Minor in the Honors Program

Requirements: The German Studies Concentration offers only a Minor in the Honors Program. Students in the German Studies 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 (SHS) 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. There will be no credit given for the revised paper.

The Honors examination will take the form of a 3-hour written examination based on a German Studies seminar or, in lieu of the seminar, two advanced courses in German Studies, the 0.5-credit SHS preparation, 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)

HIST 034. Europe 1900. Eros and Anxiety

HIST 035. The Jew as Other

HIST 036. Modern Germany

HIST 037. The Holocaust and German Culture/LITR 037G

MUSI 022. 19th-Century Music

MUSI 033. Lieder

MUSI 034. Bach

MUSI 035. Late Romanticism

PHIL 039. Existentialism*

SOAN 083. Senior Colloquium on Art and Society*

German courses numbered 003B and above.

LITR courses taught in English

Seminars (2 credits)

HIST 122. Revolutionary Europe⁺

HIST 124. Europeans and Others Since 1750⁺

HIST 125. Fascist Europe

MUSI 101. Bach

PHIL 114. Nineteenth-Century Philosophy

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 109. Rise of the Modern German Novel

GERM 110. German Literature after World War II

* 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

ROBERT S. DUPLESSIS, Professor
LILLIAN M. LI, Professor
MARJORIE MURPHY, Professor
STEPHEN P. BENSCH, Associate Professor
PIETER M. JUDSON, Associate Professor²
ROBERT E. WEINBERG, Associate Professor and Chair
TIMOTHY J. BURKE, Assistant Professor
ALLISON DORSEY, Assistant Professor³
BRUCE A. DORSEY, Assistant Professor
LAURA GOTKOWITZ, Assistant Professor³
THERESA BROWN, Administrative Assistant

2 Absent on leave, spring 2000.

3 Absent on leave, 1999-2000

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 points of view, 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 (HIST 002-010) 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 (HIST 001) 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. Students with scores of 4 or 5 in Advanced Placement examinations (or scores of 6 or 7 in International Baccalaureate [IB] examinations) may receive preference

in admission to certain first-year seminars. Upper-division courses (HIST 011-099; 1 credit) are specifically thematic and topical in nature and do not attempt to provide the broad coverage that surveys do. They are generally open to students who have fulfilled one of the following: (1) taken one of the courses numbered 001-010; (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.

Seminars: Admission to double-credit History 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 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 very much 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. To help you make an informed choice about seminars, a binder entitled "History Department Seminars" containing syllabi of all seminars currently offered by the department is available in the department office. You may wish to consult it before writing your sophomore paper.

REQUIREMENTS FOR HISTORY MAJORS

Admission to the department as a major nor-

mally requires at least two history courses taken at Swarthmore and a satisfactory standard of work in all courses. Beginning with the Class of 2002, one of these two courses will normally be a first-year seminar. **However, students who do not take a first-year seminar can still major in history.** 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 now generally assumed for admission to graduate school.

All majors (course and Honors Programs) in History must take at least nine credits in the department, chosen so as to fulfill the following requirements:

1. At least six of the nine 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. *The department expects students to concentrate in topics or areas of special interest to them and to specify them in their sophomore papers.*

Course Major

Complete the Senior Research Seminar (HIST 091) in which students write a research paper based on primary and secondary sources. The department strongly believes that majors should develop their expertise in a chosen field of history by producing a piece of historical writing and analysis. This course satisfies the College's requirement that all majors and concentrations have a culminating exercise for their majors. *The research paper should build upon 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.* Possible research themes

History

include but are not limited to colonialism and imperialism, nations and nationalism, popular culture, urbanization, politics and diplomacy, revolution and rebellion, and economic history.

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 preparations and revise one paper per preparation 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. Students may substitute an Honors Thesis (HIST 180) for one of their seminars. The thesis and revised seminar papers are due by April 28.

Minors in the Honors Program will complete one double-credit preparation and include one revised paper from that preparation in their portfolio. We strongly advise minors to take additional work in the History Department as part of their preparation for Honors.

Students in seminars must 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 April 28. The department will assume that students failing to submit their revised papers by the deadline have decided not to complete the Honors Program.

In addition, the department expects 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. Once again, this is in keeping with the department's belief that Honors is a collaborative, self-learning exercise that relies on the com-

mitment of students.

Students enrolled as minors in History will submit one revised paper as part of their portfolio. It is due by April 28. The instructions for the preparation of portfolio papers are the same for minors as they are for majors. The department also encourages minors in Honors to form self-directed study groups. The department will assume that students failing to submit their revised papers by the deadline have decided not to complete the Honors Program.

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. Beginning with the Class of 2002, 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 for incoming 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 010. Beginning with the Class of 2002, 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. This course need not be a survey course. Moreover, a grade of C

or higher must be earned in the Swarthmore course(s) for the credit(s) to be granted. 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. Students with Advanced Placement credit may elect to take HIST 003 or 005a, 005b or 005c (but not more than one of these U.S. history survey courses). A grade of 3 allows students to take an upper-division course in the same area as the Advanced Placement credit; 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 for incoming students who have achieved a score of 6 or 7 in the IB examinations if they take any course numbered 001 to 010. Moreover, a grade of C or higher must be earned in the Swarthmore course for the credit to be granted. 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. Students with IB credit may elect to take HIST 003 or 005a, 005b or 005c (but not more than one of these U.S. history survey courses).

LANGUAGE ATTACHMENT

Certain designated courses offer the option of a foreign language attachment, normally for 0.5 credit. Permission to take this option will be granted to any student whose reading ability promises the profitable use of historical sources in a foreign language. Arrangements for this option should be made with the instructor at the time of registration.

TEACHER CERTIFICATION

Students who want to obtain secondary school teaching certification in the Social Sciences are required to take two courses in the History Department. One of these courses must be in U.S. history. Students with Advanced Placement credit are encouraged to take European and U.S. history survey courses. Naturally, students who wish to obtain teaching certification may major in History and are

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especially urged to take Modern European history (HIST 003); U.S. history (preferably 005a and 005b); and a survey course in Asian, African, or Latin American history. Seminar preparation will also strengthen one's background in history. Please consult the Program in Education for information on other requirements.

COURSES

HIST 001A. First-Year Seminar: The Barbarian North

Exploration of the rise of Germanic and Celtic societies from ca. A.D. 100 to ca. A.D. 1050.

This course may count toward a major or minor in Medieval Studies.

1 credit.

Fall 1999. 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, activists for racial equality, and rap music.

1 credit.

Spring 2000. Bruce Dorsey.

HIST 001C. First-Year Seminar: Sex and Gender in Western Traditions

How have perceived natural differences between the sexes contributed historically to real social and legal inequalities among men and women? This seminar examines writings about sex by political philosophers, social thinkers, historians, and novelists from the time of the Ancient Greeks to present-day America.

This course may count toward a concentration in Women's Studies.

1 credit.

Fall 1999. Judson.

HIST 001D. First-Year Seminar: The Cold War Era

A focused examination of the origins and persistence of the Cold War from the globalization of containment to the pressure of domestic conflict.

1 credit.

Spring 2001. Murphy.

HIST 001E. First-Year Seminar: Indigenous Cultures of Latin America: Identities, Ideologies, and Experience

Explores key changes in the history of indigenous societies from the 16th-century Conquest to the present.

This course may count toward a concentration in Latin American Studies.

1 credit.

Not offered 1999-2001. Gotkowitz.

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 and a concentration in Women's Studies.

Primary distribution course. 1 credit.

Fall 1999. 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 concentrations in Black Studies and Women's Studies.

1 credit.

Not offered 1999-2000. Allison Dorsey.

HIST 001N. First-Year Seminar: The Production of History

A group of war veterans protests a museum exhibit about the decision to drop the atomic bomb on Japan. The publication of national history standards ignites a major political controversy. Crowds in Haiti tear down a statue of

Columbus and drag it to the harbor. Hobbyists re-enact Civil War battles. An Atlantic City casino adopts a "Wild West" theme. A popular subgenre of science-fiction novels explores "alternate histories" in which Hitler was never born or the Nazis won World War II. The film *Gone With the Wind* offers a powerful vision of a South that never was. In this course, we will examine these and similar 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.

Spring 2000. Burke.

HIST 001P. First-Year Seminar: History of the Left

From Walden Pond to various antiwar groups in the 20th century, America has been a land of dissent. In the shadow of the most powerful capitalist nation of the world, anarchists, socialists, and communists have played an important role in shaping the nature of the Left in America. Many have argued that these anticapitalist ideals were imported with the great influx of immigrants, but more recent scholarship has shown the degree to which the Left in America emerged from the social disorganization caused by the industrial revolution. This seminar focuses on the people and events that shaped the history of the Left in the United States.

1 credit.

Fall 1999. 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.

Spring 2000. Weinberg.

HIST 001R. First-Year Seminar: Imperial Encounters: U.S. Intervention in Latin America

Explores the impact of diverse forms of U.S. intervention in modern Latin America, ranging from outright military occupation to enclave economies and cultural imperialism. In addition to historical studies, discussions will draw on literary works, primary source documents, and film. A central component of the course will be a collaborative research project.

This course may count toward a concentration in Latin American Studies.

1 credit.

Spring 2001. Gotkowitz.

HIST 001S. 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.

Not offered 1999-2001. Allison Dorsey.

HIST 002A. Medieval Europe

A survey of medieval culture and institutions from the 3rd to the 15th centuries.

This course may count toward a major or minor in Medieval Studies.

Primary distribution course. 1 credit.

Fall 1999 and fall 2000. 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.

History

Spring 2000. 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, World War I and II, the Holocaust, and the collapse of communism.

Recommended for teacher certification.

Primary distribution course. 1 credit.

Spring 2000. Weinberg.

Spring 2001. Judson.

HIST 004A. Colonial Latin America

Thematic survey from the 16th-century Conquest through the independence wars of the early 19th century. Topics include aspects of pre-Columbian civilizations and impact of conquest and colonialism on native societies, slavery, race relations and *mestizaje*, resistance and rebellion, crisis and collapse of colonialism, and the aftermath of independence.

This course may count toward a concentration in Latin American Studies.

Primary distribution course. 1 credit.

Fall 2000. Gotkowitz.

HIST 004B. Modern Latin America

Thematic survey from the immediate postindependence period to the present. Topics include social and political consequences of the wars for independence, the formation of nation-states and export economies in the 19th century, and the divergent paths Latin Americans have taken in 20th century struggles for democracy, social justice, economic development, and national autonomy in a region deeply marked by U.S. influence.

This course may count toward a concentration in Latin American Studies.

Primary distribution course. 1 credit.

Spring 2001. Gotkowitz.

HIST 005A. The United States to 1877

A thematic survey of American society, culture, and politics from the American Revolution through the American Civil War and Reconstruction. Topics may include the political culture of party politics and popular

democracy, Indian removal, "manifest destiny" and constructions of race and region, slavery, the causes and consequences of the Civil War, and the politics of black freedom and emancipation.

Recommended for teacher certification.

Primary distribution course. 1 credit.

Fall 1999. 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.

Spring 2000. Murphy.

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 counter-culture, 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 2001. Murphy.

HIST 006. The Formation of the Islamic Near East

An introduction to the history of the Near East from the 7th to the early 15th centuries.

This course may count toward a major in Medieval Studies.

Primary distribution course. 1 credit.

Fall 1999 and fall 2000. Bensch.

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.

1 credit.

Fall 2000. Allison Dorsey.

HIST 007B. History of the African American People, 1865-Present

A study of the history of African Americans from Reconstruction to 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.

1 credit.

Not offered 1999-2000. Allison Dorsey.

HIST 008A. 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.

1 credit.

Not offered 1999-2001. Burke.

HIST 008B. Modern Africa, 1880 to Present

A survey of modern African history from the establishment of colonial rule to the contemporary African scene.

This course may count toward a concentration in Black Studies.

1 credit.

Not offered 1999-2001. 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, and 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.

Fall 2000. 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, Maoist, 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.

Spring 2000. 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.

Spring 2001. Graybill and Li.

HIST 012. Chivalric Society: Knights, Ladies, and Peasants

The emergence of a new knightly culture in the 11th and 12th centuries will be explored through the Peace of God, crusades, courtly love, lordship, and seigniorialism.

This course may count toward a major or minor in Medieval Studies.

1 credit.

Spring 2000. 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.

History

Spring 2001. 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.

Spring 2001. 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.

1 credit.

Not offered 1999-2001. Bensch.

HIST 017. The Mediterranean World in the Middle Ages

This course will examine the interface among Latin, Byzantine, and Islamic civilizations in the medieval Mediterranean, with special emphasis on the period of Western ascendancy.

This course may count toward a major or minor in Medieval Studies.

1 credit.

Not offered 1999-2001. Bensch.

HIST 019. The Italian Renaissance

The emergence of a new culture in the city-states of Italy between the 14th and 16th centuries, studied in relation to political, economic and social contexts. Emphasis on intellectual and artistic developments, historiographical debates over the modernity and secularism of Renaissance civilization, and readings in primary sources.

1 credit.

Fall 1999. 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 1999-2001. 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.

Optional language attachment: French.

1 credit.

Not offered 1999-2001. DuPlessis.

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.

1 credit.

Not offered 1999-2001. 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.

1 credit.

Not offered 1999-2001. DuPlessis.

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, socialism, nationalism, feminism, and the cultures and mythologies of revolution produced by these movements.

1 credit.

Spring 2001. Weinberg.

HIST 028. Nations and Nationalism in Eastern Europe, 1848-1998

This class 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 with permission of professor.

Optional language attachment: German.

1 credit.

Not offered 1999-2001. Judson.

HIST 029. Sexuality and Society in Modern Europe

This class examines historical constructions of sex and sexual identities in Western societies since 1700. Topics include a survey of Ancient Greek and Medieval European traditions, race and sexuality in colonized societies, urbanization and the creation of sexual communities, the medicalization of sex, the 19th-century invention of normal and deviant sexualities, eugenics and the 20th-century state, and queer theory and its relation to social history.

This course may count toward a concentration in Women's Studies.

1 credit.

Fall 2000. 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.

Optional language attachment: French.

1 credit.

Not offered 1999-2001. Judson.

HIST 031. Revolutionary Culture and Transformation in the USSR

(Cross-listed as LITR 031R)

Exploration of the ways in which after 1917 the new Soviet Republic attempted a revolutionary transformation of the entire culture as reflected in literature, film, music, and social organization.

Optional language attachment: Russian.

1 credit.

Not offered 1999-2001. Weinberg and Bradley.

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.

1 credit.

Not offered 1999-2001. 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 Germanys, recent reunification, and the legacy of the Holocaust.

This course may count toward a concentration in German Studies.

Optional language attachment: German.

1 credit.

Spring 2001. Judson.

HIST 037. History and Memory: Perspectives on the Holocaust

(Cross-listed as LITR 037G)

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. 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.

1 credit.

Fall 1999. 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

History

Soviet Union.

1 credit.

Fall 2000. Weinberg.

HIST 041. The American Colonies

The history of the mainland British American colonies within an Atlantic colonial world from 1600 to 1760.

1 credit.

Not offered 1999-2001. Bruce Dorsey.

HIST 042. The American Revolution

Revolutionary developments in British North America between 1760 and 1800.

1 credit.

Not offered 1999-2001. 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 1999-2001. 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 1999-2001. 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, Massachusetts, in 1833. Topics include gender, sexuality, industrialization, religious revivalism, mental illness, and popular politics.

1 credit.

Spring 2000. 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.

1 credit.

Fall 1999. 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.

1 credit.

Fall 2000. Murphy.

HIST 052. History of Manhood in America, 1750-1920

Examines the meanings of manhood and the various constructions of masculine identity in America between the 18th and 20th centuries.

This course may count toward a concentration in Women's Studies.

1 credit.

Not offered 1999-2001. Bruce Dorsey.

HIST 053. Topics in African American Women's History

Designed to facilitate an intensive study of black women's lives from 1700 to the present. Alternating topics include labor, civil rights struggles, feminism, literature, and sexuality.

This course may count toward concentrations in Black Studies and Women's Studies.

1 credit.

Spring 2001. Allison Dorsey.

HIST 054. Women, Society, and Politics

Women in American society from the colonial period to the present, with emphasis on the changing nature of work and the separation of spheres, the rise of feminism, and the resistance to women's rights.

This course may count toward a concentration in Women's Studies.

1 credit.

Not offered 1999-2001. Murphy.

HIST 059. The Mexican Revolution: Origins, Course, and Legacies

Examines the origins, course, and consequences of one of Latin America's most important historical events.

This course may count toward a concentration in Latin American Studies.

1 credit.

Not offered 1999-2001. Gotkowitz.

HIST 060. Cultural Constructions of Africa: Images, Inventions, and Ideologies

This course will examine the history of the concept of Africa, particularly how African societies and African peoples have been variously objects of admiration, imitation, hatred, misunderstanding, or exploitation.

No prerequisites.

The course may count toward a concentration in Black Studies.

1 credit.

Fall 1999. Burke.

HIST 062. Health, Medicine, and the Body in Modern Africa

This course examines the history of African practices and ideas of healing in the 19th and 20th centuries and their encounter with European medical institutions in the colonial and post-colonial eras.

1 credit.

Not offered 1999-2001. Burke.

HIST 063. History of Southern Africa

A detailed and in-depth examination of the history of one of Africa's most important regions, this course focuses particularly, though not exclusively, on the nation of South Africa. Using primary documents, films, novels, and historical scholarship, participants will examine topics like the settlement of Cape Town, the growth of the Zulu Empire under Shaka, the making of colonial societies in the region, the rise and fall of apartheid, and the life and times of Nelson Mandela.

The course may count toward a concentration in Black Studies.

1 credit.

Not offered 1999-2001. Burke.

HIST 064. Indian Communities and Nation-States in Modern Latin America

Indian-state relations from the Tupac Amaru rebellion to the Zapatista uprising.

This course may count toward a concentration in Latin American Studies.

1 credit.

Not offered 1999-2001. Gotkowitz.

HIST 066. Topics in Latin American History

Colloquium on specific topics in Latin American history with a strong research component.

This course may count toward a concentration in Latin American Studies.

Optional language attachment: Spanish.

1 credit.

Not offered 1999-2001. Gotkowitz.

HIST 067. Race in Latin America

Explores how scholars and historical actors have conceptualized race in Latin America from the late 18th to the 20th centuries.

This course may count toward a concentration in Latin American Studies.

1 credit.

Not offered 1999-2001. Gotkowitz.

HIST 069. Debates in African Studies

An advanced course that examines current debates about African societies and debates about the study of Africa from a variety of disciplinary perspectives, particularly history, art history, anthropology, literary studies, and political science.

1 credit.

Not offered 1999-2001. 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, and Japan's postwar growth and its contemporary society.

This course may count toward a major or minor in Asian Studies.

1 credit.

Fall 1999. 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 Middle East, 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 Asian views of the West since the 19th century.

Prerequisite: An introductory History course or permission of the instructor.

This course may count toward a major or minor in Asian Studies.

1 credit.

Fall 2000. 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 HIST 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.

Spring 2000 and 2001. Li.

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. The course begins with an examination of ideas of progress, evolution, and history in the 19th century. From there, it moves to practices of "development" under colonial rule in the first half of the 20th century. In its second half, the course examines the international and local context of development policies and projects in Africa from the Cold War up to the present day and reviews

prominent studies and criticisms of development work in Africa. Specific cases examined will include famine relief in Ethiopia and Somalia, HIV research and prevention in Uganda, and conservationist development projects in southern Africa. The course favors a critical and historical perspective on development work, but it also covers past and present efforts to defend and reform development.

Prerequisite: A prior course in the Social Sciences.

1 credit.

Spring 2000. 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.

Fall 1999. Burke.

HIST 089. Gender, Sexuality and Colonialism

Drawing on the comparative history of Asian, African, Caribbean, Latin American, and Native American societies since 1500, this course will examine the ways that colonial rulers and colonial societies envisioned and experienced gender.

This course may count toward a concentration in Women's Studies.

1 credit.

Not offered 1999-2001. Burke.

HIST 091. Senior Research Seminar

Students are expected to write a research paper based on primary and secondary sources.

Required of all course majors.

1 credit.

Fall 1999. Bruce Dorsey and DuPlessis.

Fall 2000. Gotkowitz and Judson.

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.

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 112. The Barbarian North**

The seminar is devoted to the transformation of the early Germanic and Celtic peoples during the first millennium of the Christian era. This course may count toward a major or minor in Medieval Studies.

2 credits.

Not offered 1999-2001. 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. Issues addressed include forms of political organization, varieties of humanism, political theory, changing historical consciousness, art, and society. Much attention is devoted to historiography.

2 credits.

Not offered 1999-2001. 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 during the 16th and 17th centuries.

2 credits.

Spring 2000. 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 seminar may count toward concentrations in German Studies and Francophone Studies.

2 credits.

Fall 1999. Weinberg.

HIST 124. Europeans and Others Since 1750

The rise of European nationalism, imperialism and racism examined comparatively in France, Germany, Great Britain, and the Habsburg Monarchy and their colonial empires in the period 1750-1914.

This course may count toward concentrations in German Studies and Francophone Studies.

2 credits.

Not offered 1999-2001. Judson.

HIST 125. Fascist Europe

This seminar studies European fascism in the context of societies torn by world war and economic depression. The primary focus will be on fascist movements, regimes, and cultural policy in Italy and Germany, with a secondary comparative focus on Hungarian, Romanian, and French varieties of fascism.

This seminar may count toward a concentration in German Studies.

2 credits.

Fall 2000. Judson.

HIST 128. Russian Empire 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.

Spring 2001. Weinberg.

HIST 133. U.S. Political and Diplomatic History I: The Age of Nationalism

The history of nation building, national identity, political ideologies and movements, party politics, expansionism, empire, and imperialism from the American Revolution through the U.S.-Philippines War (1899-1902).

2 credits.

Fall 1999. Bruce Dorsey.

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.

2 credits.

History

Fall 2000. 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 2000 and spring 2001. Murphy.

HIST 137. Topics in African American History

Alternating between the study of slavery and the study of black community, this seminar is an in depth social history of people of African descent in the United States. Special attention is paid to the black struggle for self-sufficiency and autonomy. Topics addressed include the nature of the family, gender relations, cultural traditions, and political activism.

This seminar may count toward a concentration in Black Studies.

2 credits.

Fall 2000. 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.

2 credits.

Spring 2000. Burke.

HIST 144. Modern China

China from the late 18th century to the present. Topics include social and intellectual currents in the late imperial era; Western imperialism; rebellion, reform, and revolution; and political and social transformation in the People's Republic of China.

This course may count toward a major or minor in Asian Studies.

2 credits.

Spring 2000 and Spring 2001. Li.

HIST 148. Race, Class, and Nationalism in Modern Latin America

Explores the conflictive process of nation making in multiracial societies from the early 19th century wars of independence through the revolutionary upheavals of the 20th century. Takes a comparative approach focusing on the role of diverse actors in struggles over citizenship and nationhood in neocolonial contexts.

This course may count toward a concentration in Latin American Studies.

2 credits.

Fall 2000. Gotkowitz.

HIST 180. Honors Thesis

For students writing an Honors thesis.

2 credits.

1999-2001. Staff.

Interpretation Theory

Coordinator: **BRUCE GRANT** (Sociology/Anthropology)
PHILIP WEINSTEIN (English Literature)

Committee: **Jean-Vincent Blanchard** (Modern Languages and Literatures)
Timothy Burke (History)
Michael Cothren (Art)
Nathaniel Deutsch (Religion)
Richard Eldridge (Philosophy)
Sibelan Forrester (Modern Languages and Literatures)
Kenneth Gergen (Psychology)
Bruce Grant (Sociology/Anthropology)
Cynthia Halpern (Political Science)
Carolyn Lesjak (English Literature)
Tamsin Lorraine (Philosophy)³
Braulio Muñoz (Sociology/Anthropology)
Christopher Pavsek (Modern Languages and Literatures)²
Frank K. Saragosa (English Literature)
Robin Wagner-Pacifici (Sociology/Anthropology)³
Mark Wallace (Religion)³
Philip Weinstein (English Literature)
Patricia White (English Literature)

2 Absent on leave, spring 2000.

3 Absent on leave, 1999-2000.

Since 1992, the concentration in Interpretation Theory has been providing students and faculty alike with an interdisciplinary forum for exploring the nature and politics of representation. Whether it be through art, cinema, ethnography, literature, historiography, philosophy, politics, psychology, religion, or sociological analysis, work done in the concentration reflects a long-standing drive to understand the world through the constructs of its interpretive propositions.

Propositions about persons, texts, works of art, or nature inevitably require acts of interpretation. All fields of knowledge, then, are wedded to interpretive processes. A program in Interpretation Theory provides students with the opportunity to explore processes of interpretation, inquiring into their nature across the disciplines, forces impinging upon interpretive acts, and the results of varying forms of interpretation both within knowledge generating communities and the culture more generally. Students in any major may add either a concentration or a focus for External Examination

in Interpretation Theory to their program by fulfilling the requirements stated below. Students should submit their proposed program to the coordinator of the concentration. All program proposals must be approved by the Interpretation Theory Committee.

CONCENTRATION REQUIREMENTS

Each concentration must include a minimum of six credits from the courses and seminars listed below. In order to provide necessary historical perspective, and in order to guarantee exposure to a sufficient variety of interpretive theories and practices, concentrators will normally include at least one course from each of the two groups of courses that serve to introduce the concentration. One such group (identified by single asterisk*) is comprised of courses that attend significantly to the historical development of interpretive practices. The other group (identified by double asterisks**)

Interpretation Theory

is comprised of courses that attend significantly to the range of interpretive strategies currently operative within several disciplines. Concentrators will choose these two recommended courses from different departments, and they will normally complete them by the end of the junior year. Three of the remaining four courses in the concentration are elective, but they must draw on at least one further department. As part of the six course requirement, all concentrators will take a capstone seminar, INTP 091, team taught by members of different departments, in their senior year.

Currently offered courses relevant to the concentration include:

INTP 091. Capstone Seminar: Beyond Reason: Nietzsche, Levinas, and the Kabbalah

This course is designed to present opposing and alternative responses to the breakdown of reason and the crisis of metaphysics (and morality) in modern thought, ethics, and politics. We will explore premodern philosophy in relation to mysticism, namely, the Kabbalah, as one kind of grounding beyond the rational ontology of the Enlightenment. Our study will center on the problems raised by Nietzsche's genealogical diagnosis of the formation and breakdown or crisis through poststructuralist theories, like those of Benjamin, Levinas, and Wyschogrod. How to think through the ungrounding of ontology, history, and politics; the politics of interpretation; and the difficulties of constructing an ethical-political response to this ungrounding will be a primary focus of the course.

1 credit.

Spring 2000. Deutsch and Halpern.

ARTH 001. Critical Study in the Visual Arts

ARTH 029. Film: Form and Signification

ARTH 061. Everyday Things

ARTH 098. Senior Workshop

BIOL 006. History and Critique of Biology

CLAS 036. Classical Mythology

ENGL 024. */ Inscriptions of the Feminine in 16th and 17th Century England**

ENGL 073A. ** Mapping the Modern

ENGL 080. ** Critical and Cultural Theory

ENGL 081. ** Theory of the Novel

ENGL 083. Feminist Theory

ENGL 084. ** Lesbian Representation

ENGL 085. ** "Whiteness" and Racial Differences

ENGL 086. Postcolonial Literature and Theory

ENGL 087. ** American Narrative Cinema

ENGL 088. ** American Attractions: Leisure, Technology and National Identity

ENGL 089. Women and Popular Culture

ENGL 091. ** Feminist Film and Media Studies

ENGL 092. ** Film Theory and Culture

ENGL 120. ** Critical and Cultural Theory

FREN 040. French Theater and Cultural Studies

FREN 061. Writing and Reading Across Gender Lines

FREN 062F. Le Romantisme

FREN 076. Femmes écrivains

FREN 102. Baroque Culture and Literature

GERM 109. Rise of the Modern German Novel

HIST 0001N. The Production of History

HIST 029. Sexuality and Society in Modern Europe

HIST 060. * Cultural Constructions of Africa

INTP 090. Directed Reading

INTP 091. Capstone Seminar

INTP 092. Thesis

LITR 065G. Marxism

LITR 071F. ** French Critical Discourse: From Barthes to Baudrillard

PHIL 017. * Aesthetics

PHIL 019. Philosophy of Social Sciences
PHIL 026. Language and Meaning
**PHIL 045.* Philosophical Approaches to
the Question of Woman**
PHIL 079. Poststructuralism
PHIL 106.* Aesthetics
PHIL 116. Language and Meaning
**PHIL 139.* Phenomenology,
Existentialism, and PostStructuralism**
PHIL 145. Feminist Theory Seminar
PHYS 006. The Character of Physical Law
PHYS 025. In Search of Reality
PHYS 029. Gender and Physical Science
POLS 012.* Modern Political Theory
POLS 013.* Feminist Political Theory
POLS 101.* Political Theory: Modern
PSYC 037. Concepts of the Person**
PSYC 044. Psychology and Women
PSYC 048. Technology, Self and Society
PSYC 068. Reading Culture**
**PSYC 087. Psychology, Biology and
Economic Rationality**
**PSYC 106.* Personality Theory and
Interpretation**
**RELG 005. Problems of Religious
Thought**
RELG 015B.* Philosophy of Religion
**RELG 018B. Modern Jewish Thought
and Literature**
RELG 112. Postmodern Religious
Thought**
SOAN 002. Nations and Nationalism
SOAN 004. Symbols and Society**
SOAN 024. Discourse Analysis**
SOAN 052. Mapping the Modern**
**SOAN 057.* History of the Culture
Concept**
SOAN 058. Cultural Representations**
**SOAN 077. Colloquium: Art and
Society**
**SOAN 101. Critical Modern Social
Theory**

SOAN 102. History and Myth
SOAN 114. Political Sociology

Other courses may be considered upon petition to the Interpretation Studies Committee. These may include relevant courses offered at Bryn Mawr, Haverford, and the University of Pennsylvania.

Latin American Studies

Coordinator: **MIGUEL DÍAZ-BARRIGA** (Sociology/Anthropology)
Jen Gifford (Administrative Assistant)

Committee: **Joan Friedman** (Modern Languages and Literatures)
Laura Gotkowitz (History)³
John Hassett (Modern Languages and Literatures)
Hugh Lacey (Philosophy)²
Braulio Muñoz (Sociology/Anthropology)
Steven Piker (Sociology/Anthropology)
Aurora Camacho de Schmidt (Modern Languages and Literatures)³
Kenneth Sharpe (Political Science)

1 Absent on leave, fall 1999.

2 Absent on leave, spring 2000.

3 Absent on leave, 1999-2000.

CONCENTRATION REQUIREMENTS

Students interested in Latin American Studies Concentration (LASC) must consult with the coordinator and members of the LASC committee before developing a proposal. The proposal should establish how the concentration relates to the overall program of undergraduate study in general, and to the departmental major in particular.

The requirements for the concentration include the following:

1. *Language.* LASC requires the successful completion of Spanish 4B or its equivalent. This requirement is waived for students who demonstrate competence in Spanish or Portuguese. In their junior year students will be expected to read texts in Spanish. Because of this, it is important for students to study language as early as possible in their undergraduate career.

2. *Study abroad.* All students are required to spend a minimum of one semester abroad in a program approved by both LASC and the Office of Foreign Study. Only in exceptional cases with the support of a faculty member and the approval of LASC Committee will a semester internship or a community service project in Latin America fulfill the concentration requirement. Study abroad must be pursued in Spanish or Portuguese.

3. *Minicourse.* Concentrators are required to participate in a minicourse during their senior year with a visiting Latin American scholar. The topic of each minicourse will depend on

the field of expertise and research of the visiting scholar. The course involves four sessions of lecture followed by discussion, and the language of instruction will be Spanish (or Portuguese with Spanish translation).

4. *Courses.* All students must take a minimum of five credits in Latin American Studies which may include seminars and courses taught at the college, or courses taken abroad in an approved program. At least one credit should be taken, either at Swarthmore or abroad, in each of the concentration's three areas: Latin American Politics and History, Latin American Literature, and Latin American Societies and Cultures. At least one credit must be taken at Swarthmore in each of two different areas.

5. (See catalog sections for individual departments to determine specific offerings.)

A. Latin American Politics and History

**HIST 001E. First-Year Seminar:
Indigenous Cultures of the Latin
America: Identities, Ideologies, and
Experience**

**HIST 004A. Latin America: The Colonial
Era**

**HIST 004B. Latin America: The Modern
Era**

**HIST 0059. The Mexican Revolution:
Origins, Course and Legacies**

**HIST 0064. Indian Communities and Nation
States in Modern Latin America**

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- HIST 066. Topics in Latin American History: Revolutionary Mexico**
HIST 067. Race in Latin America
HIST 148. Race, Class, and Nationalism in Modern Latin America
POLS 057. Latin American Politics
POLS 109. Comparative Politics: Latin America

B. 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 010. En busca de América Latina
SPAN 013. Introducción a la literatura hispanoamericana
SPAN 076. Grandes voces de América: la poesía del siglo XX
SPAN 078. La novela social de México
SPAN 080. La narrativa chilena desde el golpe militar
SPAN 082. La Mujer Mirando al Hombre
SPAN 083. El tirano latinoamericano en la literatura
SPAN 085. Narrativa hispánica contemporánea de los Estados Unidos
SPAN 101. La novela hispanoamericana del siglo XX
SPAN 106. Visiones narrativas de Carlos Fuentes
SPAN 108. La narrativa de Isabel Allende: la escritura como Sobrevivencia

C. Latin American Societies and Culture

- PHIL 058. Non-violence and Violence in Latin America**
RELG 107. Liberation Theology

- SOAN 012. Introduction to Latinos in the United States**
SOAN 030. Spirits in Exile: Afro-Latin Religions in the Americas
SOAN 030A. Cuba and Puerto Rico: "The two wings of a single bird"?
SOAN 031. Latin American Society and Culture
SOAN 032. Latin American Urbanization
SOAN 033. Indigenous Resistance and Revolt in Latin American
SOAN 034. Ecology, Peace, and Development in El Salvador
SOAN 035. Latin American Social Movements
SOAN 037. Spanish Society Through Its Novel
SOAN 118. Chicano/a Culture, Politics, Practice

REQUIREMENTS OF THE HONORS MINOR

To complete an Honors Minor in Latin American Studies students must have completed all requirements for the concentration. From within the concentration's offerings they may select for outside examination a seminar included in the Latin American Studies Concentration listing provided that this offering is not an offering within their major department.

Linguistics

THEODORE FERNALD, Assistant Professor

DONNA JO NAPOLI, Professor and Program Director

KARI SWINGLE, Instructor

ERIC RAIMY, Laboratory Assistant and Administrative Assistant

Committee: **Richard Eldridge** (Philosophy)

Carr Everbach (Engineering)

Braulio Muñoz (Sociology and Anthropology)

The discipline: 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 plays 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. But recently, a knowledge of linguistics has become important to a much wider range of activities in today's world. It is a basic tool in artificial intelligence. It is increasingly a valuable tool in literary analysis. It is fundamental to an understanding of communication skills. And, 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. This is because 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.

There are two special majors in the course program administered through the Linguistics Program in collaboration with the departments mentioned subsequently. These are the special majors: Linguistics (LING); Linguistics and Languages (LL).

There is one Honors major administered through the Linguistics Program: Linguistics.

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, 052
2. Forms: LING 050
3. Meanings: LING 026, 040, 116

All LING and LL majors (Honors or Course) will be expected to take LING 006 or LING 060. If the student speaks a non-Indo-European language, this requirement is waived.

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.

LINGUISTICS

This special major consists of 8 credits in Linguistics, where the student may choose to count LING 001 as part of the major or not.

Special majors must also pass either the Language Requirement or the Cognate Requirement. If the student is a double major, this requirement is waived.

Language Requirement: Advanced competence in at least one foreign language.

This can be demonstrated by successfully completing LATN 103, GREK 012, or above, or a seminar in the Department of Classics, or a course numbered 011 or above in the Department of Modern Languages and Literatures, or through an exam. If the language used to fulfill this requirement is not presently taught by either our Department of Modern Languages and Literatures or our Department of Classics, this exam will be administered by the Linguistics Program. Any natural language, ancient or modern, may be used to fulfill this requirement.

Cognate Requirement: At least three credits in a cognate area to linguistics. (*Note:* All courses in the chosen cognate that appear on the list below will count as part of the credits in the major in the determination of whether or not a student has adhered to the "20-course-rule.")

The cognate areas are defined below. The credits must be gained by taking classes from a single area listed below, except in options 10 and 11. The numbers of the approved courses from the named department are listed after the department name. Courses not listed here will not be accepted for the cognate requirement unless they are cross-listed with Linguistics.

1. CPSC 046, 063, 075
2. EDUC 018, 021, 042, 054, 064, 066, 068
3. ENGR 002, 071, 078
4. English Literature: A student must take 014, History of the English Language (this was formerly 023, Old English/History of the Language), a course in critical theory (marked with ** in the catalog), and any advanced course appropriate to the student's linguistics interests (chosen under consultation with linguistics advisor and instructor of course)
5. MATH 009, 023 or 053 (but not both), 041, 046, 061, 065, or 072 (but not both)
6. Music and Dance: MUSC 011, 012, 013, 014, 015, 016, 019; DANC 001, 002, 010, 011, 012, 013, 014, 024, 036, 037, 070, 071, and at most one technique class
7. PHIL 012, 026, 040, 086, 116
8. PSYC 028, 032, 033, 034, 039, 042, 043, 049, 086, 092, 133, 134
9. SOAN 010, 018, 019, 024, 104
10. Formal systems: A student may choose to do a cognate in Formal Systems, taking courses from the approved lists for Computer Science, Engineering, and Mathematics/Statistics.
11. Premed: Students interested in language pathologies may, under consultation with the department, use the premedical science requirements as the cognate.

Majors will write a senior paper in LING 100 in the fall of the senior year.

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. LING 050 is required.

All students will be expected to take LING 006, 060, 061, or 062. If the student speaks a non-Indo-European language, this requirement is waived.

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 Department of Classics, 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 will write a senior paper in LING 100 in the fall of the senior year.

Students at Bryn Mawr College (BMC) or Haverford College (HC)

Any student from the tricollage 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.

HONORS MAJOR: LINGUISTICS

Majors must pass the requirement in sounds, forms, and meanings, and in structure of a non-Indo-European language; and must write a senior thesis.

The thesis and two research papers will consti-

Linguistics

tute the portfolio for Honors.

The thesis may be on any topic in linguistics. It 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 1-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, and comparative.

The student will prepare for these research papers by taking at least four credits of course work (two credits in each of the research paper areas). The students will work independently on these papers, without collaboration and without faculty guidance in the spring of the senior year in LING 199 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.

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 two credit thesis written in fall of the senior year in LING 195. The student will also take LING 199 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. They must pass the requirement in sounds, forms, or meanings and must take a minimum of 3 credits in Linguistics. 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 immediately above for the majors. All minors must take LING 199 in the spring of the senior year for 0.5 credit.

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 1990. Napoli.

LING 002. Exploring Acoustics

(See ENGR 002.)

1 credit.

Everbach.

LING 006. Structure of American Sign Language

In this course, we look at the linguistic structures of American Sign Language.

Prerequisites: at least two out of LING 001, 040, 043, 045, and 050.

1 credit.

Fall 1999. Napoli.

LING 014. Old English/History of the Language

(See ENGL 014.)

1 credit.

Williamson.

LING 016. History of the Russian Language

(See RUSS 016.)

1 credit.

Forrester.

LING 020. History of the French Language

1 credit.

Occasionally.

LING 024. Discourse Analysis

(See SOAN 024.)

1 credit.

Wagner-Pacifi.

LING 025. Language, Culture, and Society

(Cross-listed as SOAN 079)

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 1999-2000.

LING 026. Language and Meaning

(See PHIL 026.)

1 credit.

Eldridge.

LING 030. Languages of the World

This is a course in 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 that each language draws on.

No prerequisites.

Primary distribution course. 1 credit.

Spring 2000. Swingle.

LING 033. Introduction to Classical Chinese

(See CHIN 033.)

1 credit.

Berkowitz.

LING 034. Psychology of Language

(See PSYC 034.)

1 credit.

Kako.

LING 037. Languages of Africa

(Cross-listed as SOAN 037; counts for Black Studies)

A look at phonetics, phonology, morphology, syntax, and semantics across several language families. Bantu offers a point of comparison. Topics include clicks, tones, causatives, serial

verbs, and issues of language policy in Africa.

1 credit.

Occasionally.

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.

Primary distribution course. 1 credit.

Spring 2000. 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.

Not offered 1999-2000.

LING 045. Phonetics and Phonology

Phonology is the study of the sounds of language and the rules that govern the interaction of sounds when they are put together in words and phrases.

Primary distribution course. 1 credit.

Fall 1999. Swingle.

LING 046. Language Learning and Bilingualism

(See PSYC 043.)

LING 049. Brain, Language, and Cognition

(See PSYC 049.)

1 credit.

LING 050. Syntax

We study the principles that govern how words go together to 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 natural language, modern or ancient. The argumentation skills gained in this course are applicable

Linguistics

to law and business, as well as academic fields.

This course also falls in the third category of courses approved as counting toward a computer science concentration.

Primary distribution course. 1 credit.

Fall 1999. Fernald.

LING 051. Romance Syntax

A comparative study of the syntax of modern Romance languages, including Spanish, French, Italian, Portuguese, and Romanian.

Prerequisites: LING 050 and a working knowledge of a Romance language or of Latin.

1 credit.

Occasionally. Napoli.

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.

Prerequisite: LING 001, LING 030, or LING 045 or permission of the instructor.

1 credit.

Spring 2000. Swingle.

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 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.

Prerequisite: One of LING 001, 040, 045, or 050.

1 credit.

Fall 1999. Napoli.

LING 055. Writing Systems, Decipherment, and Cryptography

The course is an introduction to the representation of natural language in a non-fundamental, 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, focussing 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 2000. Fernald.

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.

Prerequisite: At least two out of LING 001, 030, 040, 043, 045, and 050.

1 credit.

Not offered 1999-2000. Fernald.

LING 062. Structure of Japanese

(See description of LING 061.)

1 credit.

Occasionally. Napoli.

LING 070F. Caribbean and French Civilizations and Cultures

(See FREN 070F.)

1 credit.

Rice-Maximin.

LING 070R. Translation Workshop

(See LITR 070R.)

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.

1 credit.

Occasionally. Staff.

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 1999 or spring 2000. 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, the permission of the chairs of both Linguistics and Education, 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 1999 or spring 2000. Napoli.

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 Linguistics/Education 54, the permission of both Linguistics and Education, 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 member who mentors you in this.)

1 credit.

Fall 1999 or spring 2000. Napoli.

LING 100. Research Seminar

All course majors in Linguistics and Languages must write their senior paper in this seminar. Only seniors are admitted.

1 or 2 credits.

Fall 1999. Fernald.

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 1999. Fernald.

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 2000. Fernald.

SEMINARS**LING 102. Prosodic Phonology: Theory and Application**

This seminar will review recent literature in the theory of Prosodic Phonology and its applications. We will begin by looking at the theory of Prosodic Phonology and then investigate (1) claims that prosody and syntax interact in interesting ways and (2) claims that prosody plays a role in first language acquisition.

1 or 2 credits.

Spring 2000. Swingle.

LING 104. Culture and Creativity

(See SOAN 104.)

Piker.

LING 105. Seminar in Phonology

This seminar will consider recent developments in the theory of phonology. Topics vary. When it is metrical phonology, a poetry workshop will be incorporated into the seminar.

1 or 2 credits.

Occasionally. Staff.

LING 106. Seminar in Morphology

This seminar will consider recent developments in the theory of morphology. Topics vary.

1 or 2 credits.

Occasionally. Staff.

LING 108. Seminar in Semantics

This seminar will consider recent developments in the theory of semantics. Topics vary.

1 or 2 credits.

Occasionally. Staff.

Linguistics

LING 109. Seminar in Syntax

This seminar will consider recent developments in the theory of syntax. Topics vary.

1 or 2 credits.

Occasionally. Staff.

LING 110. Seminar in Syntax and Semantics: Negation

This seminar will investigate the syntax, semantics, and pragmatics of negation. The first half of the seminar will review recent proposals concerning the syntactic analysis of negation in various languages. The second half of the seminar will review literature (ancient and modern) addressing the meaning and use of negation in natural language.

Prerequisite: LING 050 or permission of the instructor.

1 or 2 credits.

Fall 1999. Swingle.

LING 116. Language and Meaning

(See PHIL 116.)

Eldridge.

LING 134. Psycholinguistics Seminar

(See PSYC 134.)

Dufour.

Mathematics and Statistics

DEBORAH BERGSTRAND, Professor

CHARLES M. GRINSTEAD, Professor

GUDMUND R. IVERSEN, Professor

EUGENE A. KLOTZ, Professor

STEPHEN B. MAURER, Professor³

HELENE SHAPIRO, Professor

THOMAS HUNTER, Associate Professor

DON H. SHIMAMOTO, Associate Professor

JANET C. TALVACCHIA, Associate Professor and Chair

GARIKAI CAMPBELL, Assistant Professor

TODD A. DRUMM, Assistant Professor

PHILIP J. EVERSON, Assistant Professor³

CHERYL P. GROOD, Visiting Assistant Professor

AIMEE S.A. JOHNSON, Assistant Professor

PAUL J. LUPINACCI, Visiting Instructor

JOYCE A. GLACKIN, Administrative Assistant

³ Absent on leave, 1999-2000.

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 aims to meet varying needs—to offer a program that will enable students both 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 upon 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 hopes that studying mathematics will foster an appreciation for the beauty and power of its methods, abstract approach, and rigorous structure.

First Year Courses: Mathematics and statistics courses appropriate for incoming first-year students with normal high school preparation include STAT 001 (Statistical Thinking),

STAT 002 (Statistical Methods), MATH 003 (Introduction to Mathematical Thinking), MATH 005 (Calculus I), MATH 005S (Calculus I Seminar), and MATH 009 (Discrete Mathematics). In the second semester, STAT 001, MATH 004 (Calculus Concepts), and MATH 009 may be available, again requiring only normal high school preparation. 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 below. 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 certain higher-level courses (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 exams mentioned below*. Students wishing to place beyond beginning calculus may take either the AP or IB (standardized)

Mathematics and Statistics

exams, or Swarthmore's *calculus placement exam*. Students wishing to take MATH 003, 004, 005, 005S, or 009 at any time during their Swarthmore years, and who do not take any of the exams just mentioned, *must* take Swarthmore's *calculus readiness exam*. Even 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 and Credit Policy: "Advanced placement" and "credit" mean different things. Placement allows students to skip material they have learned well already by starting at Swarthmore in more advanced courses. Credit confers placement as well but also is recorded on the student's Swarthmore transcript and counts toward the 32 credits needed for graduation.

The Swarthmore calculus placement exam is used for placement only, not credit. Credit is awarded on the basis of the AP and the IB exams, as follows:

- 1 credit (for STAT 002) for a score of 4 or 5 on the Statistics Advanced Placement (AP) Test of the College Board.

- 1 credit (for MATH 005) for a score of 4 on the AB or BC Calculus Advanced Placement (AP) Test of the College Board, or for a score of 5 on the Higher Level Mathematics Test of the International Baccalaureate (IB).

- 1.5 credits (for Math 5 and 6A) for a score of 5 on the AB or BC Tests or a score of 6 or 7 on the Higher Level IB.

Or 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. Advanced placement credit will be given to entering students only during their first semester at Swarthmore. Students who are eligible for advanced placement credit for a course but

who take the course anyway will not receive the advanced placement credit.

First-year students seeking advanced placement and/or credit for *calculus taken at another college or university* must normally validate their work by taking the appropriate 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 advanced placement 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 one-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 typically 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–006B or 006S), Discrete Mathematics (MATH 009), Linear Algebra (MATH 016 or 016H) and Several Variable Calculus (MATH 018 or 018H). In any event, 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 to date 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-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, majors not in the Honors Program must satisfy the departmental comprehensive requirement by passing MATH 097, the 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 above 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) for one or two credits; (3) Probability (MATH 105); (4) Multivariate Statistics (STAT 027) or, perhaps, Econometrics (ECON 135); and (5) another mathematics course numbered 025 or above. 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 thinking of graduate work in *social or management science*, or an M.B.A. Basic courses: MATH 005 (or 005S), 006A-006B (or 006S), 009, 016, and 018; Computer Science 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 is a heavy program (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 thinking of 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).

Secondary Teaching Certification: Whether or not one majors in Mathematics, the courses required as part of the accreditation process for teaching mathematics at the secondary level are: (1) three semesters of calculus (MATH 005 or 005S, 006A-006B or 006S, 018 or 018H); (2) one semester of linear algebra (MATH 016 or 016H); (3) at least one semester of discrete mathematics (MATH 009, 065, or 072) or computer science (CPSC 010 or 020); (4) geometry (MATH 045, 085, or 106); (5) one semester of modern pure or applied algebra (MATH 037, 048, or 049); and (6) one semester of statistics or probability (STAT 001, 002, 002C, 053). In addition, students are advised strongly to take further mathematics courses emphasizing modeling and applications, and/or to take at least one course in the Natural or Social Sciences in which mathematics is used in a significant way. To be recommended for certification, a student must have an average grade of C or better in all MATH/STAT courses. For further information about certification requirements, please con-

Mathematics and Statistics

sult the catalogue course listings under Education.

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.

Beginning with the Class of 1999, 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. Any alternatives to these must be approved by the department.

Students wishing to complete an Honors minor in Mathematics must have credit for, or place out of, MATH 005 or 005S, MATH 006A–006B or 006S, MATH 016 or 016H, and Math 18 or 18H. 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 provides methods for how to collect and analyze data and generalize from the results of the analysis. Statistics is 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 having 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.

Each semester. Iversen.

STAT 002. Statistical Methods

(Cross-listed as SOAN 027)

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 themselves, mainly 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 semester of calculus are advised to take STAT 023 instead).

1 credit.

Fall 1999. Lupinacci.

STAT 002C. Statistics

(Cross-listed as SOAN 028)

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.

1 credit.

Spring 2000. Lupinacci.

MATH 003. Introduction to Mathematical Thinking

For students who need further preparation for courses requiring 4 years of solid high school preparation such as STAT 002 and MATH 004, 005, 005S and 009. MATH 003 will pre-

pare students for these other courses two ways: (1) by work on standard precalculus topics; and (2) by study of other topics, perhaps new to the students, that highlight the interesting nature of mathematics. The course will probably meet in seminar format and will involve reading, discussion, board presentations, and writing. This course cannot be counted toward a mathematics major.

Prerequisite: Placement into this course through Swarthmore's calculus readiness exam (see "Placement Procedure" earlier).

Primary distribution course. 1 credit.

Fall 1999. Bergstrand.

MATH 004. Calculus Concepts

Introduction to the concepts, methods, and applications of calculus. Intended primarily for students whose preparation is limited or weak, MATH 004 proceeds more gently and less far than MATH 005. 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); with permission of the department, they may receive credit for MATH 005 by taking it after MATH 004. 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" above).

Primary distribution course. 1 credit.

Spring semester if offered.

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 1999. Bergstrand, Campbell, Grood.

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 that 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" above).

Primary distribution course. 1 credit.

Fall 1999. Shimamoto.

Note on MATH 006

The material following MATH 005 is divided into four half-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.

0.5 credit.

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 1999. Campbell, Drumm, Shapiro.

Mathematics and Statistics

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 1999. Klotz, Shapiro, Shimamoto.

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 look upon MATH 006 as 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 1999. Campbell.

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 semester (second half). Shapiro.

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.

Spring 2000.

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 include algorithms, graph theory, counting, difference equations, and finite probability. 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 1999. Shimamoto.

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 1999. Talvacchia.

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 less dwelt upon). 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 1999. Johnson.

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 016.

1 credit.

Each semester.

Fall 1999. Grood, Hunter.

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 less dwelt upon). It is intended for students with exceptionally strong mathematical skills and primarily for those who have completed MATH 016H successfully.

Prerequisite: A grade of C or better in MATH 016H or permission of the instructor.

1 credit.

Spring 2000.

STAT 027. Multivariate Statistical Methods

Given as a continuation of STAT 002 or STAT 023, the course deals mainly with the study of relationships between three or more variables.

Prerequisite: Any one of STAT 002, 023, 053, or ECON 031.

1 credit.

Alternate years.

Spring 2000. Iversen.

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, some partial differential equations.

Prerequisites: MATH 006B and either 018 or 6C or permission of the instructor. MATH 016 recommended strongly.

1 credit.

Spring 2000.

MATH 037. Number Theory

The theory of primes, divisibility concepts, and the theory of 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.

Not offered 1999-2000.

MATH 041. Probability

This course considers both discrete and continuous probability theory. The classical distributions—binomial, Poisson, and Normal—are studied, as are topics including the Central Limit Theorem, the laws of large numbers, and generating functions.

Prerequisites: MATH 006B and at least one of 009 or 018 or permission of the instructor.

1 credit.

Offered occasionally in lieu of MATH 105.

Fall 1999. Grinstead.

MATH 045. Topics in Geometry

Course content varies from year to year, but recently the focus has been on the careful

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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.

Fall 2000. Talvacchia.

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 1999. Drumm.

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.

Spring 2000.

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 1999. Hunter.

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.

Not offered 1999-2000.

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, 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.

Not offered 1999-2000.

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.

Not offered 1999-2000.

MATH 072. Topics in Combinatorial Optimization

Topics vary from year to year and will be chosen from such things as linear programming, game theory, graph theory algorithms, algorithms for prime factorization, and complexity theory.

Prerequisites: MATH 009 and at least one higher-numbered mathematics course.

Recommended: CPSC 020.

1 credit.

Alternate years.

Fall 1999. Grinstead.

MATH 81. 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.

Spring 2000.

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.

Prerequisites: MATH 016 and MATH 018. MATH 047 is also recommended.

1 credit.

Alternate years.

Not offered 1999-2000.

MATH 093/STAT 093. Directed Reading

MATH 096/STAT 096. Thesis

MATH 097. Senior Conference

Required of all senior mathematics majors in

the course program, this 0.5-credit course provides them an opportunity to delve more deeply and on their own into a particular topic agreed upon by the student and the instructor. This is accomplished through a written paper and an oral presentation. In addition, Honors minors will satisfy the Senior Honors Study component of the minor typically 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.

All year. Grinstead.

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 2000.

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 2000.

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, con-

Mathematics and Statistics

formal 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.

Not offered 1999-2000.

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.

Spring semester. Shimamoto.

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.

Prerequisites: STAT 053.

1 credit.

Alternate years.

Not offered 1999-2000.

MATH 106. Advanced Topics in Geometry

Course content varies from year to year to be chosen from among differential geometry, differential topology, and algebraic geometry. In 1998, the topic will be algebraic geometry: curves, surfaces, and their generalization to algebraic varieties.

Prerequisites: Depend upon the topic chosen.

1 credit.

Alternate years.

Not offered 1999-2000.

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.

Not offered 1999-2000.

Medieval Studies

Coordinator: **STEPHEN P. BENSCH** (History)

Committee: **Michael W. Cothren** (Art History)
Nathaniel Deutsch (Religion)
Michael Marissen (Music)
Rosaria V. Munson (Classics)
Ellen Ross (Religion)³
William N. Turpin (Classics)
Craig Williamson (English Literature)

3 Absent on leave, 1999-2000.

This interdisciplinary program offers an opportunity for an integrated study of European and Mediterranean civilization from the 4th century to the 15th. The period, which has a critical importance for the understanding of Western culture, can be approached best through a combination of several disciplines. Hence, six departments (Art, Classics, English Literature, History, Music, and Religion) cooperate to provide a course of study which may be offered as a major in the Course Program or as a major or minor in the Honors Program.

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 112)

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 above courses.)

For a major in the Course Program the requirements are as follows:

1. Distribution requirements as listed above.
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 integra-

tion of the various subjects and methods involved in the interdisciplinary field of Medieval Studies.

3. Students must complete 8 credits (at least) in Medieval Studies in order 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.)

For a major in the Honors Program the requirements are as follows:

1. Distribution requirements as listed above.
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 panel oral with all four examiners present.

Medieval Studies

Majors will have the regular individual oral for the single preparation.

For a minor in the Honors Program the requirements are as follows:

1. Distribution requirements as listed above.
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 pre-approved 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 panel oral with all four examiners present. Minors will have the regular individual oral for the single preparation.

Courses currently offered in Medieval Studies: (See catalog sections for individual departments to determine specific offerings in 1999-2000.)

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 017. The Mediterranean World in the Middle Ages

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 currently offered in Medieval Studies:

ARTH 145: Gothic Art and Architecture

ENGL 102: Chaucer and Medieval Literature

HIST 112. The Barbarian North

RELG 116. The Body in Late Antiquity

RELG 114. Love and Religion

Modern Languages and Literatures

- THOMPSON BRADLEY** (Russian), Professor and Chair
MARION J. FABER (German), Professor
JOHN J. HASSETT (Spanish), Professor
GEORGE MOSKOS (French), Professor³
ALAN BERKOWITZ (Chinese), Associate Professor
SIBELAN FORRESTER (Russian), Associate Professor
BRIGITTE LANE (French), Associate Professor¹⁰
XINRU LIU (Chinese), Associate Professor (part-time)
MICHELINE RICE-MAXIMIN (French), Associate Professor^{8,11}
HANSJAKOB WERLEN (German), Associate Professor
ALIRA ASHVO-MUÑOZ Y DIAZ (Spanish), Visiting Assistant Professor (part-time)
JEAN-VINCENT BLANCHARD (French), Assistant Professor⁹
AURORA CAMACHO de SCHMIDT (Spanish), Assistant Professor³
MARIA LUISA GUARDIOLA (Spanish), Assistant Professor
HAILI KONG (Chinese), Assistant Professor
CHRISTOPHER PAVSEK (German), Visiting Assistant Professor¹
SUNKA SIMON (German), Assistant Professor
CARLOS TRUJILLO (Spanish), Visiting Associate Professor (part-time)⁶
COLETTE J. WINDISH (French), Visiting Assistant Professor
CHRISTINE DeGRADO (Spanish), Instructor (part-time)
JOAN FRIEDMAN (Spanish), Instructor (part-time)
EVGENIYA L. KATSENELINBOIGEN (Russian), Instructor (part-time)
MARY K. KENNEY (Spanish), Instructor (part-time)
ANDREA NELSON (Russian), Lecturer (part-time)
CAROLE NETTER (French), Instructor (part-time)
JEANETTE OWEN (Russian), Visiting Instructor
ELKE PLAXTON (German), Instructor (part-time)
KIRSTEN E. SPEIDEL (Chinese), Instructor (part-time)
SUJANE WU (Chinese), Instructor (part-time)
MARIE-CHRISTINE GIRARD (French), Visiting Language Instructor
MICHAEL JONES, Language Resource Center Director
ELEONORE BAGINSKI, Administrative Coordinator
-

1 Absent on leave, fall 1999.

3 Absent on leave, 1999-2000.

6 Spring 2000 (appointment that semester only).

8 Campus coordinator, Swarthmore Program in Grenoble, fall 1999.

9 Campus coordinator, Swarthmore Program in Grenoble, spring 2000.

10 Program director, Swarthmore Program in Grenoble, fall 1999.

11 Program director, Swarthmore Program in Grenoble, spring 2000.

The Department of Modern Languages and Literatures—consisting of Chinese, French, German, Russian, and Spanish sections—provides Swarthmore students with an understanding of foreign cultures through their orig-

inal languages, and prepares students to engage effectively in 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

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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.

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 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, 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 Rice University-Chile; the University of Kansas-Costa Rica; the University of Pennsylvania-Mexico; Scripps College-Ecuador; and CEUCA in Columbia. (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 the IUB Inter-University Board Program, 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 UMass program in Tanghai. **Students on scholarship may apply** scholarship monies to designated programs of study abroad.

Students wishing to receive a Teaching Certificate in French, German, Russian, or Spanish should plan on taking the regular program of language and literature courses required for the major or show proof of the equivalent. In addition, they should take Linguistics 001. Appropriate supporting courses that broaden knowledge and understanding of the foreign culture being studied are also recommended. Prospective teachers of a foreign language must include a minimum of a semester abroad in their academic program.

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.

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 rise of the Russian novel in the 19th century during the struggle against serfdom and the transition to an urban industrial society and revolution in the 20th century.

No prerequisite.

Primary distribution course. 1 credit.

Fall 1999. Bradley.

LITR 013. Medieval Comparative Literature

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 contemplating a Literature major. Limited enrollment.

Primary distribution course. 1 credit.

Not offered 1999-2000. Faber.

LITR 015R. Russian and East European Prose

(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 approaching 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 and discussion in English; qualified students may do some readings in the original language(s).

Primary distribution course. 1 credit.

Not offered 1999-2000. 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; the religious dimension, disengagement, and the appreciation of the natural world, etc. 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 1999. Berkowitz.

Modern Languages and Literatures

LITR 017CH. The Legacy of Chinese Narrative Literature: The Story in Dynastic China

(Cross-listed as CHIN 017)

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.

Not offered 1999-2000. Berkowitz.

LITR 018CH. The Classical Tradition in Chinese Literature

(See CHIN 018)

1 credit.

Not offered 1999-2000. Berkowitz.

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 1999-2000. Kong.

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 1999-2000. Kong.

LITR 027CH. Women Writers in 20th-Century China

(Cross-listed as CHIN 027)

This course will be a close study of the liter-

ature 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 tri-college student body and taught on the Bryn Mawr campus.

1 credit.

Spring 2000. Kong.

LITR 028F. Francociné: Francophone Film

(Cross-listed as FREN 028)

This course will consider great film classics from the French-speaking world, from *Pépé-leMoko* (1936) to today. It will focus on cinematic representations of the colonial experience as well as on post-colonial redefinitions by contemporary filmmakers from the African, Arab and Asian world. Recent works of French expression from Canada and Europe (Belgium, France, and Switzerland) will also be studied. Special attention will be given to the relationship between form and ideology.

1 credit.

Spring 2000. Lane.

LITR 030R. The Intelligentsia

A critical examination of the central political, moral, and creative role of the Eastern European intelligentsia. The main focus will be on the 20th century, with special attention to the evolution of the influence and character of the intelligentsia after 1917 in the USSR and following the Second World War in Eastern Europe.

1 credit.

Spring 2000. Bradley.

LITR 031R. Revolutionary Culture and Transformation in the USSR

(Cross-listed as HIST 031)

Exploration of the ways in which after 1917 the new Soviet Republic attempted a revolutionary transformation of the entire culture

as reflected in literature, film, music, and social organization.

1 credit.

Not offered 1999-2000. Bradley and Weinberg.

LITR 032R. From Revolution to Capitalism: Critical Issues in Contemporary Russia

(Cross-listed as HIST 032)

This course focuses on those developments in the Soviet Union after the death of Stalin in 1953, which paved the way for perestroika and glasnost in the 1980s and have taken root during the current period of social, political, economic, and cultural transformation.

1 credit.

Not offered 1999-2000. Bradley and Weinberg.

LITR 033R. The Struggle for Liberation and Social Change in Literature and History

The search for community, the idea of justice and democracy, and the universal struggle for social and political change at the bottom of society in literature and history.

1 credit.

Not offered 1999-2000. Bradley, Ford, Cronin.

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. Authors include Primo Levi, Art Spiegelman, and Nietzsche. Films include *Triumph of the Will*, *Shoah*, and *The Nasty Girl*. This course may

count toward a concentration in German Studies. Fulfills distribution requirement for either Humanities or Social Sciences as designated at time of registration.

1 credit.

Fall 1999. Faber, Weinberg.

LITR 044G. Introduction to Film: Film Before World War II

(Cross-listed as ENGL 087)

This course will be an introduction to the study of the aesthetic, historical, and cultural/political dimensions of film between 1895 and 1936.

1 credit.

Not offered 1999-2000. Pavsek.

LITR 050R. Russian Literature and Revolutionary Thought

A study of continuity and change in the relationship between the major political and social movements and the writers before and after 1917.

1 credit.

Not offered 1999-2000. Bradley.

LITR 050SA. 1898: War and Literature

This course will examine the cultural and political implications of the Spanish-Cuban-American War (1895-1898), especially in Cuba and Puerto Rico.

1 credit.

Not offered 1999-2000.

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 Second World War? 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. Films by Dörre, Fassbinder, Schutte, Fellini, Holland, Gorris, Pasolini, Trueba, Bunuel, Kassovitz, Malle, Godard, Axel, Wenders, Herzog,

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Adlon, Sander, von Praunheim, Treut, Export, Wertmuller, Zurlini, Almodevar, Varda, Balletbo-Coll, Bergman, Visconti, Kieslowski, et alii.

1 credit.

Fall 1999. Simon.

LITR 053G. Politics and Utopia in Post-World War II International Cinema

This course will look at ways in which various filmmakers throughout the world attempted to create a political cinema—or to represent politics—during the sixties and seventies.

1 credit.

Not offered 1999-2000. Pavsek.

LITR 054G. Post-War German Cinema

(Cross-listed as GERM 054)

A study of (primarily west) German Cinema from the “rubble films” of the immediate post-war period, through the advent of the New German Cinema in the sixties, to the present state of German film in the “post-wall” era.

1 credit

Not offered 1999-2000. Pavsek.

LITR 055CH. Contemporary Chinese Cinema

(Cross-listed as CHIN 055)

Cinema has become a special form of cultural mirror representing social dynamics and drastic changes in contemporary China. The course will develop a better understanding of changing Chinese culture through analyzing cinematic texts.

1 credit.

Not offered 1999-2000. Kong.

LITR 055G. Film and Literature in Weimar Germany

1 credit.

Not offered 1999-2000. Faber.

LITR 055SA. The Fiction of Contemporary Spanish-American Women Writers

1 credit.

Not offered 1999-2000.

LITR 056CH. History of Chinese Cinema (1905-1995)

(Cross-listed as CHIN 056)

This course investigates Chinese cinema in its ninety 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 1999-2000. Kong.

LITR 60SA. 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 course is not a primary distribution course.

1 credit.

Not offered 1999-2000. 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 1999-2000. Camacho de Schmidt.

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 1999-2000. Berkowitz.

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 1999-2000. Camacho de Schmidt.

LITR 065G. Marxism

1 credit.

Not offered 1999-2000. Pavsek.

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.

Spring 2001. Camacho de Schmidt.

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.

Spring 2000. Berkowitz.

LITR 066G. Goethe's Faust

1 credit.

Not offered 1999-00. Werlen.

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 Vallejo, Neruda, and

Cardenal but also of younger women poets who have changed pain into song.

1 credit.

Not offered 1999-2000. Camacho de Schmidt.

LITR 067S. The Twentieth Century Spanish Novel

This course will examine in English major works of Spanish writers who chose to remain in Spain after the Civil War of 1936-39, 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 supplant the lack of a free press without sacrificing the esthetic quality of their works. Texts will include works by Camilo José Cela, Ana María Matute, Carmen Laforet, Miguel Delibes, Carmen Martín Gaité, Luis Martín Santos, and others.

1 credit.

Fall 1999. DeGrado.

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 1999-2000. Rice-Maximin.

LITR 070R. Translation Workshop

(Cross-listed as LING 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. There are no prerequisites, 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.

Fall 1999. Forrester.

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LITR 071F. French Critical Discourse: From Barthes to Baudrillard

(Cross-listed with Interpretation Theory and as FREN 071)

An introduction to the major thinkers of post-modernity (Barthes, Lacan, Foucault, Derrida, Baudrillard.) We will read at the cross roads 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.

Fall 1999. 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 rewri[gh]ting of the local colonial history.

1 credit.

Not offered 1999-2000. Rice-Maximin.

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

1 credit.

Not offered 1999-2000. Rice-Maximin.

LITR 077G. Literature of Decadence

(Cross-listed as GERM 077)

This survey course explores symbolist, fin-de-siècle, and modernist understandings of civilization, the themes of intellectual and spiritual crisis, the "decline of the West," and "art for art's sake" in European poetry, drama, and fiction during the decades 1880-1930. We will think about the impact of decadence on modern art and thought (art nouveau, "Jugendstil," and Wagnerism) and theories of degeneration and pathology, the counternatural, and the occult. Authors include Rimbaud, Baudelaire, Nietzsche, Huysmans, Sacher-Masoch, Conrad, Wilde, Stoker, D'Annunzio, and Thomas Mann. The course will conclude with readings of late 20th-century texts of "decadence." No prerequisites.

1 credit.

Spring 2000. Werlen.

LITR 078R. Russian Models of Reality: Film, Poetry, Prose, and Theory

The course will analyze both famous and neglected works, ranging from medieval chronicle and hagiography, through the great literature and criticism of the 19th and 20th centuries, to a contemporary drag queen's depiction of Marilyn Monroe.

1 credit.

Not offered 1999-2000. Forrester.

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.

Fall 2000. Moskos.

LITR 079R. Russian Women Writers

This course balances the picture of Russian literature by concentrating on the female authors whose activities and texts were for a long time left out of the canon.

Although the course is in translation, students with Russian may do part or all of the readings in the original.

1 credit.

To be offered 2000-2001. Forrester.

LITR 080R. Literature of Dissent

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 nineteenth and twentieth century Russian poetry and prose.

1 credit.

Not offered 1999-2000. 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 1999-2000. Berkowitz.

LITR 091CH. Special Topics in Chinese Literature and Culture

(Cross-listed as CHIN 091)

The course will concentrate on selected themes, genres, authors, time periods, or critical problems in Chinese literature; all readings in English translation.

1 credit.

Not offered 1999-2000.

LITR 092G. Introduction to Film/Video Production

This course will cover the basic technical aspects of film and video production as well as the basic formal properties of filmmaking. Exercises will be designed to ensure a sound technical foundation as well as familiarize students with the aesthetic and formal principles underlying a variety of film styles and traditions, including "classical" narrative and continuity, early or "primitive" cinema, and montage.

Prerequisite: A prior film course and permission of instructor. Limited to eight students.

1 credit.

Pavsek.

EXPLANATORY NOTE OF FIRST- AND SECOND-YEAR LANGUAGE COURSES

Courses numbered 001B-002B, 003B, and 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 in order 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

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, which is strongly encouraged, can be incorporated into their curriculum. Swarthmore participates in the Associated China Program at Nankai University in Tianjin for the fall semester; students also may attend a number of other recommended programs in China and Taiwan for a summer, a semester, or a full year. First- through fourth-year Chinese language courses are offered each year. An introduction to Classical Chinese is offered every year. Literature and culture courses in translation are offered regularly each year and are open to the entire student community. Students of Chinese are particularly urged to take these classes as a means of gaining perspective on Chinese literature and culture.

Majoring and Minorng in Chinese

Qualified students 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. All Chinese majors (course or Honors) normally must complete the following courses: CHIN 020, 021, and 033; one course on modern literature or film; and one course on premodern literature and culture. Interested

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students should consult with the section head in Chinese. Students of Chinese also may major and minor 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 and minor (see under Asian Studies).

Majoring and Minorng in Chinese in the Honors Program

Students of Chinese may major in the Honors Program through a Special Major in Chinese or through a major in Asian Studies. A Special Major in Chinese will consist of exams in Chinese language, literature, and culture. Work done abroad may be incorporated where appropriate. Interested students should consult with the section head in Chinese. Senior Honors Study is mandatory, and is to be arranged on an individual basis; candidates will receive up to 1 credit for completion of this work. Honors exams normally will consist of a 3-hour written exam and a 30-minute oral. Asian Studies majors should refer to the catalog entry for Asian Studies for further information.

Honors Minor in Chinese: It is possible to prepare for a minor in Chinese in the Honors program, in either Chinese language or in Chinese literature in translation; work done abroad may be incorporated where appropriate. Interested students should consult with the section head in Chinese. Senior Honors Study is mandatory for a minor in Chinese and is to be arranged on an individual basis; candidates will have the option of receiving 0.5 credit for completion of this work. The Honors exam for a minor in Chinese will consist of a 3-hour written exam and a 30-minute oral.

COURSES

CHIN 001B-002B. Introduction to Mandarin Chinese

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 1999: Wu, Speidel.

CHIN 002B, spring 2000: 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.

Primary distribution course (CHIN 004B).

1.5 credits.

CHIN 003B, fall 1999: Kong, Speidel.

CHIN 004B, spring 2000: Kong, Speidel.

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 1999: Liu.

CHIN 011A. Third-year Chinese Conversation

A 0.5-credit course concentrating on the further development of oral/aural skills in Chinese. Conducted entirely in Chinese. To be taken in conjunction with CHIN 011.

0.5 credit.

Fall 1999: Wu.

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 2000: Berkowitz.

CHIN 012A. Advanced Chinese Conversation

A 0.5-credit course concentrating on the further development of oral/aural skills in Chinese. Conducted entirely in Chinese.

1 credit.

Spring 2000. Wu.

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, and so forth. 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 1999. 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, masterworks of the Chinese literary tradition throughout the centuries of imperial China.

1 credit.

Not offered 1999-2000. Berkowitz.

CHIN 018. The Classical Tradition in Chinese Literature

(Cross-listed as LIT 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 1999-2000. Berkowitz.

CHIN 020. Readings in Modern Chinese

This course aims to perfect the student's Mandarin Chinese skills and at the same time to introduce a few major topics concerning Chinese literature and other types of writing since the May Fourth Movement.

Prerequisite: Three years of Chinese or its equivalent.

1 credit.

Fall 1999. Kong.

CHIN 021. Topics in Modern Chinese

Reading and examination of individual authors, selected themes, genres, and time periods for students with strong Chinese language proficiency. All readings, writing, and discussion in Chinese.

1 credit.

Spring 2000. 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.

1 credit.

Not offered 1999-2000. Kong.

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.

1 credit.

Not offered 1999-2000. Kong.

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CHIN 027. Women Writers in 20th-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. No previous preparation in Chinese is required. Open to the entire tricollege student body and taught on the Bryn Mawr campus.

1 credit.

Spring 2000. Kong.

CHIN 033. Introduction to Classical Chinese

(Cross-listed as LING 033)

Classical Chinese includes both the language of China's classical literature as well as the literary language used for writing in China for well over 2 millennia until earlier this century. 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.

Fall 1999. Berkowitz.

CHIN 055. Contemporary Chinese Cinema

(Cross-listed as LITR 055CH)

Cinema has become a special form of cultural mirror representing social dynamics and drastic changes in contemporary China. The course will develop a better understanding of changing Chinese culture through analyzing cinematic texts.

1 credit.

Not offered 1999-2000. Kong.

CHIN 056. History of Chinese Cinema (1905-1995)

(Cross-listed as LITR 056CH)

This course investigates Chinese cinema in its ninety-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 1999-2000. Kong.

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 1999-2000. Berkowitz.

CHIN 066. Chinese Poetry

(Cross-listed as LITR 066CH)

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.

Spring 2000. Berkowitz.

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 1999-2000. Berkowitz.

CHIN 091. Special Topics in Chinese Literature and Culture

(Cross-listed as LITR 091CH)

This course will concentrate on selected themes, genres, time periods, or critical problems in Chinese literature; all readings in English translation.

1 credit.

Not offered 1999-2000.

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 socio-historical forces underlying these various literatures and cultures.

Current Course and Honors Program

French may be offered as a major 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 new Honors Program.) Prerequisites for both Course and Honors students are as follows: 4, 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 comprehensive 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; and (7) write a senior research paper, 20 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 director immediately after Thanksgiving break. Last draft is due to all French faculty end of spring break. Completed paper is due mid-April.

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 new concentration in Francophone Studies in cooperation with other departments and programs abroad. See "Francophone Studies" for description of program and requirements.

New Honors Program in French

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

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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.

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 020).
2. MINOR: at least two advanced courses in literature or culture (above FREN 020).

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): (Senior Honors Study 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 choose 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 3-hour written examination, and a 0.5-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

Note: 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

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 1999. Netter, Girard.

FREN 002B, spring 2000. Netter, Windish, Girard.

FREN 003B, fall 1999. Windish, Girard.

FREN 004. Advanced French: Nouvelles Voix Françaises (New French Voices)

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 1999 and spring 2000. 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 1999 and spring 2000. Girard.

FREN 012C. Literature and Culture of Québec+, #

The course aims at perfecting oral and written expression skills through the exploration of the Francophone 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 Examination, or the equivalent with special permission.

Primary distribution course. 1 credit.

Fall 1999. Blanchard.

FREN 012C. France, Year "2000": Introduction Socio-Culturelle à la France Actuelle+, #

A close look at some fundamental issues reflecting the rapidly changing dimensions of French culture and society today: the questioning of the concept of national identity, the new forms of social division and types of 'family' relations, the crucial problems faced by the young and the elderly, the complex position of an increasingly multicultural "Hexagon" within United Europe and a world of globalization, and the nature of emergent forms of cultural production and the issue of *modernité*.

Prerequisite: FREN 004, a score of 675 on the College Entrance Examination, or 5 on the AP Examination, or the equivalent with special permission.

Primary distribution course. 1 credit.

Not offered 1999-2000.

FREN 012L. Introduction à l'analyse littéraire

Close reading of various texts (prose fiction,

plays, and poetry) 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 Examination, or the equivalent with special permission.

Note: FREN 012L or 012C is required to take any other French literature or culture courses.

Primary distribution course. 1 credit.

Fall 1999. Rice-Maximin.

Spring 2000. Blanchard.

FREN 022. Le Cinéma français

1 credit.

Not offered 1999-2000.

FREN 023. Topics in French Civilization: Multi-Cultural France+, #

A study of today's multicultural French society and of its new sociocultural forms of production.

1 credit.

Not offered 1999-2000.

FREN 024. Société et littérature: Cultures de l'exil+, #

An introduction to the new and diverse profile of today's multicultural French society, the making of exile cultures, the confrontation between national traditions and immigrant ways of life, the resulting social and political issues, and the new dimensions of "French" identity. With an in-depth study of the coinciding new forms of artistic production and creativity in literature and the visual arts (film and comics) as well as a discussion of post-colonial aesthetics. Readings: works by new French writers, leading French social scientists, writers in exile, and writers representing various minority groups in France.

1 credit.

Not offered 1999-2000. Lane.

FREN 025. Centers and Peripheries in the Francophone World+, #

Team-taught interdisciplinary introduction to the French-speaking world and the historical relations between the countries that form it, with a comparative study of their specific cultural achievements. Introductory course for the Francophone Studies concentration (in French

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with some lectures in English).

1 credit.

Spring 2000. Lane with the participation of DuPlessis, Grant, Hungerford, Judson.

FREN 028. Francociné: Francophone Film (Cross-listed as LITR 028F)

This course will consider great film classics from the French-speaking world, from *Pépé-leMoko* (1936) to today. It will focus on cinematic representations of the colonial experience as well as on postcolonial redefinitions by contemporary filmmakers from the African, Arab, and Asian world. Recent works of French expression from Canada and Europe (Belgium, France, and Switzerland) will also be studied. Special attention will be given to the relationship between form and ideology.

1 credit.

Spring 2000. Lane.

FREN 030. Topics in 17th- and 18th-Century Literature: L'invention de la modernité féminine en France (16e-18e)*

Works by authors such as Molière and Diderot will help us in locating changes in the cultural history of women. We will also examine how women writers (Seudéry, La Fayette, Sévigné), notably in novels, conversations, letters, and memoirs, had a key role in defining and challenging the classical ideal of literature.

1 credit.

Spring 2000. Blanchard.

FREN 033. Le Monde francophone: résistances et expressions littéraires*, #

(Cross-listed with Black Studies)

Study of the cultural and historical experiences of formerly colonized peoples as reflected in their respective literature.

1 credit.

Not offered 1999-2000. Rice-Maximin.

FREN 036. Poésie 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.

Spring 2001. Rice-Maximin.

FREN 037. Ville et exclusion*, #

An overview of the major social issues con-

fronting today some of France's major cities, which have become multicultural centers and some of their counterparts, outside of France.

1 credit.

Not offered 1999-2000.

FREN 040. French Theatre and Cultural Studies*

(Cross-listed with Interpretation Theory)

The course will explore: the works of Corneille, Racine, Molière, and others; ideologies of a spectacle society in the light of post-modern theory.

1 credit.

Not offered 1999-2000.

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 socio-political change. Based primarily on novels of Stendhal, Balzac, Flaubert, and Zola.

1 credit.

Fall 2000. Moskos.

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.

Not offered 1999-2000. 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 1999-2000. Moskos.

FREN 065. La Poésie de Baudelaire à Apollinaire

A study in depth of the poetry and poetics of the second half of the 19th century through the beginning of the 20th century, in conjunction with other artistic movements in France. We will discuss the changes in poetic expression, notably how the struggle between the poet and the modern world has influenced new

forms of aesthetics. We will also explore the connections between poetry and art, from realism to cubism. Readings will include texts by Baudelaire, Verlaine, Rimbaud, Mallarmé, Valéry, and Apollinaire.

1 credit.

Fall 1999. Windish.

FREN 067. Nineteenth and Twentieth-Century French Theater

A study of plays and theories that inform them. In addition to literary approaches to the plays, we will consider the relationship between text and performance (including its nonverbal sign systems—such as space, sound, and visual effects—which contribute to the production of meaning). We will also study the contrasts between modernism and classicism, both in form and content as French theater evolved from the romantic drama to the theater of the absurd. We will study works by such playwrights as Musset, Hugo, Jarry, Claudel, Anouilh, Sartre, Ionesco, Genet, and Beckett as well as theoretical readings by Artaud and Barthes.

1 credit.

Spring 2001. Windish.

FREN 070. Théâtre Moderne: Beyond Realism: Meta-Theater in French and European Drama

1 credit.

Not offered 1999-2000.

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 1999-2000.

FREN 071F. French Critical Discourse: From Barthes to Baudrillard

(Cross-listed with Interpretation Theory and as LITR 071F)

An introduction to the major thinkers of post-modernity (Barthes, Lacan, Foucault, Derrida, Baudrillard). We will read at the cross roads of literature, philosophy, history of science, and art to examine how the question of visual per-

ception and representation has informed the critique of traditional conceptions of the textual sign. Taught in English.

1 credit.

Fall 1999. Blanchard.

FREN 072. Le Roman du 20e Siècle

1 credit.

Not offered 1999-2000. Windish.

FREN 073. Roman et cinéma

A study of classic French novels from the 18th century through the 20th and of the films based on these novels. Through the study of works by Diderot, Laclos, Stendhal, Flaubert, Zola, Duras, and others, we will examine the relationship between narrative techniques in the two genres as well as the potential and limitations of such adaptations. Discussion will also focus on the political and social issues raised by both, as we try to determine the unique contribution a visual adaptation can bring to our appreciation of literature.

1 credit.

Fall 2000. Windish.

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

(Cross-listed with Black Studies and as LITR 075F)

Study of literary texts and their rewri[gh]ting of the local colonial history.

1 credit.

Not offered 1999-2000.

FREN 075F. French Language Attachment to Haïti, the French Antilles and Guyane in Translation

1 credit.

Not offered 1999-2000.

FREN 076. Femmes écrivains+

(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 1999-2000.

FREN 077. Prose Francophone: littérature et société+, #

(Cross-listed with Black Studies)

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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 1999-2000. Rice-Maximin.

FREN 078. Théâtre d'écritures françaises: conscience et société+

(Cross-listed with Black Studies)

Close examination of plays and their staging from and beyond the Hexagon.

1 credit.

Not offered 1999-2000. Rice-Maximin.

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, Monique Wittig, Christiane Rochefort, and Renée Vivien, among others.

(1 credit.

Fall 2000. Moskos.

FREN 091. Special Topics: Fashion and Literature#

Based on texts by Baudelaire, Zola, Mallarmé, Proust (including novels, poems, fashion journalism, and history of clothes), our inquiry will define how fashion reveals the relation between economic realities and sexuality; how the fetishism of commodities, artifice, and modernity in 19th-century France lead writers to question the boundaries between genders.

1 credit.

Fall 1999. Blanchard.

FREN 093. Directed Reading

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FREN 102. Baroque Culture and Literature*

(Cross-listed with Interpretation Theory)

2 credits.

Not offered 1999-2000. Blanchard.

FREN 104. Stendhal et Flaubert

2 credits.

Not offered 1999-2000. Moskos.

FREN 105. Proust

2 credits.

Not offered 1999-2000.

FREN 106. Poésie Symboliste

Not offered 1999-2000. Windish.

FREN 108. Le Roman du 20e siècle: Crises et Transformations

The course will focus on the long series of novelistic experiments, both narrative and ideological, which begin around the time of the First World War and continue through surrealism, existentialism and the "nouveau roman." We will study how these texts question the narrative tradition of the 19th century and reappraise the resources and limits of character, plot, and description. Our readings will include critical theory as well as works by such major authors as Marcel Proust, André Gide, André Breton, Jean-Paul Sartre, Michel Butor, and Marguerite Duras.

2 credits.

Spring 2000. Windish.

FREN 109. Le Romantisme

2 credits.

Not offered 1999-2000. Moskos.

FREN 110. Ecritures françaises hors de France: Fiction et réel+

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 1999-2000. Rice-Maximin.

FREN 111. Espaces Francophones: La Ville réelle et imaginaire*, #

From Paris to Algiers, to Dakar, to the utopian city: a study of the francophone city as socio-historical space, center of artistic creativity, object of representation and metaphor, as viewed in literature, film, and the visual arts. Texts will range from realist and surrealist novels to utopian narratives and new forms of fiction such as "littérature de banlieue" and "littérature de l'exil."

2 credits.

Not offered 1999-2000. Lane.

FREN 112. Ecritures francophones: Fiction and History in the French-speaking World+, #

Historical and literary examination of texts from Africa, the Caribbean and Vietnam.

2 credits.

Not offered 1999-2000. Rice-Maximin.

FREN 113. Voyage et littérature: Exploration, nomadisme, et migration+, #

A survey of the various forms of travel and displacements having shaped the history and daily life of various populations of the Francophone world: exploration, migration, nomadism, pilgrimages, and other forms of adventure, mystery, and quest.

2 credits.

Not offered 1999-2000. Lane.

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, theatre and therapy, rituals and subversion, the different theatrical texts, staging, and so forth.

1 or 2 credits

Fall 1999. Rice-Maximin.

FREN 115. Paroles de Femmes#

A study of texts of French expression with topics such as "Ecriture et différence, appartenance, existence, transgression, universel, rupture, métissage, fantastique" that will help us appreciate the many discourses and new directions as expressed by: I. Césaire, M. Condé, A. Djébar, K. Lefèvre, M. Ndiaye, N. Sarraute, S. Schwarz-Bart, V. Tadjó, and others.

2 credits.

Spring 2001. Rice-Maximin.

FREN 180. Thesis

FREN 199. Senior Honors Study

German

German may be offered as a major 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.

Requirements for the Major in Course

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) write a comprehensive examination based on the student's course work; (c) submit 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.

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 depart-

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ment, 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.

Senior Honors Study and Mode of Examination

For Senior Honors Study, 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 February 15 in order 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

Note: 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

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 GERM 004, 013, or 014.

1.5 credits.

GERM 001B, *fall* 1999. Werlen, Plaxton;

GERM 002B, *spring* 2000. Simon, Plaxton;

GERM 003B, *fall* 1999. Faber, Plaxton.

GERM 004. Writing and Speaking German

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 in German and the concentration in German Studies.

1 credit.

Spring 2000. Staff.

GERM 005A. German Conversation

A conversation course concentrating on the development of the students' speaking skills.

Prerequisite: GERM 004 in current or a previous semester or the equivalent Placement Test score.

0.5 credit.

Spring 2000. Plaxton.

GERM 013. Introduction to German Literature

A survey of German literature through close readings of canonical texts (prose, drama, poetry) from the late 18th century to the present. The selections will be read in the context of the artistic and socio-political developments of the era and include authors like Goethe, Tieck, Büchner, Keller, T. Mann, Kafka, Brecht, and Bachmann. Although the main goal of the course is the development of skills in literary analysis, considerable attention will be given to writing skills and speaking German.

Primary distribution course. 1 credit.

Fall 1999. Werlen.

GERM 014. Introduction to German Studies: The Places of "Culture" in Twentieth Century Germany

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 in the year 2000.

Primary distribution course. 1 credit.

Spring 2000. Faber.

GERM 050. Deutsche Lyrik und Lieder

In this course, we will read many of the major German poets, locating their work in its historical and social context, weighing its formal elements, using translation as a mode of interpretation, and exploring the interaction of words and music in the tradition of the German *Lied*. Included will be poetry by Goethe, the Romantics, Heine, Rilke, Brecht, Bachmann, Biermann, and Sarah Kirsch.

1 credit.

Spring 2000. Faber.

**GERM 052. The Body Machine:
Deconstructing the Body Politic in
Postwar German Drama**

Contemporary German plays and stage productions have returned to the body as a contested site for the manifold constructions of the dramatic. This course will ask how the deconstruction of the body and of language in contemporary German drama relates to the public sphere today and to the traditional role of German theater as a political organ of enlightenment.

1 credit.

Not offered 1999-2000. Simon.

GERM 054. Post-War German Cinema

(Cross-listed as LITR 054G)

A study of (primarily west) 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 "post-wall" era.

1 credit.

Not offered 1999-2000. Pavsek.

GERM 068. The 68 Generation in Germany

The course traces the historical, political, cultural, and literary itinerary of the first generation born in Germany after World War II and coming to maturity in the late 60s and 70s.

1 credit.

Not offered 1999-2000.

GERM 077. Literature of Decadence

(Cross-listed as LITR 077G)

This survey course explores symbolist, fin-de-siècle, and modernist understandings of civilization, the themes of intellectual and spiritu-

al crisis, the "decline of the West," and "art for art's sake" in European poetry, drama, and fiction during the decades 1880-1930. We will think about the impact of decadence on modern art and thought (art nouveau, "Jugendstil," Wagnerism) and theories of degeneration and pathology, the counternatural, and the occult. Authors include Rimbaud, Baudelaire, Nietzsche, Huysmans, Sacher-Masoch, Conrad, Wilde, Stoker, D'Annunzio, and Thomas Mann. The course will conclude with readings of late 20th-century texts of "decadence." No prerequisites.

1 credit.

Spring 2000. Werlen.

GERM 088. Frauen und Film

This course emphasizes both the representation of women in German literature and film, and more particularly the work of female film directors and writers, examining the question of women's subjectivity against the background of changing political and historical realities in 20th-century Germany.

1 credit.

Not offered 1999-2000. Faber.

GERM 091. Special Topics

Study of individual authors, selected themes, genres, or critical problems. Specific student interests will influence the final syllabus. The topic for spring 2000 is *Deutsche Lyrik und Lieder* (see description above).

1 credit.

Spring 2000. Faber.

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.

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2 credits.

Spring 2000. Werlen.

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 1999-2000.

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 1999. Simon.

GERM 109. Rise of the Modern German Novel

This seminar will discuss the development of the modern German novel from Gustav Freytag through late Thomas Mann. Novelists to be read include Freytag, Fontane, T. Mann, H. Mann, Marlitt, Döblin, Keun, Kafka, Musil, and Jünger. Topics addressed are realism and modernism, the Brecht/Lukacs debate, the "Krise des Romans," advent of the proletarian novel, left-/right-wing modernism, and influence of mass-culture and film.

2 credits.

Not offered 1999-2000. Pavsek.

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 postwar, unified Germany. Authors included are Böll, Eich, Grass, Frisch, Bachmann, Handke, Bernhard, Jelinek, Strauss, Wolf, Delius, Plenzdorf, Süskind, and Menasse.

2 credits.

Not offered 1999-2000. Werlen.

GERM 199. Senior Honors Study

Russian

Russian may be offered as a major 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.

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 078, RUSS 079, or RUSS 080, or another advanced literature course in another language (e.g., CHIN 018, CHIN 066, FREN 040, FREN 060, GERM 077, SPAN 060, SPAN 077)
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 078 or RUSS 079 or RUSS 080 or another advanced literature course in another language (e.g., CHIN 018, 066, FREN 040, FREN 060, GERM 077, SPAN 060, SPAN 077)
5. Minimum grade for acceptance into the Honors program: **B-** level work in courses taken at Swarthmore in language and in the introductory literature 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 (3) 2,500- 3,000-word papers, one for each Honors preparation, as expanded on and extended by the spring senior Honors study 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, wherever 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 3-hour written examinations prepared by the External Examiners as well as a 0.5-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 3-hour written examination prepared by the External Examiner as well as a 0.5-hour oral examination based on the contents of the written examination and the materials submitted in the portfolio.

COURSES

Note: 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 do Special Topics.

RUSS 001B-002B, 003B. Intensive Russian

For students who begin Russian 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 earlier. Normally followed by RUSS 004B and 011.

1.5 credits.

RUSS 001B, fall 1999. Nelson, Katsenelinboigen.

RUSS 002B, spring 2000. Owen, Katsenelinboigen.

RUSS 003B, fall 1999. Forrester, Katsenelinboigen.

RUSS 004B. Advanced Intensive Russian

For majors and those primarily interested in perfecting their command of language. Advanced conversation, composition, translation, and stylistics. Considerable attention paid to writing skills and speaking. Readings include short stories, poetry, and newspapers. Conducted in Russian.

1.5 credits.

Spring 2000. Nelson, Katsenelinboigen.

RUSS 006A. Russian Conversation

A 0.5-credit conversation course that meets once a week for 1.5 hours. Students will read

Modern Languages and Literatures

journals and newspapers and see films as part of their preparation for conversation.

Prerequisite: RUSS 004B in current or a previous semester or permission of instructor.

0.5 credit.

Spring 2000. Katsenelinboigen.

RUSS 011. Introduction to Russian Culture

An interdisciplinary introduction to Russian culture and the field of Slavic Studies, with visiting lectures from tricollege faculty in relevant disciplines: Anthropology, Architecture, Economics, Folklore, History, Literature, Music, Sociology. Readings, lectures, and discussions in English. An optional 4-hour attachment (for additional 0.5 credit) supplements the course for Russian majors or minors, with readings and discussion in Russian.

Primary distribution course. 1 credit.

Fall 1999. Owen, Katsenelinboigen.

RUSS 013. The Russian Novel

(Cross-listed as LITR 013R)

The rise of the Russian novel in the 19th century during the struggle against serfdom and the transition to an urban industrial society and revolution in the 20th century. The quest for freedom and social justice in a moral society with particular emphasis on the works of Gogol, Turgenev, Dostoevsky, Tolstoy, Bulgakov, and Solzhenitsyn. Lectures and readings in English. (Russian majors will be required to read a part of the material in Russian.)

No prerequisite.

Primary distribution course. 1 credit.

Fall 1999. Bradley.

RUSS 015. Russian and East European Prose

(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 approaching 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, and discussion in English; qualified students may do some readings in the original lan-

guage(s).

Primary distribution course. 1 credit.

Not offered 1999-2000. Forrester.

RUSS 016. History of the Russian Language

An introductory course. A study of 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.

To be offered in 2000-2001. Forrester.

RUSS 091. Special Topics

For senior majors. Study of individual authors, selected themes, or critical problems.

1 credit.

Spring 2000. Staff.

RUSS 093. Directed Reading

SEMINARS

RUSS 101. Tolstoy

2 credits.

RUSS 102. Russian Short Story

2 credits.

RUSS 103. Pushkin and Lermontov

2 credits.

RUSS 104. Dostoevsky

2 credits.

Fall 1999. Owen.

RUSS 105. Literature of the Soviet Period

2 credits.

RUSS 106. Russian Drama

2 credits.

RUSS 107. Russian Lyrical Poetry

2 credits.

RUSS 108. Russian Modernism

2 credits.

Spring 2000. Staff.

RUSS 109. Chekhov

2 credits.

RUSS 110. Bulgakov

2 credits.

**RUSS 111. The Hysterical Poets:
Tsvetaeva and Mayakovsky**

2 credits.

RUSS 112. The Acmeists

2 credits.

**RUSS 113. Tolstoy: Philosophy and
Religion in Russian Literature**

2 credits.

RUSS 114. Folklore in Russian Literature

2 credits.

Spanish

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 003B and above; (3) one of these courses must be SPAN 011 or 013; (4) one 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; (5) all majors are strongly encouraged to take at least one seminar offered by the section.

The Honors Program in Spanish

Candidates for the major or minor in Spanish must meet the following requirements *prior* to 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 SPAN 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: (1) 2-credit seminars offered by the section or (2) 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 3-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 3-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

Note: 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

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 earlier. Normally followed by SPAN 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.

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 difficult 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,

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read plays that might be performed for and by the class, and prepare assignments which will generate conversation among the group.

Prerequisite: SPAN 004B or its equivalent, or permission of instructor.

0.5 credit.

Each semester. Friedman.

SPAN 010. En Busca de América Latina

Although some literary texts will be used in this course, the primary focus will be linguistic and cultural rather than literary. Through selections of pertinent essays, films, poetry, and novels the class will explore how Spanish Americans view themselves and their culture. Course conducted in Spanish. Papers, presentations.

Spanish majors should note that this course does not count toward fulfillment of the requirements for the major.

1 credit.

Spring 2000. Hassett.

SPAN 011. Introduction to Spanish Literature

A study of representative fiction, poetry, and drama of the 19th and 20th centuries. Discussions, papers.

Prerequisite: SPAN 004B, the equivalent, or permission of instructor.

Primary distribution course. 1 credit.

Fall 1999. Guardiola.

SPAN 013. Introduction to Spanish American Literature

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 its equivalent or permission of instructor.

Primary distribution course. 1 credit.

Not offered 1999-2000. Camacho de Schmidt.

Note: SPAN 011 or 013, the equivalent, or consent of instructor is prerequisite for the courses in literature that follow:

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 postwar authors such as Carmen Laforet, Ana María Matute, and Mercé Rodoreda; and the contemporary ones: Carmen Martín Gaité, Montserrat Roig, Esther Tusquets, and others.

1 credit.

Fall 1999. Guardiola.

SPAN 076. Grandes voces de América: la poesía del siglo XX

Latin America has produced some of the great poets of this century. Reflecting a specific New World 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 Alegria.

1 credit.

Spring 2000. Trujillo.

SPAN 077. La novela hispanoamericana del siglo XX

After a brief examination of regionalist texts, the course's major emphasis will be on the "boom" and "post-boom" periods, during which one of the most innovative and highly commented novels of contemporary world literature has emerged. Attention given not only to the formal aspects of these novels but also to the sociopolitical contexts in which they were written. Writers will include Julio Cortázar, Juan Rulfo, Carlos Fuentes, Gabriel García Márquez, Isabel Allende, Luisa Valenzuela, Mario Vargas Llosa, Manlio Argueta, Manuel Puig, and Cristina Peri Rossi.

1 credit.

Spring 2001. Hassett.

SPAN 082. La mujer mirando al hombre: Escritoras hispanoamericanas del siglo XX

The course will examine both novels and short stories written by Latin American women writers whose principal focus is upon men and the social, political and economic structures that

they have fostered as well as the response of women to such structures. Writers will include María Luisa Bombal, Isabel Allende, Luisa Valenzuela, Angeles Mastretta, Pía Barros, Paulina Matta, Rosario Ferré, and others.

1 credit.

Fall 1999. Hassett.

SPAN 085. Narrativa Hispánica Contemporánea de los Estados Unidos

A study of the fiction of leading Hispanic American writers with particular emphasis on the contributions of Mexican Americans, Cuban-Americans, and Puerto-Rican Americans. Writers include Anaya, Rivera, Cisneros, Castillo, Hijuelos, García, and others.

1 credit.

Fall 2000. Hassett.

Courses to be offered in subsequent years:

SPAN 041. Obras maestras de la Edad Media y del Renacimiento

SPAN 043. Multiculturalismo y subversión en Cervantes

SPAN 067. La guerra civil española en la literatura y el cine

SPAN 070. Rebelión y renovación artística: el modernismo y la generación del 98

SPAN 071. Literatura española contemporánea

SPAN 074. Literatura española de posguerra

SPAN 078. La novela social de México

SPAN 079. El cuento hispanoamericano

SPAN 080. La narrativa chilena desde el golpe militar

SPAN 083. El tirano latinoamericano en la literatura

SPAN 101. La novela hispanoamericana del siglo XX

2 credits.

SPAN 102. Cervantes

2 credits.

SPAN 103. La guerra civil española

2 credits.

SPAN 104. La narrativa de Mario Vargas Llosa

2 credits.

SPAN 105. Federico García Lorca

We will examine the masterful literary production of this internationally known Spanish writer who speaks to the "outcasts." Lorca's work synthesizes traditionally Spanish themes and values with contemporary European trends. The readings will cover different periods and genre's of Lorca's literary production. Poetry such as *Romancero Gitano*, and *Poeta en Nueva York* and dramatic works, including *Doña Rosita la soltera*, *Yerma*, *La casa de Bernarda Alba*, *Bodas de sangre*, and others.

2 credits.

Spring 2000. Guardiola.

SPAN 106. Visiones narrativas de Carlos Fuentes

The seminar explores the vast and textured work of a Mexican craftsman of language who writes for the world and is a profound observer of history.

2 credits.

Fall 2000. Camacho de Schmidt.

SPAN 107. Héroes y villanos: el siglo XIX español y la democratización literaria

2 credits.

SPAN 108. La narrativa de Isabel Allende: la escritura como sobrevivencia

2 credits.

SPAN 109. Unamuno o el hambre de Dios

2 credits.

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.

Music and Dance

MUSIC

JAMES FREEMAN, Professor of Music and Chair
GERALD LEVINSON, Professor of Music
ANN K. McNAMEE, Professor of Music²
JOHN ALSTON, Associate Professor of Music
MICHAEL MARISSIN, Associate Professor of Music
THOMAS WHITMAN, Assistant Professor of Music (part-time)
DOROTHY K. FREEMAN, Associate in Performance (Music)
SARAH IOANNIDES, Associate in Performance (Music)
MICHAEL JOHNS, Associate in Performance (Music)
JUDY LORD, Administrative Assistant

DANCE

SHARON E. FRIEDLER, Professor of Dance, Director of the Dance Program
KIM D. ARROW, Assistant Professor of Dance (part-time)²
SALLY HESS, 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)
PAULA SEPINUCK, Adjunct Associate in Performance⁵
JON SHERMAN, Associate in Performance (Dance)
LEAH STEIN, Associate in Performance (Dance)
HANS BOMAN, Dance Accompanist
JUDY LORD, Administrative Assistant

ORCHESTRA 2001, ENSEMBLE IN RESIDENCE

2 Absent on leave, spring 2000.

3 Absent on leave, 1999-2000.

5 Spring 2000.

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, Early

Music 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 receive 100% subsidy for the cost of ten private lessons each semester (see MUSI 048). *Major in the Course Program:* Two semester courses in theory and one semester course in history are prerequisite for acceptance as a major. Majors will normally take five semester courses in theory (including MUSI 015, 016, or 017), 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 above, 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 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. For further details consult the guidelines for Honors Study available in the Department office.

Language Requirements for Graduate Schools: Students are advised that graduate work in music requires a reading knowledge of French and German. A reading knowledge of Latin is also desirable for students planning to do graduate work in musicology.

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 and a first movement of an easy late 18th- or early-19th-century sonata. In addition, they must demonstrate skill in score reading and in realizing figured basses. The Department recommends that majors take two semesters of MUSI 042 to develop these skills.

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 above. It is open to any student enrolled in a theory course numbered 011 or higher. No academic credit is given for basic piano.

Special scholarships and awards in music include

The Edwin B. Garrigues Music Awards: See p. 77.

The Fetter String Quartet Awards: See p. 77.

The Renee Gaddie Award: See p. 77.

Music 048 Special Awards: See p. 79.

Friends of Music and Dance Summer Awards: See p. 77.

The Boyd Barnard Prize: See p. 76.

The Peter Gram Swing Prize: See p. 80.

The Melvin B. Troy Prize: See p. 80.

CREDIT FOR PERFORMANCE

Note: All performance courses are for half-course credit per semester. A total of not more than eight 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 (Music 048)

Music majors and members of the Wind Ensemble, Chorus, Early Music Ensemble, Gamelan, Gospel Choir, Jazz Ensemble, and Orchestra may, if they wish, take lessons for credit. Instrumentalists for whom opportunities do not exist in the above ensembles may qualify for MUSI 048 by taking part in the Department's Program for Accompanists. For further details consult the MUSI 048 guidelines available from the Department office.

Students who wish to take MUSI 048 (Individual Instruction) must register for the course and submit an application to the Department at the beginning of each semester; forms are available in the Department office. Although it is necessary to be a member in good standing of a Department performance group or the Gospel Choir, it is not necessary to be registered for credit in that performing group.

A student applying for Individual Instruction should be at least an intermediate level of performance. The student will arrange to work with a teacher of her or his 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

Music and Dance

receive credit, and whether the student may re-enroll for the next semester.

For students enrolled in MUSI 048, approximately one-third of the cost of 10 lessons will be paid by the Department to the teacher. Section leaders in the Chorus and Orchestra receive subsidies of two-thirds the cost of 10 lessons. Music majors in their junior and senior years receive 100 percent subsidies of the cost of 10 lessons each semester. Gaddie, Fetter, Garrigues and other scholarships may subsidize up to the entire cost of private lessons for the more 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 and solos with the Chorus.

Orchestra, Chorus, Wind Ensemble, Early Music Ensemble, Gamelan, Chamber Music, Jazz Ensemble, and Keyboard Workshop

Students may take Performance Chorus (MUSI 044), Performance Orchestra (MUSI 043), Performance Jazz Ensemble (MUSI 041), Performance Wind Ensemble (MUSI 046), Performance Early Music Ensemble (MUSI 045), Chamber Music (MUSI 047), Gamelan (MUSI 049), or Keyboard Workshop (MUSI 050) 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 should submit to the Department at the beginning of the semester a 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 repertory, the names of all coaches who have agreed to work with them, and the proposed dates for performance in a student chamber music concert.

A student taking MUSI 047 for credit will rehearse with her/his 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, also capable of giving a performance of high quality. 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 assume responsibility for the group, making sure that the full group is present for regular rehearsals and coaching sessions.

Students taking the Keyboard Workshop (MUSI 050) will develop and refine skills in accompanying and sight-reading through work with the chamber, song, and four-hand repertoire.

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 folk music and various non-Western repertoires, the course focusses primarily on the art musics of Europe and the United States. Prior musical training is not required.

Open to all students without prerequisite.

1 credit.

Spring 2000. Marissen.

MUSI 002. Fundamentals of Music

Notation, scales, keys, chords, and sight reading. Strongly recommended as preparation for (or concurrent with) all upper-level music courses.

1 credit.

Spring 2000. Alston.

MUSI 003. Jazz History

This course traces the development of jazz from its roots in West Africa to the free styles of the 1960s. Included are the delineation of the various styles and detailed analysis of seminal figures. 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.

Fall 1999. Alston.

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. The course is open to all students. No prior musical experience or performance skills are required.

1 credit.

Spring 2000. J. Freeman.

MUSI 005. Music as Social History

This course will explore folk music, including African-American music from the slavery period and after, as the expression of the life experience, collective history, and aspirations of the people from whom it springs.

1 credit.

Not offered 1999-2000.

MUSI 006. Beethoven and the Romantic Spirit

An introduction to Beethoven's compositions in various genres.

1 credit.

Not offered 1999-2000.

MUSI 007. W.A. Mozart

Study of Mozart's compositions in various genres and of the peculiar interpretive problems in Mozart biography.

Open to all students without prerequisite.

Primary distribution course in the Humanities.

1 credit.

Fall 1999. 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.

MUSI 009. Baroque and Classical Music

Italian opera, extraordinarily popular and widespread during the 17th and 18th centuries, now provides a remarkable window through which to view European culture of the time. Opera lent its most important stylistic traits to every other kind of music, including cantatas, sonatas, concertos, and symphonies, and thus also provides an ideal background for understanding all the great music of the period. This course will focus on three immensely important Italian operas: Monteverdi's *L'Incoronazione di Poppea* (1642), Handel's *Giulio Cesare* (1724), and Mozart's *Idomeneo* (1781). The course is open to all students regardless of prior musical training or lack thereof. Students interested in music, theater, dance, literature (especially poetry), and European cultural history will be particularly appropriate members of the class. This course is also listed as MUSI 021 and as such will also count toward the Department's history requirement for majors.

1 credit.

Fall 1999. J. Freeman.

MUSI 010. Women in Music: Composers

This course traces some of the contributions made by women composers to the art of music from the Middle Ages to the present.

1 credit.

Not offered 1999-2000. See MUSI 035.

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. Placement exams are given each year at the first meeting of that course for students who feel they may be able to place out of it. Majors will normally take MUSI 011, 012, 013, 014, and one of 015, 016, or 017 in successive years.

Music and Dance

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.

One section of MUSI 040A per week, without additional credit, is required. In addition, students with minimal keyboard skills are required to take basic piano.

1 credit.

Fall 1999. Whitman.

MUSI 012. Harmony and Counterpoint 2

Written musical exercises include composition of original materials as well as commentary on excerpts from the tonal literature.

Prerequisite: MUSI 011 (or the equivalent).

One section of MUSI 040B per week, without additional credit, is required. Basic piano is also required for some students.

1 credit.

Spring 2000. Whitman.

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.

Prerequisite: MUSI 012 (or the equivalent).

One section of MUSI 040C per week, without additional credit, is required. Basic piano is also required for some students.

1 credit.

Fall 1999. Levinson.

MUSI 014. Harmony and Counterpoint 4

Advanced work with chromatic harmony and tonal counterpoint.

Prerequisite: MUSI 013.

One section of MUSI 040D per week, without additional credit, is required. Basic piano is also required for some students.

Spring 2000. Levinson.

MUSI 015. Harmony and Counterpoint 5

Detailed study of a limited number of works both tonal and nontonal, with independent work encouraged.

Prerequisite: MUSI 014.

1 credit.

Spring 2000. Whitman.

MUSI 016. Schenker

An introduction to Schenkerian analysis. An extension of traditional analytical techniques, incorporating Schenker's principles of voice leading, counterpoint, and harmony.

Prerequisite: MUSI 014.

1 credit.

Not offered 1999-2000.

MUSI 017. History of Music Theory

A survey of primary sources (in translation) from Boethius, Tinctoris, and Zarlino through Rameau, Riemann, and Schoenberg.

Prerequisite: MUSI 014.

1 credit.

Not offered 1999-2000.

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, and preparing a score for rehearsal and performance.

1 credit.

Not offered 1999-2000.

MUSI 019. Composition

1 credit.

Fall 1999 and spring 2000. 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 1999-2000.

HISTORY OF MUSIC

MUSI 020. Medieval and Renaissance Music

A survey of European art music from the late

Middle Ages to the 16th century. Relevant extramusical contexts will be considered.

Prerequisite: A knowledge of traditional notation.

1 credit.

Fall semester. Marissen.

MUSI 021. Baroque and Classical Music

This course is also listed as MUSI 009. See description there.

1 credit.

Fall 1999. Freeman.

MUSI 022. Nineteenth-Century Music

The development of the "Romantic Style" from late Beethoven and Schubert to Wagner and Verdi.

Prerequisite: A knowledge of traditional notation.

1 credit.

Not offered 1999-2000.

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.

Spring 2000. Levinson.

MUSI 032. History of the String Quartet

A history of the string quartet from its origins to its development into one of the 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 1999-2000.

MUSI 033. The Art Song

A study of various solutions by various composers to the problems of relating poetry and music.

1 credit.

Not offered 1999-2000.

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.

Prerequisite: A knowledge of traditional notation.

1 credit.

Spring 2000. 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 1999-2000.

MUSI 036. Music Since 1945

A study of contemporary concert music, including such composers as Messiaen, Crumb, Boulez, Cage, Babbitt, Carter, Lutoslawski, Ligeti. Electronic music, collage, chance and improvisation, and minimalism will also be examined, as well as the current trends toward Neo-Romanticism and stylistic pluralism.

1 credit.

Not offered 1999-2000.

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.

Prerequisite: A knowledge of traditional notation.

1 credit.

Not offered 1999-2000.

MUSI 038. Color and Spirit: Music of Debussy, Stravinsky, and Messiaen

A study of twentieth-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

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connections among them, and the resonances of their music in the work of their contemporaries and successors.

Prerequisite: A knowledge of traditional musical notation.

1 credit.

Not offered 1999-2000.

MUSI 039. Music and Dance: Criticism and Reviewing

This course, team taught by music and dance faculty with supplemental visits by guest lecturers who are prominent in the field of reviewing, 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 1999-2000.

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 seminar.

Spring 2000. Whitman.

MUSI 101. J.S. Bach

(See MUSI 034.)

Study of Bach's compositions in various genres, examining music both as a reflection of and formative contribution to cultural history.

Prerequisites: MUSI 011 and GERM 001B (higher levels in both strongly recommended; RELG 018 also recommended), or permission of instructor.

1-credit seminar.

Spring 2000. Marissen.

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 equivalent to a 2-credit seminar.

Not offered 1999-2000.

MUSI 103. Russian Music

A survey of Russian music from the early 19th century (Glinka) through Mussorgsky, Tchaikovsky, Borodin, Rimsky, and into the 20th century: Scriabin, Stravinsky, Prokofiev, Shostakovich, Schnittke, Gubaidulina, and Ustvolskaya.

Prerequisite: MUSI 011-012.

Not offered 1999-2000.

PERFORMANCE

Note: The following performance courses are for 0.5-course credit per semester. See p. 253 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 without credit. Also open to other students.

0.5 credit.

Fall 1999. Whitman.

MUSI 040B. Elements of Musicianship II

Prerequisite: MUSI 040A.

Sight-singing, rhythmic and melodic dictation. Required for all MUSI 012 students without credit. Also open to other students.

0.5 credit.

Spring 2000. Whitman.

MUSI 040C. Elements of Musicianship III

Prerequisite: Music 40B.

Sight-singing, rhythmic, and melodic dictation. Required for all MUSI 013 students without credit. Also open to other students.

0.5 credit.

Fall 1999. Ioaniddes.

MUSI 040D. Elements of Musicianship IV

Prerequisite: MUSI 040C.

Sight-singing, rhythmic and melodic dictation. Required for all MUSI 014 students without credit. Also open to other students.

0.5 credit.

Spring 2000. Ioaniddes.

MUSI 041. Performance (Jazz Ensemble)

Meets Monday nights.

0.5 credit.

Fall 1999 and spring 2000. Alston.

MUSI 042. Keyboard Musicianship

0.5 credit.

Fall 1999 and spring 2000.

MUSI 043. Performance (Chorus)

0.5 credit.

Fall 1999 and spring 2000. Alston.

MUSI 044. Performance (Orchestra)

Meets Thursday nights.

0.5 credit.

Fall 1999 and spring 2000. Ioaniddes.

MUSI 045. Performance (Early Music Ensemble)

0.5 credit.

Fall 1999 and spring 2000. Marissen.

MUSI 046. Performance (Wind Ensemble)

0.5 credit.

Fall 1999 and spring 2000. Johns.

MUSI 047. Performance (Chamber Music)

(See guidelines for this course on p. 254.)

0.5 credit.

Fall 1999 and spring 2000. D. Freeman.

MUSI 048. Performance (Individual Instruction)

(See the guidelines for this course on p. 253.)

Specific and updated guidelines are distributed at the beginning of each semester.

0.5 credit.

Fall 1999 and spring 2000.

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; open to all students with the instructor's approval.

0.5 credit.

Fall 1999 and spring 2000. Whitman.

MUSI 050. Keyboard Workshop

Developing and refining skills in accompanying and sight reading through work with the chamber, song, and four-hand repertoire.

0.5 credit.

Not offered 1999-2000.

MUSI 071. Rhythmic Analysis and Drumming

(Cross-listed as DANC 071)

0.5 credit.

Not offered 1999-2000. Arrow.

MUSI 072. Asian Performance Theory: Indonesia, China, Japan: Looking at the East through Western Eyes

(Cross-listed as DANC 072)

0.5 credit.

Not offered 1999-2000.

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. The instructors strive to create an atmosphere of cooperative learning; one which affirms group process and fosters comradery.

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Special Major: Dance and a Second Discipline

Students may combine the study of dance with substantive study in another discipline. The two disciplines in this major may be philosophically linked or may represent separate areas of the student's interest. Some examples are: English, history, linguistics, music, philosophy, religion, sociology/anthropology, and theatre. For this major, 6 dance credits from the core program listed below are joined by 6 credits in one other discipline. Such special majors require the approval of the dance program and the other department involved. Planning for these majors should take place as early in the student's program as possible; students are encouraged to develop their plans in consultation with the director of dance and with a faculty advisor in the other discipline.

Special majors are urged to supplement their study with appropriate courses in anatomy, art, history, music, sociology/anthropology, theatre, religion, and other areas of concentration such as various ethnic studies and women's studies.

Required Courses

The core program of 6 credits includes the following courses:

Two in composition/improvisation (DANC 012 or DANC 014 [1 credit] and Dance 010 [0.5 credit] or DANC 071 [0.5 credit]),

Two in history/theory (one from DANC 021-024 [1 credit] and one from 036-039 [1 credit]),

Three in performance technique (DANC 050 [0.5 credit], one other technique at the 050 level [0.5 credit], and one additional technique other than DANC 060 [0.5 credit]). It is strongly suggested that special majors continue to develop their performing skills by regular attendance in dance technique classes beyond this requirement.

One senior project and/or thesis (DANC 094, 095, or 096 [1 credit]).

Major or Minor in the Honors Program

A major or minor in dance through the Honors Program is also available for students in the Class of 1997 and onward. Please consult dance faculty for further information and guidelines.

Performance Dance: Technique

In a typical semester over 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 eight 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 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 residencies, which in 1999-2000 will include Doug Elkins Dance, Meredith Monk, a Chinese folk-dance company, and Deer Chaser Native American dancers and musicians.

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.

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. Interested students should contact the director of the Dance Program as early as possible for advising purposes and for updated information.

Poland Program

The Programs in Theatre Studies and Dance are jointly developing a new semester-abroad program for interested Swarthmore students based at the Silesian Dance Theatre (Śląski

Teatr Tańca) 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 theatre company for credit. Participating students would be housed in Bytom along with attending weekly tutorials in Cracow. Intensive study of Polish while in the country will be required of all participating students. Although details of the program are still being finalized as the College catalog goes to press, it is expected that students will be able to participate in the program beginning in Spring 2000. 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. Beyond credits in Theatre Studies, 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, Director of Theatre Studies, as early as possible for advising purposes and updated information on the status of the program. See course listings in both the Theatre Studies Program and the Music and Dance Department for types of academic credit being offered.

Additional information about the dance program is available via the World Wide Web at <http://www.swarthmore.edu/humanities/dance/>.

INTRODUCTORY COURSES

DANC 001. Introduction to Dance

A survey course that approaches dance viewing and analysis of dance performance through an introduction to elements of dance composition and history. The roles of choreographer, performer, and audience in various cultures are compared and investigated using theoretical

and practical experiences. No prior dance training is assumed; open to all students without prerequisite. Two lectures and one video viewing session per week.

Primary distribution course. 1 credit.

Not offered 1999-2000.

DANC 002. World Dance Forms

A survey course that introduces students to theoretical and practical experiences in dance forms from various cultures and time 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 such styles as various African, Asian, and Native American forms, Flamenco, contemporary social dances, and European court dancing. Open to all students; no prior dance training required.

Primary distribution course. 1 credit.

Fall 1999. Friedler.

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.

DANC 010. Dance Improvisation

Designed as a movement laboratory in which to explore the dance elements: space, time, force, and form. 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 course in dance technique is strongly recommended. Three hours per week.

0.5 credit.

Fall 1999. Hess.

COMPOSITION/HISTORY/THEORY COURSES

DANC 011. Dance Composition I

A study of the basic principles of dance composition through exploration of the elements

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of dance movement, invention, and movement themes, to the end of developing an understanding of 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. Also required is a production lab that includes an introduction to costuming, lighting, set construction, sound and video in relation to dance. A course in dance technique must be taken concurrently.

Prerequisite: DANC 010, DANC 071, or permission of the instructor.

1 credit.

Spring 2000. Hess.

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. 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 Dance 11 or its equivalent.

1 credit.

Not offered 1999-2000.

DANC 013. Dance Composition: Tutorial

Designed as a tutorial for students who have previously taken DANC 011 or the equivalent. Choreography of a final piece for public performance is required. Weekly meetings with the instructor and directed readings, video and concert viewings. A journal may also be required. A course in dance technique must be taken concurrently.

0.5 credit.

Fall 1999; Hess. Spring 2000; Friedler.

DANC 014. Special Topics in Dance Composition

A course which focuses on intensive study of specific compositional techniques and/or subjects. Topics may include autobiography, dance and text, partnering, interdisciplinary collaboration, reconstruction, and technology. Choreography of a final piece for performance is required. Weekly meetings with the instructor, directed readings, video and concert view-

ing, and a journal will be required. A course in dance technique must be taken concurrently.

Prerequisite: DANC 011.

Three hours per week.

1 credit.

Not offered 1999-2000.

DANC 021. History of Dance: Africa and Asia

This course will move through an exploration of dance forms from Africa, from Africanist cultures and from Asian cultures, from the perspectives of stylistic characteristics, underlying aesthetics, resonances in general cultural traits, and developmental history. The course 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 001 or 002. Two lectures and one hour video viewing per week.

1 credit.

Spring 2000. Friedler.

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 001 or 002; DANC 024 strongly recommended. Two lectures and one hour video viewing per week.

1 credit.

Not offered 1999-2000.

DANC 023. Twentieth Century Dance

A study of Twentieth Century social and theatrical dance forms in the context of Western societies with an emphasis on America. Influential choreographers, dancers, and theorists will be discussed.

Prerequisite: Dance 1 or 2; Dance 21 and 22 strongly recommended. Two lectures and one hour video viewing per week.

1 credit.

Not offered 1999-2000.

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.

Prerequisite: DANC 001, 002, or permission of the instructors.

Three hours per week.

1 credit.

Not offered 1999-2000.

DANC 035. Women Choreographers and Composers

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 1999-2000.

DANC 036. Dance and Gender

This course explores ways that gender has 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.

Prerequisite: DANC 001, 002, or permission of the instructor.

1 credit.

Not offered 1999-2000.

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 1999. Arrow.

DANC 039. Music and Dance: Criticism and Reviewing

(Cross-listed as MUSI 039)

This course, team taught by music and dance faculty with supplemental visits by guest lecturers who are prominent in the field of reviewing, 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 1999-2000.

DANCE TECHNIQUE COURSES

Note: Technique courses (040-048, 050-058, 060, and 061) may be taken for ½ 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.

0.5 credit.

Fall 1999. Arrow.

Spring 2000. 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.

0.5 credit.

Fall and spring. Sherman.

DANC 043. African Dance I

Introduction to African Dance aims to give students a rudimentary vocabulary in African-oriented movement. Using the Umfundalai technique, African Dance I heightens students' understanding of the aesthetic and eurhythmic principles prevalent in African Dance. Students who take African I for academic credit should be prepared to keep a weekly

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journal and write two short papers.

0.5 credit.

Fall and spring. 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.

Spring 2000. Davis.

DANC 045. Performance Dance: Hatha Yoga

Open to all students, 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.

0.5 credit.

Fall 1999 and spring 2000. 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, Classical East Indian Dance Forms, Contact Improvisation, Jazz, Pilates, and/or Musical Theatre Dance.

0.5 credit.

Section 1. *Fall 1999:* Flamenco, Gmitter.

Section 2. *Spring 2000:* Contact Improvisation, Stein.

DANC 049. Performance Dance: Repertory

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 1999: Section I: Dancing and Drumming Ensemble, Arrow/Friedler. Draws on a variety of dancing and drumming traditions from around the world as well as creating new hybrid forms. In 1999, beginning with a focus on Ghanaian forms. Open to all students.

Fall 1999: Section 2: Tap, Davis.

Fall 1999: Section 3: Modern, Arrow.

Spring 2000: Section 1: Modern, Staff.

Spring 2000: Section 2: African, Nance.

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.

0.5 credit.

Fall 1999 and spring 2000. Hess, 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.

0.5 credit.

Fall 1999 and spring 2000. Sherman.

DANC 053. African Dance 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 1999 and spring 2000. Nance.

DANC 055. Performance Dance: Hatha Yoga II

Open to students who have completed DANC 045 or the equivalent. 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.

0.5 credit.

Not offered 1999-2000.

DANC 058. Performance Dance: Special Topics in Technique II

An elaboration and extension of principles addressed in DANC 048.

Permission of the instructor required.

0.5 credit.

Spring 2000. Section 1: Flamenco, Gmitter.

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.

0.5 credit.

Fall 1999. Hess, Welsh.

Spring 2000. 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 permission of the instructor.

0.5 credit.

Fall 1999 and spring 2000. Sherman.

CROSS-LISTED COURSES

DANC 070. The Arts as Community Service/Social Change

(Cross-listed as EDUC 070)

An experiential course exploring how the arts can impact and reflect on issues of community, service, education, and social/political change. The course includes several aspects: readings and discussions on the meaning of community, service, art, and educational policy and methodology; personal reflections; classes led by guest activists and artists discussing their work with a variety of communities and from a wide range of approaches. Three on site visits to community arts organizations in the area, a short internship with an approved organization, group practice sessions, and three papers are also required. Open to sophomores and above. Limited enrollment.

1 credit.

Spring 2000. Sepinuck.

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.

Not offered 1999-2000. 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 2000.

By arrangement with Allen Kuharski.

1 credit.

Spring 2000.

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 2000.

By arrangement with Bill Marshall.

Prerequisites: THEA 004B and 014.

1 credit.

Spring 2000.

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 199 and spring 2000.

ADVANCED INDEPENDENT WORK

DANC 092. Independent Study

Available on an individual basis, this course offers the student an opportunity to do special work with performance or compositional emphasis in areas not covered by the regular curriculum. Students will present performances

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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 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 Honors, this project is designed by the student in consultation with a dance faculty advisor. The major part of the semester is spent conducting independent rehearsals in conjunction with weekly meetings under an advisor's supervision; the project culminates in a public presentation and the student's written documentation of the process and the result. An oral response to the performance and to the documentation follows in which the student, the advisor, and several other members of the faculty participate. In the case of Honors majors, this also involves external examiners. Proposals for such projects must be submitted to the dance faculty for approval during the semester preceding enrollment. Previous or concurrent enrollment in an advanced level technique course or demonstration of advanced-level technique is required.

1 credit.

Each semester. Friedler.

DANC 095, 096. Senior Thesis

Intended for seniors pursuing the special major or the major in Honors, the thesis is designed by the student in consultation with a dance faculty advisor. The major part of the semester is spent conducting independent research in conjunction with weekly tutorial meetings under an advisor's supervision. The final paper is read by a committee of faculty 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.

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.

Peace and Conflict Studies

Chair: **J. WILLIAM FROST** (Religion)
Nancy C. Swearer (Administrative Assistant)

Committee: **Amanda Bayer** (Economics)¹
Wendy E. Chmielewski (Peace Collection)
Raymond F. Hopkins (Political Science)
Hugh Lacey (Philosophy)²
Colin Leach (Psychology)³
Andrew Ward (Psychology)

1 Absent on leave, fall 1999.

2 Absent on leave, spring 2000.

3 Absent on leave, 1999-2000.

The Peace and Conflict Studies Concentration at Swarthmore College is designed to teach students to understand the causes, practices, and consequences of collective violence (war), terrorism, and peaceful or nonviolent methods of conflict management and resolution. The multidisciplinary curriculum offers instruction in the following areas: (1) alternatives to fighting as a way of settling disputes: conflict resolution, rituals, nonviolence, mediation, peace-keeping forces, private peace-fostering organizations (nongovernmental organizations [NGOs]), arms control, economic sanctions, international law, international organizations; (2) the political economy of war: the "military-industrial" complex, economic conversion; (3) causes of collective violence: aggression and human nature, the state system and international anarchy, systemic injustice, the psychology of prejudice, balance of power diplomacy, competition for scarce resources, diplomacy, ethnocentrism, ideological and religious differences, insecure boundaries, minorities within states, the relationship between internal weakness and aggression, arms races, game theory; (4) nature of war: civilian and military objectives; draft and conscientious objectors; deterrence theory; low-intensity conflict; prisoners of war; neutral rights; conventional, nuclear, and guerrilla wars; how to end a war; and effects of winning/losing a war on population; and (5) the evaluation of war: morality of war, just-war theory, pacifism, the war mentality, the utility of war, responsibilities of citizens in countries engaged (directly or indirectly) in warfare, and ways to build a lasting peace.

The Peace Studies Concentration consists of

six courses of which only two may be taken in the student's major. Introduction to Peace Studies (PEAC 015), offered yearly, is the only required course. Although a thesis or final exercise is required, it can be noncredit. For Honors students, the external examination and the Senior Honors Study (SHS) may serve as the final exercise.

Student programs can include an internship or field-work component (e.g., in a peace or conflict management organization such as the United Nations or Suburban Dispute Settlement). An internship is highly recommended. Normally, field work or internship will not receive college credit, but for special projects—to be worked out with an instructor and approved by the Peace Studies Committee in advance—students can earn up to 1 credit.

Students intending a Peace and Conflict Studies concentration should submit a plan of study to the coordinator of the program during the spring of the sophomore year, after consultation with faculty members who teach in the concentration. The plan will outline the student's program of study and the nature of the final project. Applications will then be considered by the Committee.

The Peace Studies minor in the Honors Program can be done through a combination of two courses in different departments, or a 2-credit thesis, or a combination of a thesis and a course. Introduction to Peace Studies (PEAC 015) is required and should be taken no later than the junior year. A thesis or final exercise is required. Any thesis must be multidisciplinary. A combination of courses, course and

Peace and Conflict Studies

thesis, or thesis must be approved by the Peace Studies Committee.

Any student minoring 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. Students wishing to count a seminar in their major or minor for part of their Peace Studies concentration should fulfill the department's prerequisites and take the appropriate examination.

Students whose minor in Peace Studies can be incorporated into the final requirements for SHS in the major should do so. The Peace Studies Committee will work out with the student and the major department the guidelines or model for the integration exercise. In cases where the Committee and the student conclude that integration is not feasible or desirable, the Committee will provide a reading list of books.

These courses, either currently listed in the College catalog or planned, will constitute the foundation for a Peace and Conflict Studies Concentration. Peace Studies courses offered at Haverford and Bryn Mawr that do not duplicate Swarthmore College courses may count toward the concentration pending prior approval by the Peace Studies Committee. These courses are listed in the catalogs of Bryn Mawr and Haverford.

PEACE STUDIES

PEAC 015. Introduction to Peace Studies

The course begins with an examination of perspectives on the causes of war using many disciplines (including biology, psychoanalysis, history, political science, 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 NGOs for peace.

Prerequisite: A course in history or political science dealing with foreign policy or war; a course in religion, sociology, or psychology discussing the ethics of war and causes of conflict.

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.

Spring 2000. Frost.

PEAC 060. The United Nations in the Year 2000

The course will focus on three subjects: the effectiveness of U.N. sanctions, reform of the U.N. Security Council, and preventive diplomacy. It will draw on the experience of the instructor, who after working for the United Nations for 30 years, specializing in economic development in East Asia, then served as assistant secretary general responsible for the supervision of U.N. personnel and, most recently, as head of humanitarian relief in Iraq.

1 credit.

Fall 1999. Dennis Halliday, The Eugene M. Lang Visiting Professor.

PEAC 070. Research Internship/Field Work

Credit hours to be arranged with the chair.

PEAC 090. Thesis

Credit hours to be arranged with the chair.

HIST 037. History and Memory: The Holocaust and German Culture

HIST 049. Race and Foreign Affairs

POLS 004. International Politics

POLS 045. Defense Policy

POLS 047. Politics of Famine and Food Policy

POLS 111. International Politics. Seminar

RELG 006. War and Peace

RELG 032. Buddhist Social Ethics

RELG 110. Religious Belief and Moral Action. Seminar

For Peace Studies courses at Bryn Mawr and Haverford Colleges, please consult their catalogs.

Not offered 1999-2000.

PEAC 030. Nonviolence and Social Change

PEAC 040. Peace Movement in the United States: Women and Peace

**PEAC 056. Human Rights, Refugees and
International Law**

ECON 012. Games and Strategies

HIST 134. American Diplomatic History

PSYC 026. Prejudice and Social Relations

**PSYC 045. Psychology of Oppression and
Resistance**

**PSYC 047. Applications of Social
Psychology**

RELG 107. Liberation Theology

Philosophy

RICHARD ELDRIDGE, Professor and Chair
HUGH M. LACEY, Professor²
HANS OBERDIEK, Professor
CHARLES RAFF, Professor
RICHARD SCHULDENFREI, Professor
TAMSIN LORRAINE, Associate Professor¹
GRACE LEDBETTER, Assistant Professor
JACQUELINE ROBINSON, Administrative Assistant

1 Absent on leave, fall 1999.

2 Absent on leave, spring 2000.

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.

COURSE OFFERINGS AND PREREQUISITES

The Philosophy Department offers several kinds of courses, all designed to engage students in philosophical practices. There are courses and seminars to introduce students to the major systemic works of the history of Western philosophy: works by Plato and Aristotle (Ancient Philosophy); Descartes, Hume, and Kant (Modern Philosophy); Hegel and Marx (Nineteenth-Century Philosophy); Kierkegaard, Nietzsche, Sartre, Heidegger, and de Beauvoir (Existentialism); Russell and Wittgenstein (Contemporary Philosophy). There are courses and seminars which consider arguments and conclusions in specific areas of philosophy: Theory of Knowledge, Logic, Moral Philosophy, Metaphysics, Aesthetics, and Social and Political Philosophy. There are courses and seminars 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,

there are courses and seminars on meaning, freedom, and value in various domains of contemporary life: Values and Ethics in Science and Technology, Feminist Theory.

The Department of Philosophy participates in a special major in linguistics. The interested student should consult the Linguistics Program.

Students majoring in philosophy must complete at least one course or seminar in (1) Logic and (2) either Ancient or Modern Philosophy and earn a total of eight 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 requirements 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.

Satisfactory completion of either any section of Philosophy 1, Introduction to Philosophy, Philosophy 9, Philosophy of Science, or Logic, Philosophy 12 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.

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. Among other values which may be discussed are tranquility, human relationships, autonomy, and the search for objective good.

1 credit.

Spring 2000. 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 1999. Lacey.

PHIL 013. Modern Philosophy

17th- and 18th-century sources of Modernity in philosophical problems of knowledge, freedom, humanity, nature, God. Readings from Descartes, Spinoza, Leibniz, Locke, Berkeley, Hume, Kant.

1 credit.

Spring 2000. Raff.

PHIL 015. Biotechnology and Society: The Case of Agriculture

An introduction to biotechnology, as it pertains to agricultural (and not biomedical)

applications and to issues in the ethics and philosophy of science. Reading material will include background from *Biotechnology: The Awesome Science* by Edward Alcamo and *The Lives to Come* by Phil Kitcher as well as writings from Vandana Shiva. Topics to be presented and discussed include 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. Students will be evaluated on presentations, participation in discussions, and written work.

0.5 credit.

Fall 1999. Lacey/Vollmer.

PHIL 016. Philosophy of Religion

See Religion 15B.

PHIL 017. Aesthetics

On the nature of art and its roles in human life, considering problems of interpretation and evaluation and some specific medium of art: Who should care about art? Why? How?

1 credit.

Not offered 1999-2000.

PHIL 019. Philosophy of Social Science: Methodologies of the Study of Poverty

This course will study standard problems in the philosophy of the social sciences as they are exemplified in recent studies of urban poverty.

1 credit.

Not offered 1999-2000.

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 2000. Ledbetter.

PHIL 021. Social and Political Philosophy

See Philosophy 121.

1 credit.

Fall 1999. Schuldenfrei.

Philosophy

PHIL 023. Contemporary Philosophy

Classical texts by 20th-century authors illustrate the Revolt Against Idealism (Frege, Moore, Russell), Logical Positivism (Carnap, Quine), Ordinary Language Philosophy (Austin, Ryle), later Wittgenstein, Rorty.

1 credit.

Not offered 1999-2000.

PHIL 024. Theory of Knowledge

Perplexities about the nature, limits, and varieties of rationality, knowledge, meaning, and understanding. Readings from current and traditional sources.

1 credit.

Fall 1999. 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, the geometry of physical space. A considerable range of 20th Century views on these topics will be investigated including: logicism (Frege and Russell), formalism (Hilbert), intuitionism (Brouwer, 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, relative consistency proofs for non-Euclidean geometries.

Prerequisites: Logic, or acceptance as a major in mathematics, or approval of instructor.

1 credit.

Not offered 1999-2000.

PHIL 026. Language and Meaning

See Philosophy 116.

1 credit.

Spring 2000. Eldridge.

PHIL 039. Existentialism

In this course we will examine existentialist thinkers such as Nietzsche, Kierkegaard, Heidegger, Sartre, Beauvoir, Genet, and Camus in order 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 1999-2000.

PHIL 040. Semantics

See Linguistics 40.

PHIL 045. Philosophical Approaches to the Question of Woman

We will examine definitions of woman in Western philosophy and explore how women are currently defining themselves in various forms of feminist thought.

1 credit.

Not offered 1999-2000.

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 2000. 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 1999-2000.

PHIL 086. Philosophy of Mind and 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.

Cross-listed as Psychology 86.

1 credit.

Fall 1999. Lacey.

PHIL 093. Directed Reading

Each semester. Staff.

PHIL 096. Thesis

Fall 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 2000. Oberdiek.

PHIL 102. Ancient Philosophy

A study of the origins of Western philosophical thought in Ancient Greece, from the Presocratics 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 1999. 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 2000. Raff.

PHIL 104. Contemporary Philosophy

Twentieth-century classics by Frege, Moore, Russell, Wittgenstein selected for intensive treatment and as ground for one or more current philosophical issues.

2 credits.

Not offered 1999-2000.

PHIL 106. Aesthetics and Theory of Criticism

On the nature of art and its roles in human life, considering problems of interpretation and evaluation and some specific medium of art.

2 credits.

Not offered 1999-2000.

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 1999-2000.

PHIL 114. Nineteenth-Century Philosophy

The historicist treatment of such topics as knowledge, morality, God's existence, and freedom in Kant, Fichte, Hegel, Feuerbach, Marx, and Nietzsche.

2 credits.

Fall 1999. 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.

Spring 2000. Eldridge.

PHIL 118. Philosophy of Psychology

An honors exam in Philosophy of Psychology may be prepared for by taking Philosophy 86 and attachment.

2 credits.

Not offered 1999-2000.

PHIL 119. Philosophy of Science

Selected issues, e.g., the nature of scientific explanation and evidence, the relationship between theory and observation, the rationality of science, the alleged value-freedom of science.

2 credits.

Not offered 1999-2000.

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. In addition to classic issues, such as the nature and

Philosophy

foundation of justice, considerable attention will be paid to the question of whether modern thought can or should provide a philosophical basis for political and social theorizing and, if not, what such theorizing might look like in the absence of a philosophical basis.

2 credits.

Fall semester. Oberdiek.

PHIL 122. Philosophy of Law

Not offered 1999-2000.

PHIL 139. Phenomenology, Existentialism, and Post-Structuralism

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 in order to place contemporary themes of poststructuralist thought in the context of the phenomenological, existential, and structuralist thought out of which they emerge.

2 credits.

Not offered 1999-2000.

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, post-colonial theory, French feminist theory, and other forms of feminist thought, in order to examine questions about desire, sexuality, and embodied identities, and various resolutions to this dilemma.

2 credits.

Not offered 1999-2000.

PHIL 180. Thesis

A thesis may be submitted by majors in the department in place of one Honors paper, upon 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
DOUGLAS M. WEISS, Professor
KAREN BORBEE, Associate Professor
LEE WIMBERLY, Associate Professor
PETER ALVANOS, Assistant Professor
ADRIENNE SHIBLES, Assistant Professor
PAT GRESS, Coach/Instructor
LUCI ROSALIA, Coach/Instructor
FRANK AGOVINO, Assistant
PETER DICCE, Assistant
MARK DUZENSKI, Assistant
DAN SEARS, Assistant
RONALD A. TIRPAK, Assistant
SHARON GREEN, Administrative Assistant
MARIAN FAHY, Administrative Assistant

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 which can be enjoyed after graduation.

The intercollegiate athletic program is comprehensive, including varsity teams in 24 different sports, 12 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.

Courses offered by the Department are listed below. 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.

Physical Education and Athletics

Fall Activities

- Aerobics
 - Aikido
 - Aquatics I, II, III
 - **** Cross Country
 - ‡ Field Hockey
 - Fitness Training
 - Folk Dance
 - *** Football
 - Nautilus I
 - Advanced Nautilus
 - Scuba
 - **** Soccer
 - Squash
 - Swimming for Fitness
 - *‡ Tennis
 - ** Volleyball
 - Weight Training
 - Tai Chi
-

Winter Activities

- Aerobics
- ** Badminton
- *‡ Basketball
- Fencing
- Fitness Training
- Folk & Square Dance
- **** Indoor Track
- Lifeguard Training
- Nautilus I
- Advanced Nautilus
- Scuba
- Squash
- **** Swimming
- Swimming for Fitness
- Tennis
- Volleyball
- Weight Training
- *** Wrestling

Spring Activities

- Aerobics
 - Aquatics
 - *** Baseball
 - Folk Dance continued
 - * Golf
 - **** Lacrosse
 - Nautilus I
 - Advanced Nautilus
 - Scuba
 - ‡ Softball
 - Swimming for Fitness
 - *‡ Tennis
 - **** Track and Field
 - Volleyball
 - Advanced Weight Training
 - Tai Chi
-

- ‡ 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
PETER J. COLLINGS, Professor and Chair
JOHN E. GAUSTAD, Professor of Astronomy
FRANK A. MOSCATELLI, Professor
AMY L.R. BUG, Associate Professor³
CARL H. GROSSMAN, Associate Professor³
MICHAEL R. BROWN, Assistant Professor
ERIC L.N. JENSEN, Assistant Professor of Astronomy
ANDREA L. STOUT, Assistant Professor
SETH A. MAJOR, Visiting Assistant Professor
MARK P. TAYLOR, Visiting Assistant Professor
MARY ANN HICKMAN, Lecturer
PRUDENCE G. SCHRAN, Lecturer
DEBORAH J. ECONOMIDIS, Administrative Assistant

3 Absent on leave, 1999-2000.

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 (or off) 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, computer graphics, liquid crystals, biophysics, and infrared astronomy.

The department maintains two major telescopes, a 61-cm reflector, equipped with a high-resolution spectrometer and CCD camera, and a 61-cm refractor, equipped for photographic and visual astrometry, plus a 15-cm refractor for instructional use. A monthly visitors' night at the observatory is announced in

the College calendar.

Two calculus-based introductory courses are offered. PHYS 003, 004 covers both classical and modern physics and is an appropriate introductory physics course for those students majoring in engineering, chemistry, and biology. PHYS 007 and 008, on the other hand, which is normally preceded by PHYS 006, is at a higher level. It is aimed towards students planning to do further work in physics or astronomy and is also appropriate for engineering and chemistry majors. The four-course sequence 006, 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

Degree Requirements: The minimum program in Physics is intended for students not planning to pursue graduate work. It includes PHYS 006, 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 advanced laboratory courses ENGR 072A and PHYS 082 and MATH 005, 006A, 006B, 016, and 018 must be taken.

The basic programs listed subsequently cover

Physics and Astronomy

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 subsequently.

The basic program in Physics is ASTR 003 or PHYS 006, and PHYS 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 advanced laboratory courses ENGR 072A and PHYS 082, and MATH 005, 006A, 006B, 016, and 018 must be taken. CHEM 010 is strongly recommended.

The basic program in Astronomy is ASTR 003 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. CHEM 010 is strongly recommended.

The advanced program in Physics is ASTR 003 or PHYS 006, and PHYS 007, 008, 014, and 050 in the first two years followed by PHYS 111, 112, 113, 114, 115, and 116 in the last two years. In addition, the advanced laboratory courses ENGR 072A and PHYS 082, and MATH 005, 006A, 006B, 016, and 018 must be taken. CHEM 010 is strongly recommended.

The advanced program in Astrophysics is ASTR 003 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. CHEM 010 is strongly recommended.

Students wishing an even stronger background for graduate work may take an extended program by adding seminars numbered above 130 or a research project/thesis.

Seniors not taking the external examinations must take a comprehensive examination, 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: A student 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 005 and 006 or be completing ASTR 016. The applicant must normally have an average grade in all Physics and/or Astronomy courses, as well as in MATH

016, 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 principal Physics seminars (PHYS 111, 112, 113, 114, and 115) are accompanied by a full laboratory program, namely ENGR 072A (electronics lab) and PHYS 082 (each 0.5 credit) requiring approximately one afternoon a week. Students enrolled in these seminars must arrange their programs so that they can schedule an afternoon for lab each week free of conflicts with other classes, 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). There are usually several opportunities for students to work with faculty members on research projects during the summer. In preparation for independent experimental work, prospective majors are strongly urged to take PHYS 063, Procedures in Experimental Physics, during the fall semester of their sophomore year, which will qualify them to work in the departmental shops.

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, 114), two of the following (ASTR 121, 123, 126, 128), plus a research or library thesis; Astronomy: ASTR 121, 123, 126, 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

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 1999. Taylor.

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 2000. Major.

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 1999. Boccio, Stout.

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.

Prerequisite (can also be taken concurrently): MATH 006A. PHYS 006 or permission.

1 credit.

Spring 2000. Collings.

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, 006C; 016 or 018 (can be taken concurrently).

1 credit.

Fall 1999. Moscatelli.

PHYS 014. Thermodynamics and Modern Physics

An introduction to thermodynamics and temperature, heat, work, entropy, modern physics, including relativistic dynamics, wave mechanics, Schrodinger equation applied to one-dimensional systems, and properties of atoms, molecules, solids, nuclei, and elementary particles. The quantum aspects of the interaction of photons with matter. Includes one laboratory weekly.

Prerequisites: PHYS 003, 004 or PHYS 007, 008.

1 credit.

Spring 2000. Moscatelli.

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.

Primary distribution course. 1 credit.

Not offered 1999-2000.

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

Physics and Astronomy

week plus a special project/laboratory.

1 credit.

Not offered 1999-2000.

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 1999-2000.

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.

Spring 2000. Boccio.

PHYS 029. Seminar on Gender and (Physical) Science

This seminar will take a multifaceted approach to the question: "What are the connections between a person's gender, race, or class and their practice of science?" The history of science, the education of women, and the interplay between technology and society will be addressed. Physical science will be the principal focus.

1 credit.

Not offered 1999-2000.

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 2000. Boccio.

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 or Astronomy.

0.5 credit.

Fall 1999. Technical staff.

PHYS 093. Directed Reading

This course provides an opportunity for an individual student to do special study, with either theoretical or experimental emphasis, in fields not covered by the regular courses and seminars. The student will present oral and written reports to the instructor.

0.5, 1 or 2 credits.

Each semester. Staff.

PHYS 094. Research Project

Initiative for a research project may come from the student, or the work may involve collaboration with on-going faculty research. The student will present a written and an oral report to the Department.

0.5, 1 or 2 credits.

Each semester. Staff.

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. Wave phenomena. Prerequisites: PHYS 014, 050; MATH 018.

1 credit.

Fall 1999. Moscatelli.

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. Four vector formulation of relativistic elec-

trodynamics.

Prerequisite: PHYS 014, 050; MATH 018.

1 credit.

Fall 1999. Major.

PHYS 113. Quantum Theory

Postulates of quantum mechanics. Operators, eigenfunctions, and eigenvalues. Function spaces and hermitian operators; bra-ket notation. Superposition and observables. 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. Transition rates.

Prerequisites: PHYS 111 and MATH 016.

1 credit.

Spring 2000. Brown.

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, micro-canonical, 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 2000. Taylor.

PHYS 115. Quantum Applications

Applications of theory developed in PHYS 113 and 114. Topics selected from: Atomic physics. Solid-state physics. Nuclear physics. Particle physics. Molecular physics.

Prerequisites: PHYS 111, 113.

1 credit.

Fall 1999. Boccio.

PHYS 116. Modern Optics

Wave equations, superposition, interference, Fraunhofer and Fresnel diffraction, polarization. Optical instruments: spectrometers, interferometers, etalons. Propagation in fibers, Fourier optics, spatial and temporal coherence, lasers, elements of nonlinear optics. Quantum theory of light: blackbody

radiation, modes, quantization of the electromagnetic field, photons, intensity fluctuations.

Prerequisites: PHYS 112, 113.

1 credit.

Spring 2000. Collings.

PHYS 130. General Relativity

Newton's gravitational theory. Special relativity. Linear field theory. Gravitational waves. Measurement of spacetime. Riemannian geometry. Geometrodynamics and Einstein's equations. The Schwarzschild solution. Black holes and gravitational collapse. Cosmology.

Prerequisites: PHYS 111 and 112.

1 credit.

Not offered 1999-2000.

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, finally, some of the ideas behind lattice gauge calculations.

Prerequisites: PHYS 113 and 115.

1 credit.

Not offered 1999-2000.

PHYS 132. NonLinear Dynamics and Chaos

Nonlinear mappings, stability, bifurcations, catastrophe. Conservative and dissipative systems. Fractals and self-similarity in chaos theory.

Prerequisites: PHYS 111 and 112.

1 credit.

Not offered 1999-2000.

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.

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Prerequisites: PHYS 113, 115, and 116.

1 credit.

Not offered 1999-2000.

PHYS 134. Advanced Quantum Mechanics

Photon polarization. Quantum interference effects. Measurement theory. Potential scattering. Time-independent and time-dependent perturbation theory. Interaction of the quantized radiation field with matter. Addition of angular momenta. Rotations and tensor operators. Identical particles. Second quantization. Atoms and molecules. Relativistic spin zero particles. The Klein-Gordon equation. The Dirac equation.

Prerequisites: PHYS 113 and 115.

1 credit.

Not offered 1999-2000.

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. Superconductivity.

Prerequisites: PHYS 113, 114, and 115.

1 credit.

Not offered 1999-2000.

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 superradiance.

Prerequisites: PHYS 113 and 116.

1 credit.

Not offered 1999-2000.

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, 111, and taken previously or concurrently, 113, 114.

1 credit.

Not offered 1999-2000.

PHYS 138. Plasma Physics

An introduction to the principles of plasma physics. Treatment will include the kinetic approach (orbits of charged particles in electric and magnetic fields, statistical mechanics of charged particles) and the fluid approach (single fluid magnetohydrodynamics, two fluid theory). Topics may include transport processes in plasmas (conductivity and diffusion), waves and oscillations, controlled nuclear fusion, and plasma astrophysics.

Prerequisite: PHYS 112.

1 credit.

Not offered 1999-2000.

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. Rather than attempting to survey an extremely large field, the seminar focuses on the physical forces responsible for the formation and stabilization of biomacromolecular structures such as proteins and lipid membranes. 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.

Spring 2000. Stout and Howard.

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 2000. Staff.

UPPER-CLASS LABORATORY PROGRAM**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**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.

Each semester. Gaustad, Jensen.

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.

1 credit.

Each semester. Jensen.

ASTR 016. Modern Astrophysics

This is a one-semester introduction to astro-

physics 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, 006AB, and PHYS 003, 004 or PHYS 007, 008.

1 credit.

Each semester. Gaustad.

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.

0.5 credit.

Each semester. Gaustad, Jensen.

ASTR 093. Directed Reading

(See PHYS 093.)

ASTR 094. Research Project

(See PHYS 094.)

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.

Prerequisites: ASTR 005, 006, or 016.

1 credit.

Fall 1999. 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. Star formation.

Prerequisites: ASTR 005, 006, or 016.

1 credit.

Not offered 1999-2000.

Physics and Astronomy

ASTR 126. The Interstellar Medium

Study of the material between the stars. Radiative processes in space. Heating and cooling mechanisms. Physics of interstellar dust. Chemistry of interstellar molecules. Magnetic fields. Emission nebulae. Hydrodynamics and shock waves. Supernova remnants. Star-forming regions. Active galactic nuclei. X-ray and gamma-ray sources.

Prerequisites: ASTR 005, 006, or 016.

1 credit.

Not offered 1999-2000.

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, instabilities. Galaxy and star formation. Starburst galaxies. Quasars and active galaxies. Galaxy clusters and interactions. Large-scale structure of the universe.

Prerequisites: ASTR 005, 006, o283r 016.

1 credit.

Spring 2000. Staff.

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 2000. Gaustad.

Political Science

RAYMOND F. HOPKINS, Professor
JAMES R. KURTH, Professor
RICHARD L. RUBIN, Professor (part-time)³
KENNETH E. SHARPE, Professor
DAVID G. SMITH, Professor Emeritus
CAROL NACKENOFF, Associate Professor and Chair
KEITH REEVES, Associate Professor
RICHARD VALELLY, Associate Professor
TYRENE WHITE, Associate Professor
CYNTHIA PERWIN HALPERN, Assistant Professor
META MENDEL-REYES, Assistant Professor
BRUCE MORRISON, Assistant Professor
PRAVEEN CHAUDHRY, Visiting Instructor (part-time)
KATHLEEN KERNS, Administrative Assistant
DEBORAH SLOMAN, Administrative Assistant

³ Absent on leave, 1999-2000.

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, and 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, 002, 003, and 004). Normally, any two of these courses constitute the prerequisite for further work in the department.

REQUIREMENTS FOR THE 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 following three fields: (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

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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 are required to 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 advisor. Detailed information about all of these options is made available at the beginning of the junior year.

HONORS MAJORS

(Available to Classes of 1997 onward)

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 first choice will go to Honors majors. Political Science Honors majors must meet all current distributional requirements for majors, including the political theory requirement. They must have a minimum 10 credits inside the Political Science Department. 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. Examples include POLS 038 (Public Service, Community Organizing, and Social Change) plus POLS

036 (Multicultural Politics in the United States); POLS 013 (Feminist Political Theory) plus either POLS 031 (Difference and Dominance) or POLS 032 (Gender, Politics, and Policy in America); or POLS 024 (Constitutional Law) plus POLS 072 (Special Topics/Thesis). 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 have the time to direct such individual work.

All prospective Honors majors must have completed one of their four Honors preparations before their senior year to have room in their schedule for the Senior Honors Colloquium.

All senior Honors majors must 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 requirement and will be submitted to the external examiners.

HONORS MINORS

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 three-field distribution requirement—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 3-hour written exam in each of the student's seminars, and an oral exam of 0.5 hour.

CONCENTRATION IN PUBLIC POLICY

Students have the option of pursuing interdisciplinary work as an adjunct to a major in Political Science in the concentration of Public Policy. 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. 306). Currently, Professor Ellen Magenheim is the coordinator of the concentration in Public Policy.

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 the relationship between individual activism, social responsibility, and political change at the grassroots level. Students interested in the project are encouraged to take the three core courses: Democratic Theory and Practice (POLS 019); Multicultural Politics in the United States (POLS 036); and Public Service, Community Organizing, and Social Change (POLS 038).

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 at least two introductory courses at Swarthmore as a prerequisite for more advanced work in the department.

TEACHER CERTIFICATION

Occasionally, majors in Political Science wish to pursue certification for secondary school teaching. For such students, there are two normal routes to Social Studies Certification. One of these is through a major in the social sciences, plus four to six semesters of courses in other social sciences. Students majoring in History, Political Science, and Sociology-Anthropology are required to take at least four courses outside their major; students majoring in Economics or Psychology are required to take six. The other route to certification is by taking at least 12 semester courses in social sciences, of which 6 must normally be in one discipline, and at least 2 more must be in a single other discipline. All students seeking social studies certification are required to take two courses in history. At least one course in American history and one social science course focusing on Third World or non-Anglo subject matter are required. For further information, see the listing for the Education Department.

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 1999. Halpern, Mendel-Reyes, Sharpe.

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 1999. Nackenoff, Reeves, Valelly.

POLS 003. Comparative Politics

An introduction to the major themes and methods of comparative analysis through a study of the history and character of contemporary politics in Eastern and Western Europe. Topics will include the formation of states, the growth of nationalism and ethnic conflict, patterns of socioeconomic development, the role of civil society, and the prospects of supranational integration.

Primary distribution course. 1 credit.

Fall 1999. Morrison.

POLS 004. International Politics

An introduction to the analysis of the contemporary international system and its evolution in the twentieth century. The course will examine various approaches to explaining major international wars, ethnic conflicts, and economic problems.

Primary distribution course. 1 credit.

Spring 2000. Hopkins, Kurth.

POLS 007. Introduction To African Studies

(Cross-listed as HIST 065)

An historically oriented introduction to African societies, cultures, and political economies offers perspectives on different reconstructions of Africa's precolonial/colonial past. We also discuss the postcolonial present, exploring socioeconomic transformations, continuities, as well as struggles over authority, gender and access to resources. Focusing mainly on two contrastive geographic regions in West and South Africa, the course introduces students to a variety of oral and written texts, scholarly analysis, first-person narratives, and fiction as well as visual representations of Africa's past and present in film and sculpture. Meets at Haverford and occasionally elsewhere with notice. Transportation will be provided. Highly recommended for students planning to study abroad in Africa.

1 credit.

Fall 1999. Glickman.

POLS 009. State and Society in South and Southeast Asia

This course will examine state and society in South and Southeast Asia from the two perspectives of economic growth and successful

governance. The focus will be on problems facing multicultural/multiethnic societies in their efforts to establish modern states. We will seek to understand issues related to religion, caste, peasants, ethnicity, child labor, women, and untouchables. Counts toward the Asian Studies Program.

1 credit.

Fall 1999. Chaudhry.

POLS 010. Freshmen Seminar: Public Opinion and Democratic Governance

This survey seminar focuses on the role and impact of public opinion on democratic governance and society. For example, we will examine theoretical, empirical, normative, and applied issues such as the nature and origins of mass public opinion, the rise of political consultants in election campaigns, the measurement of public opinion in newly emerging democracies, and the consistency between public preferences and national policy decisions.

Enrollment limited to freshmen.

1 credit.

Fall 1999. Reeves.

POLS 011. Ancient Political Theory: Greek and Biblical Origins and Traditions

Two traditions constitute the origins of Western politics. We begin with Greek tragedy and Athenian democracy against which Greek political theory arose (Sophocles, Plato, and Aristotle). We contrast this tradition with that of the Hebrew Bible (the prophets Jeremiah, Ezekiel, and Deutero-Isaiah) as a different way of understanding justice, order, suffering, community, and politics. These two traditions converge in the New Testament era (selections gospels, from Paul, and from gnostic gospels). We conclude with Augustine, a point of convergence for both of these traditions.

1 credit.

Fall 1999. Halpern.

POLS 012. Modern Political Theory

This course will be concerned with the nature of modernity, theory and politics. We will study the roots of modernity in the Reformation and the Renaissance (Luther, Calvin, and Machiavelli); the foundations of

modernity in the construction of liberty, property, and equality (Hobbes, Locke, and Rousseau); the culmination of modernity in the Enlightenment projects of Kant, Mill, and Marx; and the breakdown of the Enlightenment (Freud, Nietzsche, and Foucault). We analyze both historical context and theory, authority, and revolution, which contributed to the great democratizing impulse in the West.

1 credit.

Spring 2000. Halpern.

POLS 013. Feminist Political Theory

Exploration of key contributions and debates in feminist political and legal theory, including the body, personhood and citizenship, theorizing otherness, discourses privileged and silenced, and feminism and global women of color.

1 credit.

Not offered 1999-2000. Nackenoff.

POLS 014. Political Theater and Film

Explores political theater and film as vehicles for understanding, preserving, and changing relations of power. Playwrights and filmmakers include Brecht, Costa-Gavras, Eisenstein, Griffith, Lee, Machiavelli, Ophuls, Pontecorvo, Riefenstahl, Shakespeare, Sophocles.

1 credit.

Not offered 1999-2000. Mendel-Reyes.

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 1999-2000. Halpern.

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 1999-2000. Sharpe, Schwartz.

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 1999-2000. Nackenoff.

POLS 019. Democratic Theory and Practice

Explores the relationship between theories and practices of democracy, focusing on the gap between the nearly universal commitment to "the rule of the people" and the fact that very few people exercise such power today.

1 credit.

Not offered 1999-2000. Mendel-Reyes.

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 1999-2000. Nackenoff, Reeves.

POLS 023. Presidency, Congress, and Court

How does anyone actually get anything done in such a formally complicated government? Course considers constitutional and extra-constitutional institutions; formal and informal politics; and their interactions, tensions, and occasional pathologies. Specific topics include presidential policy and governance strategies, types of presidential and congressional involvement in federal bureaucracies, the development of norms to tame conflicts, partisan and group insertion into governance, and roles of the Supreme Court and judicial review.

Prerequisite: POLS 002.

1 credit.

Spring 2000. Valelly.

Political Science

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 2000. 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.

Spring 2000. Reeves.

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 post-colonial relationships are examined and compared. How do these various struggles bear on meanings of and prospects for equality in the United States? What are the political consequences of adapting an equality-as-sameness or equality-as-difference framework, and what other alternatives are there? We will examine the efficacy of individual and collective strate-

gies; the utility of assimilation (androgyny), negative identity, separatism, and revolt; along with the promise and limits of liberal participatory politics for achieving greater power and equality.

Women's Studies elective.

1 credit.

Fall 1999. Nackenoff.

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 1999-2000. Nackenoff.

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.

Not offered 1999-2000. 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. And 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.

Spring 2000. Reeves.

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? To many people, nostalgia for a "united" America contrasts with widespread anxiety about a nation increasingly divided between whites and people of color, citizens and immigrants, rich and poor, "straights" and homosexuals, and powerful and powerless. 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 environmental racism.

This course may be counted toward a concentration in Public Policy.

1 credit.

Spring 2000. Mendel-Reyes.

POLS 037. 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.

Spring 2000. Reeves.

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. Topics include democratic theory and practice, multicultural politics, community politics in Chester and Philadelphia, community organizing and public service, social justice and social responsibility, and the relationship between individual activism and political change at the grassroots. Prerequisite: Permission of instructor and internship arranged before the end of the fall 1999 semester. This course may be counted toward a concentration in Public Policy.

1 credit.

Not offered 1999-2000. Mendel-Reyes.

POLS 041. Political Economy and Social Policy in the U.S.

Considers how government buffers the risks for individuals of a market system and what that means for citizenship.

Prerequisite: POLS 002.

1 credit.

Next offered 2001-2002. Vallery.

POLS 043. Environmental Policy

(Cross-listed as ENGR 068)

1 credit.

May be offered spring 2000.

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.

Fall 1999. Vallery.

POLS 045. Defense Policy

Analysis of American defense policy since World War II, with particular emphasis on for-

Political Science

eign 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 1999. Kurth.

POLS 047. Politics of Famine and Food Policy

The causes and proposed solutions to major food problems: hunger, rural poverty, and food insecurity. The proper role of government policy in production, distribution, and consumption of food is considered. Cases include the American experience, special problems facing less developed countries, and the role of international trade and aid. An early final exam and a substantial paper are features of the course. Students with little work in political science may be admitted with the consent of the instructor. This course may be counted toward a concentration in Public Policy.

1 credit.

Fall 1999. Hopkins.

POLS 052. The European Welfare State

Is welfarism in Europe on the way out, or are the reports of its death greatly exaggerated? Are the current pressures for retrenchment directed at the whole of the welfare state or just at certain of its component parts? These and other questions will be addressed within the context of a study of the historical origins of the European welfare state, its national peculiarities, and its relationship to broader approaches to economic development. Comparisons with North American cases will be made.

This course may be counted toward a concentration in Public Policy.

1 credit.

Spring 2000. Morrison.

POLS 053. The Politics of Eastern Europe

A comparative examination of Eastern Europe over the course of the 20th century. The focus will be on political regime changes, both in an authoritarian and democratic direction as well as on the pattern of state-society relations established within these regimes. Primary emphasis will be on Poland, Hungary, and the Czech and Slovak Republics, although the

other countries in the region will be treated as well.

1 credit.

Spring 2000. Morrison.

POLS 054. The Past and Present of European Democracy

A survey of the European experience of democracy from its origins in the early modern period to the present. The dual aim of the course will be to place the recent Southern and Eastern European transitions to democracy in historical context while also examining these events in their own right. Among the problems to be addressed: defining democracy and characterizing democratic regimes; assessing the relative influence of social, institutional, and other causes of democratic changes; and identifying the factors that support the consolidation of democracy or contribute to its collapse.

1 credit.

Not offered 1999-2000. Morrison.

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 social and political consequences of reform, the prospects for regime liberalization and democratization, and the China-Hong Kong-Taiwan nexus. Also examines China's changing role in East Asia and the world.

This course may be counted toward a program in Asian Studies.

1 credit.

Not offered 1999-2000. White.

POLS 057. Latin American Politics

A comparative study of the political economy of the region focusing on Mexico, Chile, Guatemala, Nicaragua, and El Salvador. 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 2000. Sharpe.

POLS 058. African Politics

A comparative study of the politics of sub-Saharan African societies undergoing turbulence and pursuing economic development. Policies that shape statehood, "nation building," and economic development will be considered. This course may be counted toward a concentration in Public Policy.

1 credit.

Not offered 1999-2000. Hopkins.

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.

Spring 2000. Kurth.

POLS 062. Political Economy of the North South Conflict

The purpose of this course is to examine how and why the South (the countries of the Middle East, Africa, Asia, and Latin America) tried to shape itself as a unit, bargaining with the North for concessions and institutional reforms in the international economic order from the 1950s to the 1990s. Why did democracies like India adopt a mixed economy and an anti-North position, and authoritarian regimes like Korea and Taiwan adopt strategies that served the interests of industrialized democracies? How has the nature of the North-South conflict changed since the end of the cold war? We will pay particular attention to India, Egypt, Indonesia, Philippines, Thailand, Malaysia, Korea, and Taiwan.

1 credit.

Not offered 1999-000. Chaudhry.

POLS 063. La Frontera: The United States and Mexico in Politics and Literature

An interdisciplinary exploration of the relationship between the United States and Mexico as experienced by communities on both sides of the U.S.-Mexico border.

1 credit.

Not offered 1999-2000. Mendel-Reyes, Camacho de Schmidt.

POLS 064. American-East Asian Relations

Will the 21st century be the "Pacific Century"? This course examines the historic and contemporary world views of the major Pacific countries (including China, Japan, Korea, Vietnam, and the United States); regional politics and international affairs within East Asia; and international relations across the Pacific. Topics include American security strategy in East Asia, growing Chinese power in the region, and the role of culture, image, and perception in cross-Pacific affairs. This course may be counted toward a concentration in Asian Studies.

1 credit.

Fall 1999. White.

POLS 065. The Politics of Population

Examines global, regional, and national population issues in historical perspective. Topics include the relationship between population growth, economic development, and political stability; the causes of fertility decline in different regional and cultural settings; the political implications of shifting demographic structures and aging populations; and the relationship between the current population debate and issues such as euthanasia, international migration, and the AIDS epidemic. This course may be counted toward a concentration in Public Policy.

1 credit.

Spring 2000. White.

POLS 067. International Relations of South and Southeast Asia

This course is designed for students with an interest in understanding policy making in international relations. The course will focus on the intersection of the cold war and the rise of Asian nationalism. At the core of the analysis is the clash between America's strategy of military containment of the USSR and the national assertions of Asian countries. The course also examines new patterns of relationships between U.S.-India, U.S.-Pakistan, U.S.-China and U.S.-ASEAN countries in the post-cold war period. Counts toward Asian Studies Program.

1 credit.

Spring 2000. Chaudhry.

Political Science

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 GATT/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.

Spring 2000. Hopkins, Golub.

POLS 072. Constitutional Law: Special Topics

An in-depth exploration of several recent issues and controversies, most likely drawn from 1st, 4th, 5th, 6th, and/or 14th Amendment jurisprudence. Some attention will also be given to theories of interpretation. This is designed for students who want to deepen their work in constitutional law.

Prerequisite: POLS 024.

1 credit.

Fall 1999 and spring 2000. Nackenoff.

POLS 073. Comparative Politics: Special Topics

1 credit.

Not offered 1999-2000.

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 2000 the topic will be the social construction of the Holocaust and other genocides and their contemporary meanings in international politics. Special attention will be given to humanitarian intervention.

Prerequisite: POLS 004.

1 credit.

Spring 2000. Kurth.

POLS 075. Special Topics in Modern Political Thought: Beyond Reason—Nietzsche, Levinas, and the Kabbalah

See description under Interpretation Theory (INTP 091. Capstone seminar)

1 credit.

Spring 2000. Halpern and Deutsch.

POLS 076. Theory, Method, and Research Design in the Social Sciences

1 credit.

Not offered 1999-2000.

POLS 080. Senior Colloquium

This colloquium engages problems in contemporary politics and seeks to teach students how to think theoretically and synthetically, and to integrate approaches from the major fields in the discipline. Available to course students with permission of the instructor.

1 credit.

Fall 1999. Kurth, Sharpe.

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 philoso-

phers include Plato, Aristotle, Augustine, and Hobbes.

2 credits.

Fall 1999. Sharpe.

POLS 101. Political Theory: Modern

This seminar will be concerned with the nature of modernity, theory, and politics. We study the roots of modernity in the Reformation and the Renaissance (Luther, Calvin, and Machiavelli); the foundations of modernity in the construction of liberty, property and quality (Hobbes, Locke, and Rousseau); the culmination of modernity in the Enlightenment projects of Mill, Hegel, and Marx; and the breakdown of the Enlightenment (Freud/Jung, Nietzsche, and Foucault). We analyze both historical context and theory and authority and revolution, which contributed to the great democratizing impulse in the West.

2 credits.

Spring 2000. Halpern.

POLS 102. Senior Colloquium

This colloquium engages problems in contemporary politics and seeks to teach students how to think theoretically and synthetically and to integrate approaches from the major fields in the discipline. Required of all senior honors majors.

2 credits.

Fall 1999. Kurth, Sharpe.

POLS 103. American Politics

The relationship between American political thought and political practice. Exploration of classic authors and texts accompanied by investigation of political narratives and the impact of popular culture on forms of public discourse as well as by interpretations of the character of American politics.

2 credits.

Not offered 1999-2000. Nackenoff.

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 (e.g., more of Congress one year, political parties the next, and so forth).

Also, particular attention to the analytical maturity and sophistication of various subfields (e.g., public opinion research vs. presidency studies). Participants are expected to read widely beyond the syllabus and to grasp current public affairs and events.

Prerequisite: POLS 002 or 023.

2 credits.

Spring 2000. Valelly.

POLS 105. Constitutional Law in the American Polity

The Supreme Court in American political life, with emphasis on civil rights and civil liberties and on 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 2000. Nackenoff.

POLS 107. Comparative Politics: Greater Europe

A survey of the European experience of democracy from its origins to the present. Particular emphasis will be placed on the claim that democracy's prospects are most heavily influenced by the manner in which the state fights; finances itself; and administers, regulates, and integrates "its" society. As such, the course will examine the array of state forms across Europe in the early modern and modern period to the end of discerning where and why the opening to democracy comes. The many challenges faced by the early democratizers of Western Europe will be traced through the middle of the 20th century, after which consideration will be given to the recent transitions to democracy in Southern Europe in the 1970s and then in East Europe in the 1980s.

2 credits.

Spring 2000. Morrison.

POLS 108. Comparative Politics: Greater China

Examines patterns of political and economic development in China, Taiwan, Hong Kong,

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and Singapore comparing the different paths to economic development, the role of authoritarianism and democracy in the development process and the dynamics of regime transitions, sources of regime legitimacy, and the China-Taiwan-Hong Kong nexus. Will also examine China's changing role in East Asia, the prospects for regional conflict, and issues in Sino-American relations.

This course may be counted toward a concentration in Public Policy or a program in Asian Studies.

2 credits.

Fall 1999. White.

POLS 109. Comparative Politics: Latin America

A comparative study of the political economy of the region focusing on Mexico, Chile, Guatemala, Nicaragua, 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 2000. Sharpe.

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.

Fall 1999. 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.

Spring 2000. Hopkins.

POLS 180. Thesis

With the permission of the department, Honors candidates may write a thesis for double course credit.

Psychology

ALFRED H. BLOOM, Professor*
KENNETH J. GERGEN, Professor
DEBORAH G. KEMLER NELSON, Professor and Chair
JEANNE MARECEK, Professor²
ALLEN M. SCHNEIDER, Professor²
BARRY SCHWARTZ, Professor³
FRANK H. DURGIN, Assistant Professor
WENDY HORWITZ, Assistant Professor
EDWARD KAKO, Assistant Professor
COLIN W. LEACH, Assistant Professor³
ANDREW H. WARD, Assistant Professor
JANE GILLHAM, Visiting Lecturer
JEANNINE PINTO, Visiting Lecturer
JULIA L. WELBON, Academic Coordinator
JOANNE M. BRAMLEY, Administrative Coordinator

* President of the College.

² Absent on leave, spring 2000.

³ Absent on leave, 1999-2000.

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 normally a prerequisite for further work in the Department.

A Course major consists of at least eight credits, excluding courses cross-listed in psychology that are taught only by members of other departments. Four should be core courses (with

course numbers in the 30s): Physiological Psychology, Learning and Action, Perception, Cognitive Psychology, Psychology of Language, Social Psychology, Personality, Concepts of the Person, Abnormal Psychology, and Developmental Psychology. Students may not take both PSYC 036, Personality, and PSYC 037, Concepts of the Person.

Students are required to meet a comprehensive requirement in their majors. In psychology, this may be accomplished in one of two ways: The first, open to all majors, is the comprehensive examination, prepared independently and completed early in the spring semester of the senior year. The second way is to complete a 2-credit senior thesis (one credit each semester of the senior year). The senior thesis program is open to students who have a high B average both in psychology and overall. Students must have an acceptable proposal, an advisor and sufficient background to undertake the proposed work. See PSYC 096, 097, and the departmental brochure.

Students should take at least one course that provides them with experience in conducting research.

Students majoring in psychology who wish to include study abroad are advised to complete

Psychology

the time away before the second semester of the junior year.

Students intending to pursue graduate work in psychology will find it useful to take either STAT 002 or 002c, offered by the Department of Mathematics and Statistics. In addition they are strongly encouraged to take PSYC 025, Research Design and Analysis. If possible, students should enroll in both Statistics and Research Design before their senior year.

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 either 2-credit seminars or two-unit sequences of courses; the third is a thesis, completed over the course of the senior year. In addition, Honors majors take part in Senior Honors Study in the spring of their senior year. Students must also meet the requirement for study in four core areas, as described previously.

The psychology department also offers a minor in the Honors program. Students with Honors minors in psychology must take at least 4 credits in psychology. These normally include two core courses. They must prepare one field for external examination, involving either a two-unit approved sequence of courses or a 2-credit seminar. A detailed description of the program is available in the departmental brochure.

TEACHER CERTIFICATION

Occasionally, majors in psychology wish to pursue certification for secondary school teaching. For such students, there are two normal routes to Social Studies certification. One of these requires a major in the social sciences, plus four to six courses in social sciences outside the major field. Students majoring in History, Political Science, and Sociology and Anthropology are required to take at least four courses outside their major; students majoring in Economics or Psychology are required to take six. The other route to certification requires taking at least 12 semester courses in social sciences, of which 6 must normally be in one discipline and at least two more must be in

a single other discipline. All students seeking social studies certification are required to take two courses in history. At least one course in American history and one social science course focusing on Third World or non-Anglo subject matter are required. For further information, see the listing for the Program in 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 behavior are determined by learning, motivation, neural, cognitive, and social processes.

In addition to the course lectures on Tuesday and Thursday mornings, 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, Wednesday (1:15-4), or Friday (2:15-5) 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 which 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, brain functioning, 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.

Fall 1999. Kemler Nelson.

PSYC 021. Educational Psychology

(See EDUC 021.)

Fall 1999. Ong.

PSYC 022. Counseling

(See EDUC 025.)

Not offered 1999-2000. Metherall-Brenneman.

PSYC 023. Adolescence

(See EDUC 023.)

Spring 2000. 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.

1 credit.

Fall 1999. Durgin.

PSYC 026. Prejudice and Social Relations

An introduction to psychological approaches to prejudice based on such factors as ethnicity, gender, nationality, "race," religion, and sexuality. Moving from the inside out, perspectives range from the psychodynamic, including questions of individual identity, projection, and displacement, to the social, including issues of group identity, exclusion, ideology, and politics. Central questions include: Is prejudice similar across target, time, and place? Is prejudice natural and unavoidable? How do psychological approaches relate to more macro perspectives?

Primary distribution course. 1 credit

Not offered 1999-2000. Leach.

PSYC 028. 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 stu-

dents 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 such that we may know it? What kinds of explanations are necessary to explain cognition?

Prerequisite: PSYC 001 or permission of the instructor.

Primary distribution course. 1 credit.

Spring 2000. Staff.

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.

Not offered 1999-2000. 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.

Not offered 1999-2000. 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 homonculus watching the world.

Prerequisite: PSYC 001.

1 credit.

Spring 2000. 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.

1 credit.

Fall 1999. Durgin.

Psychology

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 so 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)?

1 credit.

Fall 1999. 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 the theory and research. The dynamics of cooperation and conflict, group identity, conformity, social influence, help giving, aggression, persuasion, attribution, and attitudes are discussed.

1 credit.

Spring 2000. Ward.

PSYC 036. Personality

An integration of personality theory and research. The course examines psychoanalytic, trait, behavioral, humanistic, and social cognitive approaches. Not open to students who have taken PSYC 037.

Not offered 1999-2000.

PSYC 037. Concepts of the Person

An analysis of central conceptions of psychological functioning from both an historical and cultural perspective. 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 post modern period. Students who plan to take the

seminar Personality Theory and Interpretation (PSYC 106) should not take PSYC 037. Not open to students who have taken PSYC 036.

1 credit.

Spring 2000. 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.

1 credit.

Spring 2000. 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.

1 credit.

Fall 1999 and spring 2000. Pinto.

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.

Spring 2000. 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.

1 credit.

Not offered 1999-2000. Kemler Nelson.

PSYC 043. Evolutionary Psychology

Where do we come from? What has made us the way we are? Recently, psychologists have begun to frame these questions with reference to natural selection, the evolutionary mechanism first proposed by Charles Darwin in the mid-19th century. 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? And finally, why do we have language? We also explore the limits of this approach: To what extent have culture and technology excused us from the rough-and-tumble of natural selection?

1 credit.

Kako.

PSYC 044. Psychology and Women

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.

1 credit.

Not offered 1999-2000. Marecek.

PSYC 045. Psychology of Oppression and Resistance

This course examines the psychological position of the oppressed, with special attention to the "psycho-existential" perspective developed by Frantz Fanon in relation to decolonization movements, Hegel, Sartre, Gandhi, psychoanalysis, and ego psychology. Central questions include: How is identity social or political and what exactly is "identity politics?" Are there psychological consequences to subordination, akin to what has been called an "inferiority complex" or "mental slavery?" What constitutes resistance? When,

why, and how does resistance occur? What is the role of violence/non violence in resistance?

1 credit.

Not offered 1999-2000. Leach.

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.

1 credit.

Fall 1999. 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. Emphasis is placed not only on the direct translation of laboratory findings to "real-world" settings but also on the practical value of theories in social psychology. In particular, a distinction is drawn between conducting applied research and conducting theory-driven research that is "applicable."

1 credit.

Not offered 1999-2000. 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

Psychology

potentials for community are also discussed.
Fall 1999. Gergen.

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. There is a heavy emphasis on current research questions and empirical findings related to each disorder. Prerequisite: PSYC 038, PSYC 039, or instructor's permission.

Fall 1999. Gillham.

PSYC 052. Representations of Women's Identity

(See ENGL 082). Satisfies distribution requirement in group 1, not group 3.

Not offered 1999-2000. Marecek and Blum.

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.

1 credit.

Fall 1999. Horwitz.

PSYC 060. Gender and Mental Health

This course 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 the cultural, 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 therapy.

Prerequisites: PSYC 01 and one of the following: PSYC 038, 044, SOAN 007, or WMST 001.

1 credit.

Not offered 1999-2000. Marecek.

PSYC 061. The Self: Theory, Practice, and Ideology

Psychological theory and research paints dramatically different pictures of the self, each sustaining a particular tradition of Western thought, carrying different ideological implications, and giving rise to different forms of social practice. This course examines major strengths and weaknesses of these traditions—intellectual, ideological, and practical. Special attention is given to newly emerging conceptions of self as relationship, with a focus on the personal, political, and therapeutic implications of relational being. No prerequisite, but some familiarity with psychology will be useful.

1 credit.

Fall 1999. Gergen.

PSYC 062. The Social Construction of the Mind

How are beliefs about the mind generated and sustained; what are the effects of current beliefs on social life; can these beliefs be changed? The course explores various social, rhetorical, and ideological processes that influence current constructions of the mental world.

1 credit.

Not offered 1999-2000. Gergen.

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 1999-2000.

PSYC 064. Research Issues in Clinical Child Psychology

This course addresses clinical topics (e.g., pervasive developmental disorder, anxiety, depression, chronic illness, sexual abuse), while considering specific problems of research (e.g.,

sampling strategies, reliability and validity, cross-sectional vs. longitudinal designs, qualitative analysis) as they pertain to clinical child psychology. Students learn to locate and evaluate current empirical studies as they discuss childhood problems.

Prerequisite: Introduction to Psychology and one of the following: Abnormal or Developmental Psychology, Research in Naturalistic Settings, Research Design and Analysis or Children at Risk.

1 credit.

Not offered 1999-2000. Horwitz.

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 1999-2000.

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 sub cultures, identity politics, and the postmodern cultural transformation.

1 credit.

Spring 2000. Gergen.

PSYC 086. Philosophy of Mind and Psychology

(Cross-listed as PHIL 086)

In practical life, we usually explain human actions by giving the person's reasons—his or her goals and beliefs—for performing them. In contrast, in experimental science, we attempt to explain behavior by finding laws in accordance with which it occurs. This course explores the extent to which the categories of explanation that come from practical life con-

strain or limit the scope of scientific explanations.

Prerequisite: Introductory courses in Psychology and Philosophy.

This course and a 1-credit attachment (PSYC 086A) constitute an Honors preparation in the philosophy of psychology.

1 credit.

Fall 2000. Lacey.

PSYC 087. Colloquium: Psychology, Biology, and Economic Rationality

This course offers a critical examination of the notion of economic rationality, exploring the role it plays in economics, in evolutionary biology (sociobiology), and in psychology. The implications of this notion for thinking about morality and about social organization are also considered.

Prerequisite: The course is open, by application, to advanced students in either biology, economics, philosophy, or psychology.

1 credit.

Not offered 1999-2000. Schwartz.

PSYC 090. Practicum in Clinical Psychology

An opportunity for advanced psychology students to gain supervised experience working in off-campus clinical settings. Course requirements and evaluations are tailored to individual projects. Advance arrangements for placements should be made in consultation with the instructor.

1 credit.

Fall 1999: Gillham. Spring 2000: Horwitz.

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, Alzheimer's disease, and cerebral lateralization. Students have the opportunity to learn laboratory techniques used in behavioral neuropharmacology.

Prerequisite: PSYC 030. By permission of the instructor.

Fall 1999. Schneider.

Psychology

PSYC 092. Research Practicum in Psycholinguistics

This course provides hands-on experience in performing research in psycholinguistics. Students learn the various steps associated with research in this field, including experimental design, construction and selection of the appropriate material to test hypotheses, methods used to test subjects, and statistical analyses commonly used in the field.

Prerequisite: PSYC 034 or 033 or permission of the instructor.

1 credit.

Not offered 1999-2000. Kako.

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 year long 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.

SEMINARS

PSYC 106. 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 theory, 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. Preliminary background in relevant areas of study recommended. By permission.

2 credits.

Fall 2000. Gergen.

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 030. By permission.

1 credit.

Not offered 1999-2000. Schneider.

PSYC 131. Learning and Action

(See description of PSYC 031.)

The seminar considers in depth special topics of interest discussed in the Learning and Action course.

Prerequisite: PSYC 031. By permission.

1 credit.

Not offered 1999-2000. Schwartz.

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 032. By permission.

1 credit.

Not offered 1999-2000. 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 033 or PSYC 028. By permission.

1 credit.

Spring 2000. Durgin.

PSYC 134. Psycholinguistics

(See description of PSYC 034.)

The seminar considers in depth special topics of interest within the field. A research component is frequently included.

Prerequisite: PSYC 034. By permission.

1 credit.

Spring 2000. 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 035. By permission.

1 credit.

Fall 1999. Ward.

PSYC 138. Abnormal Psychology

A study in depth of several psychological conditions and their treatment. These include chronic mental illness, suicide, eating disorders, and depression. Readings represent a range of theoretical approaches, both positivist and post-positivist. We consider conventional psychological research as well as historical studies, cultural-comparative analyses, ethnographic and phenomenological studies, and discursive ways of working.

Prerequisite: PSYC 038. By permission.

1 credit.

Fall 1999. Marecek.

PSYC 139. Developmental Psychology

(See description of PSYC 039.)

The seminar considers in depth special topics of interest within the field. A research component is included.

Prerequisite: PSYC 039. By permission.

1 credit.

Spring 2000. Kemler Nelson.

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.

Both semesters. Staff.

PSYC 199. Senior Honors Study

Senior Honors Study in psychology consists of a series of student-run, weekly meetings for Honors majors in the first half of the spring semester. The semester begins with readings selected by the faculty to connect the work of the students across their programs. Additional reading is chosen, and presentations are made by the students. Following the sessions, the students write essays that their external examiners evaluate.

1 credit.

Spring 2000.

An additional field, Philosophy of Psychology, can be prepared for external examination. (See PSYC 086 and 086A.)

Public Policy

Coordinator: **ELLEN MAGENHEIM** (Economics)
Cathy Wareham (Administrative Assistant)

Committee: **John Caskey** (Economics)²
Robinson Hollister (Economics)
Raymond Hopkins (Political Science)
Gudmund Iversen (Mathematics and Statistics)
Roger Latham (Biology)³
Arthur McGarity (Engineering)
Meta Mendel-Reyes (Political Science)
Carol Nackenoff (Political Science)
Keith Reeves (Political Science)
Richard Rubin (Political Science)
Eva Travers (Education)
Richard Valeyly (Political Science)
Robert Weinberg (History)

2 Absent on leave, spring 2000.

3 Absent on leave, 1999-2000.

The concentration in Public Policy enables students to combine work in several departments toward both critical and practical understanding of public policy issues, including those in the realm of social welfare, health, energy, environment, food and agriculture, and national and global security. These issues may be within domestic, foreign, or international governmental domains. Courses in the concentration encompass the development, formulation, implementation, and evaluation of policy.

REQUIREMENTS AND RECOMMENDATIONS

The concentration in Public Policy 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 below.

In addition to these three foundation courses, 3 credits must be taken from among the substantive policy courses listed below, one of which must be the Public Policy Thesis. These courses deal with substantive sectors and institutional aspects of public policy analysis. The substantive policy requirement may be fulfilled through courses and seminars. Only 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 take into account course prerequisites when planning the concentration program.

INTERNSHIP

Some direct experience or practical responsibility in the field, through work in a public, pri-

vate, or voluntary agency, is required for graduation with a concentration in Public Policy. Normally, students will hold internships between their junior and senior years. The internship program is supervised by the coordinator for the concentration. Planning for the internship experience should begin six to eight months before the time it might commence. 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 10 to 12 weeks of a summer internship.

For students who are concentrators, the College attempts to provide support to those 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 \$3,250. 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.

PUBLIC POLICY THESIS

One of the requirements of the concentration, providing one of the three units of substantive policy work, is a senior thesis. The thesis requirement is designed to provide a structured opportunity to write a substantial paper on a public policy issue. It is especially aimed to allow those who have cultivated (through internships and academic work) a well-developed understanding of some policy question to complete research and analysis under the supervision of the coordinator of the Public Policy concentration and one or more other core faculty. Paper topics may focus on nation-

al 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 REQUIREMENTS

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, and alternatively, they may submit for external examination course or seminar work amounting to two 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. 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. These are but two illustrative examples. Combinations of this sort would be arrived at through consultation with the coordinator of the concentration who could then

Public Policy

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 relevant also 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., 3-hour written exam, oral exam alone) will depend on the nature of the student's preparation (e.g., thesis, course, or seminar combination). Students minoring in Public Policy will, for their Senior Honors Study (0.5 credit), write a short (two- to five-page) paper, the focus of which will depend on what the student is using as her Honors preparation.

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 below.

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 or 135. Econometrics*

ENGR 057/ECON 032. Operations Research

Policy Courses and Seminars* (arranged by department)

PPOL 097/098. Public Policy Thesis

PPOL 199. Senior Honors Study

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 036. Multicultural Politics: Democracy and Diversity

POLS 038. Public Service, Community Organizing, and Social Change

POLS 041. Political Economy and Social Policy

POLS 045. Defense Policy

POLS 047. Politics of Famine and Food Policy

POLS 052. European Welfare State

POLS 062. Development and Discontent

POLS 065. Politics of Population

POLS 068. International Political Economy

POLS 076. Theory, Method, and Research Design in the Social Sciences

POLS 108. Comparative Politics: China*

POLS 110. Comparative Politics: Africa*

POLS 111. International Politics*

ECON 005. Savage Inaccuracies: The Facts and Economics of Education in America (Cross-listed as EDUC 069)

ECON 022. The Economics of Banking and Financial Markets

ECON 041. Public Finance

ECON 042. Law and Economics

ECON 043. Public Policy and the American Family

ECON 044. Urban Economics

ECON 051. The International Economy

ECON 053. The International Political Economy

ECON 061. Industrial Organization

ECON 73. Women and Minorities in the Economy

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*
ECON 151. International Economics*
ECON 161. Industrial Organization and Public Policy*
ECON 171. Labor and Social Economics*
ECON 181. Economic Development*
EDUC 68. Urban Education (Cross-listed as SOAN 068)
EDUC 069. Savage Inaccuracies: The Facts and Economics of Education in America (Cross-listed as ECON 005)
HIST 049. Race and Foreign Affairs
HIST 054. Women, Society, and Politics
SOAN 068. Urban Education (Cross-listed as EDUC 068)

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 minor, 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 page at: <http://www.swarthmore.edu/SocSci/PublicPolicy>.

Religion

J. WILLIAM FROST, Professor, Director of the Friends Historical Library
DONALD K. SWEARER, Professor and Acting Chair
ELLEN M. ROSS, Associate Professor³
MARK I. WALLACE, Associate Professor and Chair³
YVONNE P. CHIREAU, Associate Professor
VERA B. MOREEN, Visiting Associate Professor (part-time)
WILLIAM GRASSIE, Visiting Associate Professor
NATHANIEL DEUTSCH, Assistant Professor
STEVEN P. HOPKINS, Assistant Professor
RUQAYYA Y. KHAN, Visiting Assistant Professor and Mellon Postdoctoral Fellow
EILEEN McELRONE, Administrative Assistant

3 Absent on leave, 1999-2000.

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 raised include those of historical, theological, philosophical, literary-critical, feminist, sociological, and anthropological interests. *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 courses is normally required for admission to seminars, and is also 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, The Senior Symposium: Religion Café, a weekly symposium, over espresso and snacks, for senior majors on seminal themes, theories, and methods in the comparative, cross-cultural study of religion.

Majors are required to complete at least eight credits in Religion, including the senior symposium, to meet department graduation requirements.

HONORS PROGRAM

The normal method of preparation will be done through three seminars, although with the consent of the department work done in a 2-credit thesis, 1-credit thesis/course combination, or in a combination of two courses (including attachments and study abroad options) can count for one preparation. In general, only one such preparation can consist of nonseminar-based studies.

The mode of assessing a student's three 2-credit preparations in Religion (seminars or course combinations, but not 2-credit theses) will be written papers of not more than 4,000 words for each preparation to be completed in the spring of the senior year. In the winter of the senior year external evaluators will provide questions for the honors papers. These papers will be written independently and presented to the evaluators for oral examination during Honors Week in the spring of the senior year. The student's portfolio will consist, then, of the senior honors papers and corresponding preparation syllabi—and a thesis for the student who selects this option.

Students who have a minor in Religion do a single 2-credit preparation that must be in a seminar. In addition, minors are required to complete at least two courses in Religion (including any prerequisites for the seminar) prior to or in conjunction with any seminar. Students who minor in Religion, in the spring of the senior year, will also write a paper of not more than 4,000 words to complete their two-credit preparation in the minor.

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; ritual behavior and moral action. Members of the depart-

ment will lecture and lead weekly discussion sections.

Primary distribution course. 1 credit.

Fall 1999. Hopkins, Swearer.

RELG 002B. Religion in America

An introductory survey that explores religion in the United States from a historical perspective. Starting with an examination of native American belief systems on the eve of culture contact, and moving onward to the impact of present-day immigrant traditions, this course will emphasize America's heritage of cultural diversity and religious pluralism. 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 2000. 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 1999. Deutsch.

RELG 004. New Testament and Early Christianity

An introduction to the New Testament and its development. The New Testament will be read closely in English translation, with special attention to problems of redaction and literary construction.

1 credit.

Not offered 1999-2000. Deutsch.

RELG 005. Problems of Religious Thought

Study of contemporary religious and cultural problems. Topics include the challenge of radical evil, the social construction of religious knowledge, and the question of ethical integrity; the dialogue between religion and science; the promise of critical theory for understanding

Religion

sacred texts; and the corrosive influences of racism and sexism within religious communities. Authors include S. Kierkegaard, M. Buber, F. Nietzsche, A. Cohen, M. Abe, S. McFague, R. Rorty, and C. West.

1 credit.

Fall 1999. Grassie.

RELG 006. War and Peace

An analysis of the moral issues posed by war, with consideration of the arguments for holy wars, just wars, real politik, and pacifism. The first part of the course will trace the evolution of major ideas of war from the Bible to the present. A study of America's wars since 1940 will show the application of these ideas in this nation's response to organized violence.

1 credit.

Fall 1999. Frost.

RELG 007B. Women and Religion

This course will examine the variety of women's religious experiences in the United States. We will read a number of primary and secondary texts that explore the diverse ways that women have historically experienced/made sense of the sacred. 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.

Spring 2000. Chireau.

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 taken from the Hindu and Buddhist traditions of India, the Confucian and Taoist traditions of China, and from Zen in Japan. Themes include myth and cosmology, asceticism and shamanism, personal identity and community, religious language and the experience of the divine, narrative and gender.

Primary distribution course. 1 credit.

Spring 2000. 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.

Not offered 1999-2000. Swearer.

RELG 010. African American Religions

What makes African-American religion "African" and "American"? Using text, 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, including 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.

Spring 2000. Chireau.

RELG 011B. Introduction to Islam

The historical origins and development of Islam will be studied in light of the sources that have shaped it. Themes to be explored include the central doctrines of Islam as derived from the Qur'an and traditions (sunnah), the development of Islamic law (shari'ah), the Shi's alternative, the growth of Muslim theology, philosophy, and mysticism (Sufism), and controversial issues among contemporary Muslims.

1 credit.

Fall 1999. Khan.

RELG 012. The History, Religion, and Culture of India I: From the Indus Valley to the Hindu Saints

(Cross-listed as HIST 012)

The religious history of India, with a focus on Hindus, Buddhists, and Jains. Themes include hierarchy, caste, and class; image worship, world renunciation, and the social order.

1 credit.

Not offered 1999-2000. Hopkins.

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 1998-99. Hopkins.

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.

1 credit.

Not offered 1999-2000. Ross.

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.

1 credit.

Not offered 1999-2000. 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 1999-2000. Deutsch.

RELG 017B. Midrash Tisch

Before Deconstructionism there was Midrash, a sophisticated, imaginative, and entertaining method of interpreting the Bible. Open to students with intermediate knowledge of Hebrew and above.

1 credit.

Not offered 1999-2000. Deutsch.

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 1999-2000. Deutsch.

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 1999-2000. Deutsch.

RELG 020B. Prophets and Visionaries: Christian Mysticism Through the Ages

Course considers topics in the history of Christian mysticism.

1 credit.

Not offered 1999-2000. Ross.

RELG 021. "The Friends of God": The Great Mystics of Islam

This course will focus on Islamic Mysticism (Sufism), its theory and practice, as expressed in the prose and poetry of some of the greatest mystics such as 'Attar, Ansari, Ibn al-'Arabi, Rumi, Hafiz, and others.

1 credit.

Fall 1999. Moreen.

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 1999-2000. Wallace.

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. There will be comparisons among English, American, and Third World Friends. There will be assessment of the contributions of Quakers to reform movements: Indian rights, antislavery, the treatment of the insane, prison reform, temperance, women's movement, and peace.

1 credit.

Spring 2000. Frost.

RELG 024B. From Vodun to Vodoo: African Religions in the Old and New Worlds

Is there a kindred spirituality in the ceremonies, music, and movements of African

Religion

religions? This course explores the dynamics of African religions throughout the Diaspora and the Atlantic world. Using text, art, film, and music, we will look at the interaction of society and religion in the black world, beginning with traditional religions in West and Central Africa, examining the impact of slavery and migration, and the dispersal of African religions throughout the Western Hemisphere. The course will focus on the varieties of religious experiences in Africa and their transformations in the Caribbean, Brazil, and North America in the religions of Candomblé, Santería, Conjure, and other New World traditions. At the end of the term, in consultation with the professor, students will create their own CD-ROM in lieu of a final paper.

1 credit.

Foreign study credit may be available.

Fall 1999. Chireau.

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 1999-2000. Chireau.

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 interpretations 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.

Spring 2000. Swearer.

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 1999-2000. Swearer.

RELG 028. Ritual and Image in Buddhist Traditions

(Cross-listed as ARTH 038)

An interdisciplinary, historical introduction to Buddhist traditions in South, Southeast, Central and East Asia, with an emphasis on imagery, monumental architecture, devotion, and religious practice.

1 credit.

Not offered 1999-2000. Graybill and Hopkins.

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.

Not offered 1999-2000. Ross and Cothren.

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. Exploration of differing attitudes toward the physical embodiment of divinity, including issues of divine "presence" and "absence"; icons, aniconism, and "idolatry"; and distinctions drawn in some traditions between different types of images and/or different devotional attitudes toward sacred images. From Yahweh's back, bleeding icons, to Jain worship of "absent" saints.

1 credit.

Spring 2000. Hopkins.

RELG 031B. Religion and Literature: From the Song of Songs to the Hindu Saints

A cross-cultural, comparative study of religious literatures in Jewish, Christian, Islamic, and Hindu traditions. How "secular" love poetry and poetics have both influenced and been influenced by devotional poetry in these traditions, past and present. Readings include the Hebrew Song of Songs, Dante and the Troubadours; the Flemish female saint-poet Hadewijch and San Juan de la Cruz; the Sanskrit plays of Kalidasa; South Indian Tamil poems of love, war, and religious devotion; Rajasthani women's wedding songs, and love poems to the Prophet Muhammad.

1 credit.

Fall 1999. Hopkins.

RELG 032B. A Path to Theocracy: The Twelve Shi'is of Iran

This course examines the origins and development of Shi'ism in Iran focusing on modern religious and political developments.

1 credit.

Not offered 1999-2000. Staff.

RELG 037. Greek and Roman Religion

(See CLAS 037.)

RELG 038B. Religion as a Cultural Institution

(See SOAN 070.)

RELG 041. Secrecy and Revelation in Islam

An exploration of a dialectic of the secret in medieval and modern Islamic texts. We will read translations of secular and Sufi love poetry, Qur'anic and hadith material, diverse types of narratives such as stories, epistles, romances, biographies, and treatises.

1 credit.

Not offered 1999-2000. Khan.

RELG 042. The Psychology of Religion

How can we go beyond the "mechanistic Freud" to a "phenomenological Freud" whose methods of healing, insight, and interpretation enhance understanding of the psychological meanings of religious expressions? Theorists studied include Freud, Jung, Erikson, Fromm, Kohut, Winnicott, Lacan, Ricoeur, Kristeva, Bal, and others. Topics: psychoanalysis, religion, and mourning; unconscious fantasy and conscious engagement of myth; psychoanalytic hermeneutics; religiocultural configuring of desire, death, envy, sexuality; object relations, image of God, and spirituality; and psychoanalysis and ethics.

1 credit.

Spring 2000. Khan.

RELG 044. Approaches to Tibet

(Cross-listed as ARTH 037 and ASIA 041)

An approach to Tibet from multiple disciplines, viewpoints, and historical time frames, in a reading/research seminar. Main themes include Tibet's historical and modern relations with India and China; and Tibetan Buddhism

and its visual culture. The course will coincide with an exhibition on campus of Tibetan Buddhist art.

Prerequisite: Sophomore standing or above.

1 credit.

Fall 1999. Graybill.

RELG 093. Directed Reading

1 credit.

Staff.

RELG 095. Religion Café: Senior Symposium

A weekly symposium, over espresso and snacks, for 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 will include Mircea Eliade, Victor Turner, Rene Girard, Mary Douglas, Mikhail Bakhtin, Carolyn Walker Bynum, and Michel Foucault.

1 credit.

Fall 1999. Deutsch.

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 1999-2000. Ross.

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.

Religion

How do we understand the relationship between formal and informal religious belief and practice? How have regional or ethnic influences shaped the "official" religions? Special attention is given to expressions of belief in ritual, festival, and sacred ceremonies. Topics include folk Catholicism in America, local religious celebrations, 19th-century popular movements, and public celebrations as folk religion.

2 credits.

Spring 2000. Chireau.

RELG 103. Women and Spirituality

Using various methodological approaches and texts by Native American, African-American and Euro-American women writers, we will examine women's spiritual experiences, traditions and religious healing cross-culturally.

2 credits.

Not offered 1999-2000. Chireau.

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.

2 credits.

Not offered 1999-2000. Swearer.

RELG 105. Religion and Society

How have religious ideas and institutions shaped and been influenced by American culture? Topics include the varieties of Protestantism, Roman Catholicism and Judaism, and contemporary religious practices, and church and state.

2 credits.

Not offered 1999-2000. Frost.

RELG 106. Contemporary Religious Thought

Study of the major theological options in the West since the Enlightenment.

2 credits.

Not offered 1999-2000. Wallace.

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 1999-2000. Lacey.

RELG 108. Poets, Saints, and Story-tellers: 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.

Fall 1999. Hopkins.

RELG 109. Afro-Atlantic Religions

This seminar examines 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 1999-2000. Chireau.

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.

Fall 1999. Swearer.

RELG 111. Medieval Theology and Contemporary Feminism

This course explores the integration of recent women's studies scholarship with themes in medieval spiritual theology.

2 credits.

Not offered 1999-2000. Ross.

RELG 112. Postmodern Religious Thought

The problem of ethics and belief beyond the philosophical foundations of traditional religious thought. Readings include Kierkegaard, Nietzsche, Heidegger, Barth, Derrida, Levinas, Bataille, and Kristeva.

2 credits.

Not offered 1999-2000. Wallace.

RELG 113. From Buddha's Relics to the Body of God: Hindu and Buddhist Devotion

A comparative historical and thematic exploration of Hindu and Buddhist forms of devotion in South and Southeast Asia.

2 credits.

Not offered 1999-2000. Hopkins.

RELG 114. Love and Religion

An exploration of the concept of "love" in selected western, near eastern and Indian traditions.

2 credits.

Not offered 1999-2000. 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 Mandaeans of Late Antiquity to the recent writings of Harold Bloom.

2 credits.

Spring 2000. Deutsch.

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 1999-2000. Deutsch.

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 1999-2000. Deutsch.

RELG 119. Desire and Faith in Islamic and Christian Romances

Focusing on scriptural and romance narratives from the traditions of Christianity and Islam, this course will treat comparatively topics such as conceptions of and dynamics between desire and faith, subjectivity and interiority, body and gender, secrecy and revelation, love and the erotic, ethics and piety. Islamic texts include the *Qur'an*, *Majnun Layla*, *1001 Nights*, *'Antar and 'Abla*, *Viz and Ramin*, *Haft Paykar* and *The Ring of the Dove*. Christian works examined are the *Bible*, *Tristan, Lancelot, Erec and Enide*, *Sir Gawain and the Green Knight*, the *Lais of Marie de France*, and Cappelanus' *Treatise on Love*. Feminist, psychoanalytic, and semiotic approaches to the material will be considered.

2 credits.

Fall 1999. Khan.

Sociology and Anthropology

JOY CHARLTON, Professor⁴

JENNIE KEITH, Professor⁴

MICHAEL MULLAN, Professor

BRAULIO MUÑOZ, Professor and Chair

STEVEN I. PIKER, Professor

ANASTASIA POSADSKAYA-VANDERBECK, Cornell Visiting Professor

ROBIN E. WAGNER-PACIFICI, Professor³

BRUCE GRANT, Associate Professor

MIGUEL DÍAZ-BARRIGA, Associate Professor

CONSTANCE T. GAGER, Visiting Assistant Professor

FARHA GHANNAM, Visiting Assistant Professor

SARAH WILLIE, Assistant Professor

MARIS GILLETTE, Visiting Assistant Professor

RAQUEL ROMBERG, Visiting Assistant Professor (part-time)

MICHAEL SPEIRS, Visiting Instructor

LAURA JACKSON, Visiting Lecturer

ROSE MAIO, Administrative Coordinator

3 Absent on leave, 1999-2000.

4 Absent on administrative leave, 1999-2000.

The program of this department emphasizes that Sociology and Anthropology are engaged in a common intellectual task. Studies in the department are directed toward understanding the order, meaning, and coherence of life in human societies and cultures, as well as the pressures and contradictions that produce patterns of conflict and change. Courses variously emphasize the comparative study of societies and cultures, the conditions of social organization as well as disorganization, evolution and the bases of human adaptation, change as well as continuity, gender and culture, and the symbolic aspects of human social life.

Emphasis is also placed on the relevance of Sociology and Anthropology to the study of contemporary and, particularly, American society, and to contemporary social problems. The department strongly encourages students to carry out their own research and offers internship opportunities as well as courses in research methods.

In addition to exploring the mutuality of Sociology and Anthropology, members of the department and their courses have many links to neighboring disciplines such as Biology, Education, English, History, Literature,

Philosophy, Psychology, and Religion. The department also participates in a Special Major in Linguistics and BioAnthropology.

REQUIREMENTS AND RECOMMENDATIONS

Courses numbered 001 through 019 may 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 all other work in the department. (Some courses may, however, with permission of the instructor, be taken without prerequisite.)

Applicants for the major will normally be expected to have completed at least two courses in the department. Majors will complete a minimum of eight 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 021, is strongly recommended for majors, and spring semester of the junior year is the ideal time to take it, as it offers important preparation for the senior thesis project.

Students contemplating teacher certification would normally schedule their program in a semester, which does not conflict with their senior thesis. Such programs should be developed in close consultation with advisors in the Education Program.

The department emphasizes the importance of familiarity with appropriate elementary statistics as well as computer literacy, both for work taken at the College and for subsequent career development. Toward underlining this, the department cross-lists Statistics courses 002 and 002C (listed as, respectively, SOAN 027 and 028).

Major and minor in the Honors Program: 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 one 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 (Díaz-Barriga, Grant, Muñoz, Piker, Wagner-Pacifici, Willie)
2. Human Adaptation, Cultural Ecology, and Human Evolution (Piker, Speirs)
3. Modern Society (Charlton, Díaz-Barriga, Grant, Wagner-Pacifici, Willie)
4. Cultural and Ethnic Pluralism (Charlton, Díaz-Barriga, Grant, Muñoz, Willie)
5. Religion and Culture (Charlton, Grant, Piker)
6. Psychology and Culture (Charlton, Piker)
7. Sociology of Art and Intellectual Life (Grant, Muñoz, Wagner-Pacifici)
8. Modernization and Development (Díaz-

Barriga)

9. Inequality (Charlton, Díaz-Barriga, Wagner-Pacifici, Willie)
 10. Political Behavior and Culture (Díaz-Barriga, Grant, Wagner-Pacifici, Willie)
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CERTIFICATION FOR SECONDARY SCHOOL TEACHING

There are two normal routes to Social Studies certification. One of these is through a major in the social sciences, plus four to six semesters of courses in other social sciences. Students majoring in History, Political Science, and Sociology-Anthropology are required to take at least four courses outside their major; students majoring in Economics and Psychology are required to take six. The other route to certification is by taking at least 12 semester courses in social sciences, of which six must normally be in one discipline and at least two more must be in a single other discipline. All students seeking social studies certification are required to take two courses in history. At least one course in American history and one social science course focusing on Third World or non-Anglo subject matter are required.

COURSES

SOAN 001. Modern America: Issues, Problems, and Social Change

This course will provide an introduction to some of the major social issues and problems currently facing U.S. society. The course will address the meaning and definition of social problems. We will focus on both individuals and social systems as the unit of analysis. The course will begin with a brief overview of the theoretical models and methods used to study social problems. Then we will discuss how demographic trends and changes in the distribution of wealth and power are related to the issues this course will cover. The course will then survey several broad categories including (1) problems of inequality, poverty, and urban areas; and (2) problems with selected social institutions including families, education, health care, and work. Throughout the course, we will explore the relationship between insti-

Sociology and Anthropology

tutions, structures, and individual behavior. This course should provide students with a better understanding of the current debates over these contemporary issues and problems as well as an improved ability for critical thinking about their solutions.

Primary distribution course. 1 credit.

Fall 1999. Gager.

SOAN 002. Nations and Nationalisms

Nationalist movements around the world have risen to the fore in the late 20th century by drawing on very 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 in Interpretation Theory, Asian Studies, and Francophone Studies.

Primary distribution course. 1 credit.

Fall 1999. Grant.

SOAN 003. Sociological and Policy Perspectives on Families

This course provides an introduction to sociological perspectives on families and public policies aimed at families. The course begins with a brief overview of theoretical perspectives on families and family patterns over the last century. The second part of the course focuses on the private family—the one in which we live most of our personal lives. Focusing on the contemporary United States, we will explore variation in families by gender, race and ethnicity, class, and sexual orientation. We will consider: who marries, and who doesn't; who co-habits, and who doesn't; who divorces, and who doesn't; and who does the housework, and who doesn't. In the last section of the course, we will consider issues involving the public family, in which adults perform tasks that are important to society (i.e., rearing children and caring for the elderly). We will examine how society (i.e., taxpayers) provides for families that cannot provide for themselves (welfare) and how society regulates family behavior (abortion or teen childbearing). Throughout the course, we will critically examine the data on family patterns and changes in families over time.

1 credit.

Spring 2000. Gager.

SOAN 004. 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 1999-2000. Wagner-Pacifici.

SOAN 005. 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. Limited enrollment.

Primary distribution course. 1 credit.

Fall 1999. Muñoz.

SOAN 006. 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 1999-2000. Díaz-Barriga.

SOAN 007. Gender, Power, and Identity

An exploration of the social and political implications of gender, drawing on cross-cultural and historical materials. Primary emphasis will be on developments in contemporary America. This course may be counted toward a concentration in Women's Studies.

Primary distribution course. 1 credit.

Not offered 1999-2000. Charlton.

SOAN 008. Psychological Anthropology

Sometimes called culture and personality, this field explores the relationship between the individual and his or her culture. The course treats the following issues: (a) the psychological, or symbolic, capacities presupposed by culture; (b) socialization, or the transmission of culture from generation to generation; and (c) the psychological functions of culture. Case materials will be principally, but not exclusively, non-Western, and the cross-cultural study of child rearing will receive particular emphasis.

Primary distribution course. 1 credit.

Spring 2000. Piker.

SOAN 009. 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 Sufism. 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.

Spring 2000. Ghannam.

SOAN 010. Human Evolution

This course surveys both the fossil record of human evolution and the archaeological, primatological, and ethnographic evidence that has contributed to its interpretation. It evaluates the interpretive frameworks in which the data have historically been placed and assesses how these schemes have been influenced by ideological and scientific biases.

The course assumes no prior knowledge of paleoanthropology, but integrates information and perspectives from anatomy, primatology, evolutionary biology, and the geosciences.

Primary distribution course. 1 credit.

Fall 1999. Speirs.

SOAN 011. Intro 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.

Primary distribution course. 1 credit.

Spring 2000. Willie.

SOAN 012. 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.

1 credit.

Not offered 1999-2000. Diaz-Barriga.

SOAN 013. 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.

Sociology and Anthropology

Fall 1999. Ghannam.

SOAN 014. 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.

Spring 2000. Mullan.

SOAN 016. Sociology through African-American Women's Writing

Interrogating the explicit and implicit claims that black women writers make in relation to work by social scientists, we will read texts closely for literary appreciation, sociological significance, and personal relevance, examining especially issues that revolve around race, gender, and class. Of special interest will be where authors position their characters vis-à-vis white supremacy, patriarchy, capitalism, and the United States. This course may count toward a concentration in Black Studies and Women's Studies.

1 credit.

Fall 1999. Willie.

SOAN 017. Learning Cultures

This course is intended for students planning to do foreign study during the spring 1999. It seeks to enable students, while studying abroad, to understand how their host cultures work at the most local, human level (i.e., in the context of routine, everyday social encounters and activities and endeavors, as experienced by natives). Toward this end, the course will include field work, use of films as cultural documents, and destination country-specific projects. Readings will include the works of Edward T. Hall, Irving Goffman, James Spradley, Robert Emerson, and J. and L. Lofland. The course is open equally to students from Bryn Mawr, Haverford, Penn, and Swarthmore and will have IP status.

1 credit.

Not offered 1999-2000. Piker and Mancini.

SOAN 021. 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 2000. Charlton and Gager.

SOAN 022. Field Methods

Techniques of primary data collection and analysis used in field research, with particular attention to participant observation and interviewing. We'll read, in addition to the how-tos, some of the classic ethnographies, think about how theory connects with method, and get practical experience doing field research directly.

1 credit.

Not offered 1999-2000. Charlton.

SOAN 024. 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, legal settings, and so on. 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.

1 credit.

Not offered 1999-2000. Wagner-Pacifici.

SOAN 027. Statistical Methods

(See STAT 002 for description.)

SOAN 028. Statistics

(See STAT 002C entry for description.)

SOAN 030. Spirits in Exile: Afro-Latin Religions in the Americas

This course examines the often misunderstood practices of Cuban Santería, Haitian Vodou, Brazilian Candomblé, and U.S. Orisha-Voodoo in terms of their colonial, national, and transnational trajectories. Differences in Portuguese, Spanish, and French colonial rule will become evident as we look at processes of syncretism and mimesis from historical, political, and religious perspectives. The unique multichanneled, performative aspects of these Afro-Latin religions will be illustrated through video and music recordings of spiritual events in which divination, drumming, myth, dance, trance, and healing come to life. Confronting practitioners' experiences with the exoticizing and frightening images produced by Hollywood reveal some of the problems that these religions and their practitioners face in contemporary societies.

1 credit.

Spring 2000. Romberg.

SOAN 030A. Cuba and Puerto Rico: "The Two Wings of a Single Bird"?

Puerto Rico and Cuba share several aspects of their history such as Spanish Catholic colonial rule, slavery, evangelization, nationalism, and the Spanish American war, yet also differ in the kind of solutions given to decolonization, capitalism, progress, development, and modernization. From a comparative perspective, this course will examine, for instance, how the particular social organization of slavery and evangelization, and the participation in the global economy was differentially implemented in both islands, and to what extent these processes can explain later postcolonial and nationalist developments and interventions. From this vantage point, we will also discuss migration to and from the United States and examine how the different geopolitical status of these islands shape the identity politics of Cubans and Puerto Ricans vis-à-vis the U.S. and Latin America.

Counts toward a concentration in Black Studies and Latin American Studies.

1 credit.

Fall 1999. Romberg.

SOAN 031. 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. This course may be counted toward a concentration in Latin American Studies.

1 credit.

Not offered 1999-2000. Muñoz.

SOAN 032. Latin American Urbanization

This course is designed as an introduction to problems and issues related to Latin American 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. This course may be counted toward a concentration in Latin American Studies.

1 credit.

Not offered 1999-2000. Díaz-Barriga.

SOAN 033. 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. This course may be counted toward a concentration in Latin American Studies.

Not offered 1999-2000. Díaz-Barriga.

SOAN 034. Ecology, Peace, and Development in El Salvador

There is little disagreement that prolonged and pronounced social injustice was the fundamental factor that led to the war in El Salvador (1980-92). Now, under U.N. auspices, an agreement has been signed that not only has put an end to the fighting and set the terms for disarmament but also has laid out an agenda for reconstruction, economic development, and the consolidation of democracy. In this course, we will examine the various models,

Sociology and Anthropology

policies, and practices of development that are being proposed by political parties, international institutions (including nongovernmental organizations), and other civic groups in El Salvador. This course may be counted toward a concentration in Public Policy.

1 credit.

Not offered 1999-2000. Díaz-Barriga.

SOAN 035. Social Movements in Latin America

Over 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 Latin American and Peace and Conflict Studies.

1 credit.

Not offered 1999-2000. Díaz-Barriga.

SOAN 037. 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.

This course may be counted toward a concentration in Latin American Studies.

1 credit.

Not offered 1999-2000. Hassett and Muñoz.

SOAN 039. 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 repre-

sentation 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 include the relationship of documentary realism to ethnographic film, the emergence of indigenous media, and debate over "postmodern" forms of representation.

(Note: Unlike SOAN 111, this class does not have a production component.)

1 credit.

Not offered 1999-2000. Díaz-Barriga.

SOAN 041. Comparative Studies of China and Japan

Comparative studies of China and Japan, focusing on the family and social organization. Social reproduction and social transformation in rural and urban settings. Ideological and other aspects of tradition and modernity. Domestic space and its effects on sociability.

1 credit.

Fall 1999. Gillette.

SOAN 043. 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/ Anthropology, Black Studies, or Philosophy.

1 credit.

Not offered 1999-2000. Willie.

SOAN 046. 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 1999-2000. Grant.

SOAN 047. Soviet Culture

The building of the Soviet state was a vast undertaking that drew on high modernist visions of cultural identity. This course examines Soviet nationality and cultural policies through the lens of anthropology and literature, with a particular view to the debates regnant in the 19th century and now again in a post-Soviet setting over whether Russia's soul belongs to Europe or Asia.

1 credit.

Not offered 1999-2000. Grant.

SOAN 050. 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: One course in Theory, Sociology/Anthropology, Literature, or Philosophy.

1 credit.

Fall 1999. Willie.

SOAN 051. 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 1999-2000. Willie.

SOAN 052. Mapping the Modern

(Triple listed in English, Sociology, and 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 1999-2000. Philip Weinstein and Robin Wagner-Pacifici.

SOAN 053. 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 1999-2000. Muñoz.

SOAN 055. 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.

1 credit.

Not offered 1999-2000. Wagner-Pacifici.

SOAN 057. 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

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of representation in anthropology and cultural studies more broadly. This course may be counted toward a concentration in Franco-phone Studies.

1 credit.

Spring 2000. Grant.

SOAN 058. 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.

1 credit.

Not offered 1999-2000. Díaz-Barriga.

SOAN 061. An Introduction to Archaeology

(See CLAS 052 for description.)

SOAN 064. Seeds of Change: The Environmental Consequences of the Agricultural Revolution in Prehistory

This course investigates the impact of the Agricultural Revolution in prehistory on physical and social environments. We examine the coevolutionary processes that transformed mobile foraging groups into sedentary farmers and herders following the end of the last Ice Age and focus on the ecological and paleodemographic impacts of increased reliance on domesticated plants and animals for subsistence. We will examine myths about prehistoric edens and indigenous populations as "Ecologically Noble Savages" and will attempt to use the archaeological record as a guide for selecting appropriate options for future agricultural development. This course may be counted toward concentrations in Environmental Studies and Public Policy.

1 credit.

Spring 2000. Speirs.

SOAN 065. Primate Behavior

(See BIOL 031 for description.)

SOAN 066. The Hominid Heritage: Special Topics in Paleoanthropology

The evolution of four presumably adaptive hominid behavioral repertoires and their

anatomical substrates will be the focus of this course. Emphasizing the development of analytical competence in evaluating paleoanthropological data, as well as critical reading of the primary literature, we will examine changes in dietary, locomotor, symbolic and reproductive behavior over the course of human evolution and consider the implications of these developments for understanding and coping with several contemporary health and biocultural issues.

Prerequisite: SOAN 010 or equivalent or instructor's permission.

1 credit.

Spring 2000. Speirs.

SOAN 067. Human Biodiversity

An introduction to the evolving concept of "race" in biological anthropology and its legacy for the contemporary exploration of modern human variation as a product of population history, evolution, and adaptation. In addition to the examination of the dynamic interaction of genotype and phenotype—whether physiologically or socially constituted—from multiple historical and scientific perspectives, we will scrutinize the use and abuse of racial perspectives in the biomedical sciences and current efforts to catalog the human genome.

1 credit.

Not offered 1999-2000. Speirs.

SOAN 068. Urban Education

(Cross-listed as EDUC 068)

SOAN 069. School and Society

(Cross-listed as EDUC 063)

SOAN 070. 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.

Spring 2000. Piker.

SOAN 071. 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 2000. Ghannam.

SOAN 072. 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 1999-2000. Grant.

SOAN 074. 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.

Fall 1999. Ghannam.

SOAN 075. The Changing Suburban Landscape in Fiction and Film

This course will address how social and demographic changes in America have influenced the "new Suburbia." The course will begin by surveying the history of the development of suburbia and outlining the technological innovations that made suburbia possible, such as the commuter trains. We will debunk some of the myths surrounding the suburban ideal of the family of the 1950s and how these myths were propagated through popular culture including film, television, and fiction. This course will also examine how economic and population change has altered the current face of suburbia and the degree to which the image of the suburbs in popular culture has kept pace with these changes. The course will culminate with a focus on current suburban realities and problems.

1 credit.

Fall 1999. Gager.

SOAN 077. 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, Nietzsche, and Plato will be examined. This course may be counted toward a concentration in Interpretation Theory.

1 credit.

Not offered 1999-2000. Muñoz.

SOAN 080. History of Poverty and Welfare in the United States

This course will survey poverty in the United States over the past century and the antipoverity programs used to combat poverty. We will focus on the following areas: (1) the causes of poverty; (2) the extent, distribution, and measurement of poverty; (3) who is poor, and who is not; and (4) the extent to which antipoverity programs have reduced poverty and for whom. We will pay particular attention to the effect of the welfare reform legislation passed by the Clinton administration in 1996 and monitor the effect of state level legislation enacted in response to federal changes in welfare guidelines. Students will be asked to visit a state welfare office to observe firsthand the

Sociology and Anthropology

treatment of the poor.

1 credit.

Spring 2000. Gager.

SOAN 084. 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.

Not offered 1999-2000. Wagner-Pacifici.

SOAN 086. Culture, Illness, and Health

This course will treat (1) evolved human adaptations, with reference to health and illness; (2) cultural constructions of and responses to illness; and (3) the intersection of non-Western and Western medical systems. Cross-cultural materials will be featured. This course may be counted toward a concentration in Public Policy.

1 credit.

Spring 2000. Piker.

SOAN 088. 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 Baudrillard. Prerequisite: Modern Social Theory. Limited enrollment.

1 credit.

Not offered 1999-2000. Muñoz.

SOAN 090. Research Internship

Interns receive research experience through placements in professional research settings. The availability of internship in the department varies from year to year.

Please see below.

Section 001

Juniors and seniors with a B average willing to commit 6 to 12 hours of work on their project per week 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 021.

0.5 to 1 credit.

Fall 1999 and spring 2000. Charlton.

Section 002

Internships in professional organizations such as WHY?Y, 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/anthropology-related themes. Interns will normally receive 0.5 credit (grade based on credit/no credit) for committing to their projects for 6 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 111.

0.5 to 1 credit.

Fall 1999 and spring 2000. Díaz-Barriga

SOAN 091. Practicum in Visual Ethnography

This practicum explores the ethnography of visual communication, including photography and feature film, 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 111.

1 credit.

Spring 2000. 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 the instructor is required.

0.5 or 1 credit.

Fall 1999 and spring 2000. Members of the department.

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 field work.

1 credit each semester.

Fall 1999 and spring 2000. Members of the department.

The following courses, with attachment, can be taken in preparation for Honors examinations SOAN 033 and 035, 055, 057, 070, 084, 086.

SEMINARS

SOAN 101. Critical Modern Social Theory

The development of critical theory from Kant to Habermas. Works by Hegel, Marx, Nietzsche, 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 105, Modern Social Theory, as preparation for this seminar. This course may be counted toward a concentration in Interpretation Theory.

2 credits.

Spring 2000. Muñoz.

SOAN 102. History and Myth

The well-worn canons of historiography and anthropology have undergone watershed changes in the last 20 years, repositioning the constitution of knowledge, power, and the self in new analytical genres. This course takes a look at some wide-ranging developments in recent historiographic theory within anthropology, drawing special attention to ways in which mythic narratives inform the power of persons and states, blurring the boundaries

between history and myth. This course may be counted toward a concentration in Franco-phone Studies.

2 credits.

Not offered 1999-2000. Grant.

SOAN 103. Gift and Fetish

Can objects lead social lives? This most 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 thoroughly modern animisms in the contemporary globalized world.

2 credits.

Spring 2000. Grant.

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.

Fall 1999. Piker.

SOAN 105. 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 Modern Social Theory.

2 credits

Fall 1999. Muñoz.

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SOAN 106. 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 Paulo, and Shanghai. We read these ethnographies to (1) discuss different techniques and approaches used to study urban cultures and identities; (2) examine how the collection of data relates to anthropological theories and methods; and (3) explore how research in cities shape the field of cultural anthropology. In our discussions, we also explore important urban problems such as poverty, gangs, violence, and homelessness.

2 credits.

Spring 2000. Ghannam.

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

Spring 2000. Piker.

SOAN 108. 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 1999-2000. Wagner-Pacifici.

SOAN 110. Work and the Workplace

This seminar examines the meaning of life as it relates to work, on both a microlevel and macrolevel, using the classic theoretical statements as well as case studies.

2 credits

Not offered 1999-2000. Charlton.

SOAN 111. 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 1999. Díaz-Barriga and Jackson.

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.

2 credits.

Not offered 1999-2000. Wagner-Pacifici.

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/ Anthropology, Philosophy, or Political Science; or permission of the instructor. This course may be counted toward a concentration in Interpretation Theory.

2 credits

Not offered 1999-2000. Muñoz.

SOAN 117. Liberation Theology and Social Movement in Latin America

This course looks at the concepts, practices, and history of liberation theology and new social movements in Latin America, focusing on the ways Christian Base Communities and social movements (including human rights, women's, urban, and ecological) have articulated demands and sought to empower local communities. The relations between popular religion in Latin America and liberation theology will also be explored.

2 credits.

Not offered 1999-2000. Díaz-Barriga, Lacey.

SOAN 118. Chicana/o Culture/Politics/ Practice

This seminar explores the history of writings on Chicano/a (Mexican-American) culture, including ethnographies, literature, and primary texts. The seminar focuses on the intersection of culture/politics by exploring how Chicanos have negotiated and resisted race relations and hierarchy, challenged dominant understandings of Chicana history, and reformulated notions of culture and citizenship. Topics covered in the course include the Chicano civil rights movement, immigration politics, and interpretations of key symbols (such as La Llorona, La Virgén de Guadalupe, and Aztlán). Requirements for the course will also include a service learning component—interning one afternoon a week—with organizations that serve the Mexican community in Southeastern Pennsylvania.

2 credits.

Spring 2000. Díaz-Barriga.

SOAN 120. Gender and Culture

A comparative exploration of the social construction of gender using diverse theoretical and empirical perspectives. This course may be counted toward a concentration in Women's Studies.

2 credits.

Not offered 1999-2000. Charlton.

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 1999 and spring 2000. Members of the department.

Women's Studies

Coordinator: **JEANNE MARECEK** (Psychology) (Fall 1999)²
NORA JOHNSON (English Literature) (Spring 2000)
TAMSIN LORRAINE (Philosophy) (Spring 2000)¹
Jen Gifford (Administrative Assistant)

Committee: **Yvonne Chireau** (Religion)
Carr Everbach (Engineering)
Ruqayya Khan (Religion)
Carolyn Lesjak (English Literature)
Carol Nackenoff (Political Science)
Sunka Simon (Modern Languages)
Patricia White (English Literature)

1 Absent on leave, fall 1999.

2 Absent on leave, spring 2000.

The program in Women's Studies provides students with the opportunity to learn the contributions of women to society, science, and the arts; to study gender and gender roles in a variety of social and historical contexts; to relate issues of gender to those of race, class, and sexual preference; and to explore new methods and theories arising from interdisciplinary study. Women's Studies encourages students to examine critically the representations of women in religion, in the arts and literature, in social and political theory, and in the sciences. Students in any major, whether in Course or in the Honors Program, may add a concentration in Women's Studies to their program by fulfilling the requirements stated below. Students in the Honors Program may minor in Women's Studies or design a special major in consultation with the Women's Studies Coordinator, following the guidelines outlined below. All students intending to pursue Women's Studies should submit their proposed program to the Coordinator when they submit their sophomore papers. All program proposals must be approved by the Women's Studies Committee. *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.

CONCENTRATION

Each concentration must include a minimum

of five credits in Women's Studies. One course must be the senior seminar. Because Women's Studies is an interdisciplinary program, the courses (or seminars) in each concentration must be selected from at least two different Divisions. Students may elect, with the approval of the coordinator, to write a one-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 programs courses on women and gender offered at Bryn Mawr, Haverford, the University of Pennsylvania, and abroad. 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. Students will normally take the senior seminar in the spring semester of the senior year.

It is recommended that potential concentrators take Women's Studies 1, Introduction to Women's Studies, in their first or second year.

HONORS PROGRAM

Students in the Honors program may minor in Women's Studies by completing six credits in Women's Studies, completing ½ credit of Seniors Honors Study and preparing for and taking one external exam. The preparation consists of the Women's Studies Senior Seminar, Women's Studies 91, plus the one-

credit Honors Attachment, 91A. The Senior Honors Study can be completed either semester of the senior year and will consist of a literature review essay.

Courses on women and gender regularly offered for the concentration include:

- BIOL 006. History and Critique of Biology**
BIOL 093. Directed Reading in Feminist Critiques of Biology
DANC 036. Dance and Gender
ECON 043. Public Policy and the American Family
ECON 073. Women and Minorities in the Economy
EDUC 061. Gender and Education
ENGL 005M. Ways of Seeing
ENGL 005N. Illicit Desires in Literature
ENGL 005R. Fictions of Identity
ENGL 023. Renaissance Sexualities
ENGL 024. Inscriptions of the Feminine in 16th- and 17th-Century England
ENGL 034. Romanticism and the Performance of Gender
ENGL 036. Colloquium: The Age of Austen
ENGL 046. Stein and Woolf
ENGL 048. Contemporary Women's Poetry
ENGL 067. (Asian) Ethnicity and (Hetero) Sexual Normativity
ENGL 071J. Cherchez la femme: The "Mystery" of Women in the Mystery Genre
ENGL 071K. Lesbian Novels Since WWII
ENGL 071R. Feminist Theatre
ENGL 083. Feminist Theory
ENGL 084. Lesbian Representation
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 061. Odd Couplings: Writings and Readings Across Gender Lines
FREN 076. Femmes écrivains
GERM 077. Literature of Decadence
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
HIST 001S. Sex, Sin, and Kin in Early Europe
HIST 029. Sexuality and Society in Modern Europe
HIST 052. The History of Manhood in America
HIST 053. African American Women's History
HIST 054. Women, Society, and Politics
HIST 089. Gender, Sexuality and Colonialism
LITR 051G. Gender and Race in European Cinema
LITR 061SA. Women's Testimonial Literature of Latin America
LITR 077G. Literature of Decadence
LITR 079R. Russian Women Writers
MUSI 010. Women in Music: Composers
MUSI 035. Women Composers and Choreographers
PEAC 040. Peace Movement in the United States: Women and Peace
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
-

Women's Studies

PSYC 044. Psychology and Women

PSYC 060. Gender and Mental Health

RELG 007B. Women and Religion

RELG 025B. Black Women and Religion in America

RELG 041. Secrecy and Revelation in Islam

RELG 103. Women and Spirituality

RELG 118. Gender and Judaism

RUSS 079R. Russian Women Writers

SOAN 007. Gender, Power, and Identity

SOAN 016. Sociology through African American Women's Writing

SOAN 041. Comparative Studies of China and Japan

SOAN 042A. Transitions to Democracy: The Gender Challenge

SOAN 120. Gender and Culture

SPAN 066. La escritora española en los siglos XIX y XX

THEA 106. Theatre History Seminar

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.

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, feminist utopias in science fiction, and others. Expected workload is two long papers and several short ones, with no midterm, final, or labs.

Women's Studies 030 does not fulfill a college-

wide distribution requirement. However, it can be used to satisfy the distribution requirement for the concentration.

1 credit.

Spring 2000. Everbach.

WMST 091. Seminar in Women's Studies

An advanced seminar emphasizing theoretical and methodological questions which arise when women are placed at the center of study, and in which students engage in research projects based upon their prior work with gender in the various disciplines. This class is required of, and normally limited to, Women's Studies concentrators and special majors. It must be taken in the senior year and cannot be used to fulfill distribution requirements in the concentration.

1 credit.

Spring 2000. Simon.

WMST 091A. Honors Attachment to Seminar in Women's Studies

An advanced seminar or tutorial required of students who complete an Honors minor in Women's Studies.

1 credit.

Spring 2000. Simon.

WMST 092. Thesis

1 credit.

WMST 192. Thesis

For students completing a special major in honors.

2 credits.

WMST 199. Senior Honors Study

Required of students who complete an Honors minor in Women's Studies.

0.5 credit.

VI

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The Faculty

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Degrees Conferred

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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*
Simpson Thacher & Bartlett
425 Lexington Avenue
New York, NY 10017-3909

Maurice G. Eldridge, *Assistant Secretary*
Swarthmore College
Swarthmore, PA 19081

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Swarthmore, PA 19081

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21 College Avenue
Swarthmore, PA 19081

Marge Pearlman Scheuer, *Vice Chair*
101 Central Park West
New York, NY 10023

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Simpson Thacher & Bartlett
425 Lexington Avenue
New York, NY 10017-3909

Ex officio
Alfred H. Bloom

Chairman of the Board Emeritus
Eugene M. Lang
912 Fifth Avenue
New York, NY 10021

Current Term Expires December 1999

Mary Schmidt Campbell
457 W. 144th Street
New York, NY 10031

*Barbara J. Dingfield
3246 Cascadia Avenue, South
Seattle, WA 98144

Neil Grabois
Carnegie Corporation of New York
437 Madison Avenue
New York, NY 10022

Graham O. Harrison
334 Cotuit Bay
Cotuit, MA 02635

Samuel L. Hayes III
345 Nahatan Street
Westwood, MA 02090

James C. Hormel
Equidex, Inc.
19 Sutter Street
San Francisco, CA 94104-4901

Barbara Mather
Pepper Hamilton LLP
3000 Two Logan Square
18th and Arch Streets
Philadelphia, PA 19103-2799

**Preston C. Polk Jr.
First Data Corp., Suite 1400
5660 New Northside Drive
Atlanta, GA 30328

Marge Pearlman Scheuer
101 Central Park West
New York, NY 10023

*William G. Stott
Marshfield Associates Investment Counsel
51 Collins Road
Northboro, MA 01532

*Nominated by the Alumni Association

**Young Alumni Manager

Current Term Expires December 2000

Neil R. Austrian
22 Ballwood Road
Old Greenwich, CT 06870

Dulany Ogden Bennett
Oregon Episcopal School
6300 SW Nicol Road
Portland, OR 97223

*Donald T. Fujihira
1199 Park Avenue, Apt. 7B
New York, NY 10128

*Martha Salzmann Gay
1004 Montgomery Avenue
Ft. Washington, PA 19034

John D. Goldman
Richard N. Goldman & Co.
One Bush Street, Suite 900
San Francisco, CA 94104

Julie Lange Hall
1161 Pine Street
Winnetka, IL 60093

Lillian E. Kraemer
Simpson, Thatcher & Bartlett
425 Lexington Avenue
New York, NY 10017-3909

**Maeghan T. LeRoy Maloney
2921 SE 62nd Avenue
Portland, OR 97206

William G. Nelson IV
GEAC Computer Corp. Limited
11 Allstate Parkway, Suite 300
Markham, Ontario
L3R 9T8 CANADA

J. Lawrence Shane
21 College Avenue
Swarthmore, PA 19081

Thomas E. Spock
43 Stoneyside Drive
Larchmont, NY 10538

Current Term Expires June 2001

*Elenor G. Reid
12 E. 86th Street, Apt. 623
New York, NY 10028

Current Term Expires December 2001

Nancy Y. Bekavac
Office of the President
Scripps College
1030 Columbia Avenue
Claremont, CA 91771

Lloyd W. Lewis
65 Twin Pine Way
Glen Mills, PA 19342

James Noyes
9 Back River Circle
Savannah, GA 31411

*Freeman L. Palmer
363 Canal Street, Apt. 3
New York, NY 10013

Barbara Hall Partee
50 Hobart Lane
Amherst, MA 01002

Asahi Pompey
666 West End Avenue, Apt. 10F
New York, NY 10025

Marc J. Sonnenfeld
Morgan, Lewis & Bockius, LLP
1701 Market Street, 13th Floor
Philadelphia, PA 19103

Current Term Expires December 2002

Catherine Good Abbott
Columbia Gas Transmission Corp.
12801 Fair Lakes Parkway
Fairfax, VA 22033

Paul I. Corrdry
601 Gulf Shore Boulevard North
Naples, FL 34103

*Nominated by the Alumni Association

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1614 Twentieth Street, NW
Washington, DC 20009

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4730 Fieldston Road
Bronx, NY 10471

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717 Dorset Street
Philadelphia, PA 19119

Emeriti

John C. Crowley
615 Linda Vista Avenue
Pasadena, CA 91105-1122

Richard M. Hurd
337 13th Avenue
Bethlehem, PA 18018

Clark Kerr
8300 Buckingham Drive
El Cerrito, CA 94530

Jerome Kohlberg Jr.
Kohlberg & Company
111 Radio Circle
Mt. Kisco, NY 10549

Walter Lamb
147 Tannery Run Circle
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Berwyn, PA 19312

Eugene M. Lang
912 Fifth Avenue
New York, NY 10021

Elizabeth J. McCormack
Rockefeller Family & Associates
Room 5600
30 Rockefeller Plaza
New York, NY 10112

Charles C. Price III
Quadrangle C-301
3300 Darby Road
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17211 Quaker Lane
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New York, NY

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New York, NY

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Ithaca, NY

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Joanna Bailey '88²
Grand Rapids, MI

1 Term ends 2002.

2 Term ends 2000.

3 Term ends 2001.

4 Nominating committee.

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Minneapolis, MN
Richard W. Mansbach '64²
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Joel S. Taylor '65³
Bexley, OH
Burnham Terrell '45¹
Minneapolis, MN
Lesley C. Wright '79³
Iowa City, IA

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Eric Osterweil '56³
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Katharine Winkler '93¹
Durham, NC

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Jennifer J. Rickard '86
Philadelphia, PA

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Pittsburgh, PA

San Francisco

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Oakland, CA

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Deborah Read '87
Seattle, WA

National Chair

Don Fujihira '69
New York, NY

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2 Term ends 2000.

3 Term ends 2001.

4 Nominating committee.

The Faculty

Alfred H. Bloom, B.A., Princeton University; Ph.D., Harvard University, President and Professor of Psychology and Linguistics. 324 Cedar Lane.

Jennie Keith, B.A., Pomona College; M.A. and Ph.D., Northwestern University, Provost and Centennial Professor of Anthropology. 612 Ogden Avenue.

Wendy E. Chmielewski, B.A., Goucher College; M.A. and Ph.D., State University of New York at Binghamton, Cooley Curator of the Swarthmore College Peace Collection. Swarthmore College.

David Ramirez, B.A., M.A., and Ph.D., University of Texas, Director of Psychological Services. Swarthmore College.

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

Meg E. Spencer, B.A., University of Richmond; M.S., Drexel University, Acting Science Librarian. Swarthmore College.

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

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.

Paul H. Beik, B.A., Union College, M.A. and Ph.D., Columbia University, Centennial Professor Emeritus of History. 2461 Venetian Way, Winter Park, FL 32789.

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.

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. 505 Yale Avenue.

Alice Brodhead, B.S. and M.A., University of Pennsylvania, Professor Emerita of Education. Stonegates #162, 4031 Kennett Pike, Greenville, DE 19807.

Hilde D. Cohn, Dr. Phil., University of Heidelberg, Professor Emerita of German. Apt. 6311, 3300 Darby Road, Haverford, PA 19041-1095.

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 of Engineering. 603 Elm Avenue.

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 Paxton 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.
- Charles E. Gilbert**, B.A., Haverford College; Ph.D., Northwestern University, Professor Emeritus of Political Science. 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.
- 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.
- Philip Metzidakis**, B.A., Dartmouth College; Ph.D., Yale University, Professor Emeritus of Spanish. 64 Tonset Road, Orleans, MA 02653.
- John M. Moore**, B.A., Park College; B.D., Union Theological Seminary; M.A., Harvard University; Ph.D., Columbia University, Professor Emeritus of Philosophy and Religion. Barclay Friends, 700 North Franklin Street, West Chester, PA 19380.
- 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.
- Bernard Morrill**, B.S. in M.E., Massachusetts Institute of Technology; M.M.E., University of Delaware; Ph.D., University of Michigan, Henry C. and J. Archer Turner Professor Emeritus of Engineering. 535 Fanshaw, Boca Raton, FL 33434-6140.
- 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. 351 Riverview Road.

Faculty

Ernest J. Prudente, B.S. and M.S., University of Pennsylvania, Professor Emeritus of Physical Education. 914 Surrey Road, Wallingford, PA 19086.

Frederic L. Pryor, B.A., Oberlin College; M.A. and Ph.D., Yale University, Professor Emeritus of Economics. 740 Harvard 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, Glaschw, 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.

Susan Snyder, B.A., Hunter College; M.A. and Ph.D., Columbia University, Gil and Frank Mustin Professor Emerita of English Literature. 2939 Van Ness Street, Washington, DC 20008-4607.

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, 12 Recreation Drive, Jim Thorpe, PA 18229.

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, Twickenham, 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.

Neal A. Weber, B.A., M.S., and D.Sc., University of North Dakota; M.A. and Ph.D., Harvard University, Professor Emeritus of Zoology. 1805 Aaron Drive, Tallahassee, FL 32303.

M. Joseph Willis, B.C.E., University of Washington; M.S., Cornell University; Ph.D., The Johns Hopkins University, Professor Emeritus of Engineering. 103 Jefferson Street, Oxford, MD 21654.

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

- Abigail Adams**, Diploma, Royal Academy of Dramatic Art; Certificate, Wielopolska Training School, Visiting Lecturer in Theatre Studies (part-time). 603 Hillborn Ave.
- Frank Agovino**, B.S., St. Joseph's University, Assistant 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.
- Peter Alvanos**, A.A., Anne Arundel Community College; B.S., Drexel University; M.A., University of Louisville, Assistant Professor of Physical Education. Swarthmore College.
- Diane Anderson**, B.A., Montclair State College; M.S., Drexel University, 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.
- Peter Aronoff**, B.A., Queens College, Visiting Assistant Professor of Classics. Swarthmore College.
- Kim D. Arrow**,² B.S., Temple University; M.F.A., New York University, Assistant Professor of Dance (part-time). Swarthmore College.
- Alira Ashvo-Muñoz y Diaz**, B.A., M.A., and Ph.D., University of Texas at Austin, Visiting Assistant Professor of Spanish (part-time). Swarthmore College.
- Cynthia Baker**, B.A., Wesleyan University; M.T.S., Harvard University; Ph.D., Duke University, Visiting Assistant Professor of Religion. Swarthmore College.
- David Barton**, B.A., Stanford University; Ph.D., University of California, Berkeley, Visiting Assistant Professor of Philosophy. Swarthmore College.
- Amanda Bayer**,¹ B.A., Williams College; M.A., M.Phil. and Ph.D., Yale University, Associate Professor of Economics. 548 Westminister Avenue.
- Carla Belver**, B.A., Temple University; M.A., Villanova University, Visiting Lecturer in Theatre Studies (part-time). 121 Dundee Mews, Media, PA 19063.
- Stephen P. Bensch**, M.A., University of Toronto; Ph.D., University of California, Berkeley, Associate Professor of History. 614 Yale Avenue.
- Deborah J. Bergstrand**, B.S., Allegheny College; M.S. and Ph.D., University of Illinois, Professor of Mathematics/ Statistics. Swarthmore College.
- Alan Berkowitz**, M.A. and Ph.D., University of Washington, Associate Professor of Chinese. Swarthmore College.
- Thomas H. Blackburn**, B.A., Amherst; B.A. and M.A., University of Oxford; Ph.D., Stanford University, Centennial Professor of English Literature. 801 Yale Avenue #1001.
- Jean-Vincent Blanchard**,² B.A. and M.A., Université de Montréal; Ph.D., Yale University, Assistant Professor of French. Swarthmore College.
- Abbe Blum**,³ B.A., University of California, Berkeley; B.A. and M.A., Cambridge University; Ph.D., Yale University, Associate Professor of English Literature. 400 Walnut Lane.
- John R. Boccio**, B.S., Polytechnic Institute of Brooklyn; Ph.D., Cornell University, Professor of Physics. 318 North Chester Road.
- Elizabeth Bolton**,¹ B.A., Middlebury College; M. Phil. and Ph.D., Yale University, Associate Professor of English Literature. 4 Crum Ledge Lane.
- Karen Borbee**, B.S., University of Delaware; M.Ed., Widener University, Associate Professor of Physical Education. 933 Mitchell Avenue, Morton, PA 19070.

1 Absent on leave, fall 1999.

2 Absent on leave, spring 2000.

3 Absent on leave, 1999-2000.

9 Campus Coordinator, Swarthmore Program in Grenoble, spring 2000.

Faculty

Thompson Bradley, B.A., Yale University; M.A., Columbia University, Professor of Russian. Price's Lane, Moylan, PA 19065.

Darlene D. Bramucci, B.A. and M.S., University of Maryland, Laboratory Instructor in Biology, 532 Milmont Avenue, Milmont Park, PA 19033.

Elaine Brenneman,⁶ B.A., University of Vermont; M.Ed. and Ph.D., University of Delaware, Visiting Assistant Professor of Education. Swarthmore College.

Michael R. Brown, B.A., Pomona College; Ph.D., Dartmouth College, Assistant 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,⁷ 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, Assistant Professor of History. Swarthmore College.

Garikai Campbell, B.A., Swarthmore College; Ph.D., Rutgers University, Assistant Professor of Mathematics. Swarthmore College.

Sydney L. Carpenter, B.F.A. and M.F.A., Tyler School of Art, Associate Professor of Studio Arts. Swarthmore College.

John P. Caskey,² B.A., Harvard University; Ph.D., Stanford University, Professor of Economics. 220 West Rittenhouse Square, Apt. 23C, Philadelphia, PA 19103.

Joy Charlton, B.A., University of Virginia; M.A. and Ph.D., Northwestern University, Professor of Sociology. 503 North Chester Road.

Praveen K. Chaudhry, B.A., M.A., and M.Phil., University of Delhi, Visiting Instructor in Political Science (part-time). Swarthmore College.

Erik Cheever, B.S., Swarthmore College; M.S.E. and Ph.D., University of Pennsylvania, Associate Professor of Engineering. 423 S. Olive Street, Media, PA 19063.

Yvonne P. Chireau, B.A., Holyoke College; M.T.S., Harvard University; Ph.D., Princeton University, Associate Professor of Religion. 600 Elm Avenue.

Lisa Cohen, B.A., Brown University; M.Phil. and Ph.D., Yale University, Visiting Assistant Professor of English Literature and Mellon Postdoctoral Fellow. Swarthmore College.

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.

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 Dee, B.A., Swarthmore College; M.A. and Ph.D., University of Maryland at College Park, Assistant Professor of Economics. 739 Harvard Avenue.

Christine DeGrado, B.A., University of Chicago; M.A. and Ph.D., University of Pennsylvania, Instructor of Spanish (part-time). Swarthmore College.

Ursula Neuerberg Denzer, B.A., Freie Universität; M.A., New York University, Instructor in English Literature and Theatre Studies. 20 Oberlin Avenue.

Peggy deProphetis, A.B., Vassar; M.B.A., Wharton School, University of Pennsylvania; Ph.D., University of Pennsylvania. Visiting Lecturer in Economics. Swarthmore College.

2 Absent on leave, spring 2000.

3 Absent on leave, 1999-2000.

6 Spring 2000 (appointment that semester only).

- Nathaniel Deutsch**, B.A., M.A., and Ph.D., The University of Chicago, Assistant Professor of Religion. Swarthmore College.
- Lee Devin**, B.A., San Jose State College; M.A. and Ph.D., Indiana University, Professor of English Literature, Theatre Studies. 603 Hillborn Avenue.
- Miguel Díaz-Barriga**, B.A., University of Chicago; M.A. and Ph.D., Stanford University, Associate Professor of Anthropology. 8B Whittier Place.
- Pete Dicce**, B.A., Temple University; J.D., Pepperdine University, Assistant in Physical Education. Swarthmore College.
- Allison Dorsey**,³ B.A., University of San Francisco; M.A. and Ph.D., University of California, Irvine, Assistant Professor of History. Swarthmore College.
- Bruce A. Dorsey**, B.A., Biola University; A.M. and Ph.D., Brown University, Assistant Professor of History. Swarthmore College.
- Todd A. Drumm**, B.S., Westminster College; Ph.D., University of Maryland, College Park, Assistant Professor of Mathematics. Swarthmore College.
- Robert S. DuPlessis**, B.A., Williams College; M.A. and Ph.D., Columbia University, Professor of History. 211 Rutgers Avenue.
- 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.
- Frank H. Durgin**, B.A., St. John's College; M.A., University of Pennsylvania; Ph.D., University of Virginia, Assistant Professor of Psychology. 6 Crum Ledge.
- Mark Duzenski**, B.S., Trenton State University, Assistant 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.
- Raima Evan**, B.A., Radcliffe College, Harvard University; M.A. and Ph.D., University of Pennsylvania, Visiting Assistant Professor of English Literature (part-time). 602 Elm 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**,³ B.A., Pomona College; M.A. and Ph.D., Harvard University, Assistant 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 Arts. 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.
- Theodore Fernald**, B.A., Ohio State University; Ph.D., University of California at Santa Cruz, Assistant Professor of Linguistics. Swarthmore College.
- Shawn Ferris**, B.A., West Chester University, Assistant in Physical Education. 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 and Director of the Orchestra. 206 Martroy Lane, Wallingford, PA 19086.
- Sharon E. Friedler**, B.A., Colby College; M.F.A., Southern Methodist University, Professor of Dance and Director of the Dance Program. 220 Vassar Avenue.

³ Absent on leave, 1999-2000.

Faculty

Joan Friedman, M.A., University of Wisconsin, 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.

Constance T. Gager, B.A., Clark University; M.A., University of Vermont; Ph.D., University of Pennsylvania, Visiting Assistant Professor of Sociology. 103 Queen Road, Stockton, NJ 08559.

John E. Gaustad, A.B., Harvard University; Ph.D., Princeton University, Edward Hicks Magill Professor of Astronomy. 430 S. Chester Road.

Kenneth J. Gergen, B.A., Yale University; Ph.D., Duke University, Gil and Frank Mustin Professor of Psychology. 331 Rogers Lane, Wallingford, PA 19086.

Farha N. Ghannam, B.A. and M.A., Yarmouk University; Ph.D., University of Texas at Austin, Visiting Assistant Professor of Anthropology. Swarthmore College.

Scott F. Gilbert,³ 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 Lecturer in Psychology. Swarthmore College.

Marie-Christine Girard, D.E.U.G. d'Allemand, Orléans, Paris VII; M.A., University of Sydney, Visiting Language Instructor of French. 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. 600 Elm Avenue.

Laura Gotkowitz,¹ B.A., Brown University; M.A., and Ph.D., University of Chicago, Assistant Professor of History. Swarthmore College.

Bruce Grant, B.A., McGill University; M.A. and Ph.D., Rice University, Associate Professor of Anthropology. Swarthmore College.

William J. Grassie, B.A., Middlebury College; M.A. and Ph.D., Temple University, Visiting Associate Professor of Religion (part-time). Swarthmore College.

Maribeth Graybill,² B.A., College of Wooster; M.A. and Ph.D., University of Michigan, Associate Professor of Art History. 515 Elm Avenue.

Pat Gress, B.S., Towson State 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, Visiting Assistant Professor of Mathematics. Swarthmore College.

Carl H. Grossman,³ B.Sc. and Ph.D., University of Pennsylvania, Associate Professor of Physics. 3 Whittier Place.

Maria Luisa Guardiola, Licenciada, University of Barcelona; Ph.D., University of Pennsylvania, Assistant Professor of Spanish. Swarthmore College.

Dennis Halliday, B.A., Trinity College, Dublin; M.A., Dublin University, Eugene M. Lang Visiting Professor of Social Change (Fall).

Cynthia Perwin Halpern, B.A., Tulane University; M.A., The London School of Economics; Ph.D., Princeton University, Assistant Professor of Political Science. Swarthmore College.

² Absent on leave, spring 2000.

³ Absent on leave, 1999-2000.

-
- 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.
- Cheryl A. Hemkin**, A.B., University of Chicago; M.S., University of Illinois at Chicago; Ph.D., Purdue University, Visiting Assistant Professor of Chemistry.
- Michelle Hermann**, B.A. and M.A., University of Chicago, Visiting Instructor in English Literature and Minority Scholar in Residence. Swarthmore College.
- Sally Hess**, B.A., Barnard College; M.Phil., Yale University, Assistant Professor of Dance (part-time). Swarthmore College.
- Mary Ann Hickman**, B.A., Agnes Scott College; M.S., University of Wyoming, Lecturer in Physics and Astronomy. Swarthmore College.
- Sara Hiebert**, B.S., University of St. Andrews; Ph.D., University of Washington, Assistant 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.
- Camara Dia Holloway**, B.A., Barnard College, Visiting Instructor in Art History and Minority Scholar in Residence. Swarthmore College.
- 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, Assistant Professor of Religion. 8 Crum Ledge Lane.
- Wendy A. Horwitz**, A.B., Harvard University; M.A. and Ph.D., Temple University, Assistant Professor of Psychology. 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, 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.
- Sarah Ioannides**, B.A., Oxford University, Associate in Performance (Music). Swarthmore College.
- Gudmund R. Iversen**, M.A., University of Michigan; Ph.D., Harvard University, Professor of Statistics and Director, Center for Social and Policy Studies. 212 Elm Avenue.
- Laura Jackson**, B.A., Hollins College; M.A., Virginia Polytechnic Institute and State University, Visiting Lecturer in Sociology/Anthropology. Swarthmore College.
- Mark Jacobs**, B.A., Harvard University; Ph.D., Stanford University, Centennial Professor of Biology. 606 North Chester Road.
- Ahamindra Jain**, S.B., Massachusetts Institute of Technology; Ph.D., Harvard University, Visiting Assistant Professor of Chemistry. 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**,³ B.A., Vassar College; M.A., Ph.D., University of Virginia, Associate Professor of Economics. 625 Elm Avenue.
-

3 Absent on leave, 1999-2000.

Faculty

John B. Jenkins,² 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.

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.

Nora Johnson, B.A., University of California, Los Angeles; M.A. and Ph.D., University of California, Berkeley, Assistant Professor of English Literature. Swarthmore College.

Pieter M. Judson,² B.A., Swarthmore College; M.A. and Ph.D., Columbia University, Associate Professor of History. 801 Yale Avenue, Apt. 919.

Edward T. Kako, B.A., Brown University; M.A. and Ph.D., University of Pennsylvania, Assistant Professor of Psychology. 4708 Springfield Avenue, Philadelphia, PA 19143.

Evgeniya L. Katsenelinboigen, Moscow Polygraphic Institute, Instructor in Russian (part-time). 133 Deerpath Lane, Media, PA 19063.

John Keady, B.A., Ithaca College; M.A., State University of New York at Albany, Assistant in Physical Education. Swarthmore College.

Charles F. Kelemen,³ B.A., Valparaiso University; Ph.D., Pennsylvania State University, Professor of Computer Science and Mathematics. 2105 N. Providence Road, Media, PA 19063.

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, Instructor in Spanish (part-time). Swarthmore College.

Ruqayya Y. Khan, B.A., Goucher College; M.A. and Ph.D., University of Pennsylvania, Visiting Assistant Professor of Religion and Mellon Postdoctoral Fellow. Swarthmore College.

Paul H. King, B.F.A., Philadelphia College of Arts; M.F.A., Boston University, Visiting Lecturer in Studio Art (part-time). Swarthmore College.

T. Kaori Kitao,² B.A. and M.A., University of California, Berkeley; Ph.D., Harvard University, William R. Kenan Jr. Professor of Art History. 540 Westminster Avenue.

Eugene A. Klotz, B.S., Antioch College; Ph.D., Yale University, Albert and Edna Pownall Buffington Professor of Mathematics. 735 Yale Avenue.

Haili Kong, M.A., People's University, Beijing; Ph.D., University of Colorado at Boulder, Assistant Professor of Chinese. Swarthmore College.

Allen Kuharski, B.A., University of Wisconsin-Madison; M.A. and Ph.D., University of California, Berkeley, Associate Professor of English Literature, Resident Director, and Director of Theatre Studies Program. 5 Crum Ledge Lane.

Kevin Kumashiro, B.A., Pomona College; M.A., University of Wisconsin-Madison, Visiting Instructor in Education and Minority Scholar in Residence.

Mark Kuperberg,¹ 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,² B.A. and M.A., University of Melbourne; Ph.D., Indiana University, Professor of Philosophy. 336 Park Avenue.

1 Absent on leave, fall 1999.

2 Absent on leave, spring 2000.

3 Absent on leave, 1999-2000.

Brigitte Lane,¹⁰ Licence ès Lettre d'Enseignement, Université de Paris, Sorbonne; M.A., University of Kansas; Ph.D., Harvard University, Associate Professor of French. 312 South Chester Road.

Roger E. Latham,³ B.A., Swarthmore College; Ph.D., University of Pennsylvania, Assistant Professor of Biology. Swarthmore College.

Colin W. Leach,³ B.A. and M.A., Boston University; Ph.D., University of Michigan, Assistant Professor of Psychology. 20 Oberlin Avenue.

Grace Ledbetter, A.B., Bryn Mawr College; M.A., University of Virginia; Ph.D., Cornell University, Assistant Professor of Classics and Philosophy. Swarthmore College.

Carolyn Lesjak, B.A., Swarthmore College; M.A., Duke University; Ph.D., Duke University, Assistant Professor of English Literature. Swarthmore College.

Gerald Levinson, B.A., University of Pennsylvania; M.A. and Ph.D., University of Chicago, 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.

Xinru Liu, Ph.D., University of Pennsylvania, Associate Professor of Chinese (part-time). Swarthmore College.

Tamsin Lorraine,¹ B.A., Middlebury College; Ph.D., University of Massachusetts, Associate Professor of Philosophy. 318 N. Chester Road.

Paul J. Lupinacci, B.S., Villanova University; M.S., Temple University, Visiting Instructor of Mathematics/Statistics (part-time). 1700 Butler Pike, Conshohocken, PA 19428.

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, Associate Professor of Economics. 7 Sylvan Avenue, Rutledge, PA 19070.

Seth A. Major, B.A., Swarthmore College; M.S., Syracuse University; Ph.D., Pennsylvania State University, Visiting Assistant Professor of Physics/Astronomy. 405 Rogers Lane, Wallingford, PA 19086.

Jeanne Marecek,² 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.

James Marshall, B.S., Cornell University; M.S. and Ph.D., Indiana University, Visiting Assistant Professor of Computer Science. Swarthmore College.

William Marshall,² B.F.A., University of Florida; M.F.A., Virginia Tech, Associate Professor of English Literature and Resident Designer, Theatre Studies Program. Swarthmore College.

Jocelyn Mattei-Noveral, B.S., Orsay University, Laboratory Instructor in Biology.

Stephen B. Maurer,³ 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.

Ann Kosakowski McNamee,³ B.A., Wellesley College; M.Phil. and Ph.D., Yale University, Professor of Music. 6 Whittier Place.

1 Absent on leave, fall 1999.

2 Absent on leave, spring 2000.

3 Absent on leave, 1999-2000.

10 Program Director, Swarthmore Program in Grenoble, fall 1999.

Faculty

Lisa Meeden, B.A., Grinnell College; M.S. and Ph.D., Indiana University, Assistant Professor of Computer Science. 416 North Chester Road.

Meta Mendel-Reyes, B.A., University of California, Santa Cruz; M.A. and Ph.D., University of California, Berkeley, Assistant Professor of Political Science. Swarthmore College.

Rachel A. Merz, B.A., Western New Mexico University; M.S., University of Florida; Ph.D., University of Chicago, Associate Professor of Biology. 515 Elm Avenue.

Brian A. Meunier, B.F.A., University of Massachusetts, Amherst; M.F.A., Tyler School of Art, Temple University, Professor of Studio Arts. 5 Whittier Place.

Lynne A. Molter,² B.S. and B.A., Swarthmore College; S.M. and Sc.D., Massachusetts Institute of Technology, Associate Professor of Engineering. Swarthmore College.

Vera B. Moreen, B.A., Princeton University; M.A. and Ph.D., Harvard University, Visiting Associate Professor of Religion (part-time). Swarthmore College.

Bruce Morrison, B.A. and M.A., McGill University; Ph.D., Harvard University, Assistant Professor of Political Science. 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,² B.A., Davidson College; M.A. and Ph.D., University of Wisconsin, Madison, Professor of French, James C. Hornell 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, Universitab degli Studi, Milano; Ph.D., University of Pennsylvania, Associate Professor of Classics. 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. 723 Yale Avenue.

Shane Murray, B.S., Pennsylvania State University; M.S. Drexel University, Laboratory Instructor in Biology.

Carol Nackenoff, A.B., Smith College; M.A. and Ph.D., University of Chicago, Associate Professor of Political Science. 222 Vassar Avenue.

C. Kemal Nance, B.A., Swarthmore College; M.A., 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.

Andrea Nelson, B.A., University of California at Santa Barbara; M.A., University of Illinois at Urbana-Champaign; Ph.D., Bryn Mawr College, Lecturer in Russian (part-time). Swarthmore College.

Carole Netter, Maitrise and DEA, University of Paris, Instructor in French (part-time). Swarthmore College.

Tia Newhall, B.S.-SED, M.S., Ph.D., University of Wisconsin-Madison, Instructor 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.

² Absent on leave, spring 2000.

³ Absent on leave, 1999-2000.

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.

Jeanette Owen, B.A., Knox College; M.A., Bryn Mawr College, Visiting Instructor of Russian. Swarthmore College.

Robert S. Paley,³ B.S., McGill University; M.S. and Ph.D., University of Michigan, Associate Professor of Chemistry. 404 Elm Avenue.

Emilie Passow,² B.A., City College of New York; M.A. and Ph.D., Columbia University, Assistant Professor of English Literature (part-time). 50 Belmont Avenue, Bala Cynwyd, PA 19004.

Robert F. Pasternack, B.A. and Ph.D., Cornell University, Edmund Allen Professor of Chemistry. 800 Avondale Road, Wallingford, PA 19086.

Christopher Pavsek,¹ B.A., Cornell University; Ph.D., Duke University, Visiting Assistant Professor of German. Swarthmore College.

Donna T. Perrone, B.S., University of Delaware, Laboratory Instructor in Chemistry. 1002 Beech Road, Wallingford, PA 19086.

Larry Perry, B.A., Pennsylvania State University, Assistant in Physical Education. Swarthmore College.

Steven I. Piker, B.A., Reed College; Ph.D., University of Washington, Professor of Anthropology. 125 Rutgers Avenue.

Jeanine Pinto, B.A., Vassar College; Ph.D., University of Virginia, Visiting Lecturer in Psychology. Swarthmore College.

Elke Plaxton, B.A., Brigham Young University; M.A., University of Colorado, Instructor in German (part-time). 2022 Brandywine Street, Philadelphia, PA 19103.

Anastasia Posadskaya-Vanderbeck, Diploma of Honor and M.A., Moscow State University; Ph.D., Russian Academic of Sciences, Cornell Visiting Professor of History.

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, Assistant 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.

Keith Reeves, B.A., Swarthmore College; Ph.D., University of Michigan, Associate Professor of Political Science. Swarthmore College.

Cecelia B. Reisman,³ B.F.A., Carnegie-Mellon University; M.F.A., Yale University, Assistant Professor of Studio Arts (part-time). 49 Merbrook Lane, Merion Station, PA 19066.

K. Ann Renninger,³ 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,^{8,11} 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.

Eric Roberts, A.B., S.M., Ph.D., Harvard University, Eugene M. Lang Visiting Professor of Social Change (Spring).

Raquel Romberg, B.A. and M.A., Tel Aviv University; Ph.D., University of Pennsylvania, Visiting Assistant Professor (part-time) in Sociology/Anthropology. 7946 Montgomery Avenue, Elkins Park, PA 19027.

Luci Rosalia, Coach/Instructor in Physical Education.

1 Absent on leave, fall 1999.

2 Absent on leave, spring 2000.

3 Absent on leave, 1999-2000.

6 Spring 2000 (appointment that semester only).

8 Campus coordinator, Swarthmore Program in Grenoble, fall 1999.

11 Program director, Swarthmore Program in Grenoble, spring 2000.

Faculty

Gilbert P. Rose,³ B.A. and Ph.D., University of California, Berkeley, Professor of Classics. 551 Marietta Avenue.

Ellen M. Ross,³ 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,³ 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.

Frank K. Saragosa, B.A., Bard College; M.A., University of California at Berkeley, Instructor in English Literature. Swarthmore College.

Aurora Camacho de Schmidt,³ M.A. and Ph.D., Temple University, Assistant Professor of Spanish. Swarthmore College.

Peter J. Schmidt,¹ B.A., Oberlin College; M.A. and Ph.D., University of Virginia, Professor of English Literature. 606 Elm Avenue.

Allen M. Schneider,² 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.

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,³ 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, Assistant in Physical Education. Swarthmore College.

Paula Sepinuk,⁵ B.A., Bennington College; M.A., Villanova University, Adjunct 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.

Jon Sherman, B.A., Temple University, Associate in Performance (Dance). Swarthmore College.

Adrienne Shibles, B.A., Bates College; M.A., Smith College, Assistant 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.

Wesley Shumar, B.A., University of Pennsylvania; M.A., New York University; Ph.D., Temple University, Visiting Assistant Professor of Education. 577 West Orange Street, Media, PA 19063.

Faruq M.A. Siddiqui, B.S., Bangladesh University of Engineering and Technology; M.S. and Ph.D., University of Pittsburgh, Professor of Engineering. 636 Yale Avenue.

Sunka Simon, M.A., Universitadt Hamburg; Ph.D., The Johns Hopkins University, Assistant Professor of German. Swarthmore College.

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.

¹ Absent on leave, fall 1999.

² Absent on leave, spring 2000.

³ Absent on leave, 1999-2000.

⁵ Fall 1999 (appointment that semester only).

Robert J. Sklenar, B.A., University of Michigan; M.A., Princeton University; J.D. and Ph.D., University of Michigan, Visiting Assistant Professor of Classics. Swarthmore College.

Lisa Smulyan, B.A., Swarthmore College; M.A.T., Brown University; Ed.D., Harvard Graduate School of Education, Associate Professor of Education. 115 College Avenue.

Kirsten E. Speidel, B.A., Oberlin College; M.A., Johns Hopkins University, Instructor of Chinese (part-time). Swarthmore College.

Michael Speirs, B.A. and M.A., University of Pennsylvania, Visiting Instructor in Sociology and Anthropology. 545 Strath Haven Avenue.

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.

Andrea A. 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 Harriet 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.

Mark P. Taylor, B.S., Massachusetts Institute of Technology; Ph.D., Brandeis University, Visiting Assistant Professor of Physics/Astronomy. 445 Rogers Lane, Wallingford, PA 19086.

Ronald A. Tirpak, B.A., Millersville University; M.A., Temple University, Assistant in Physical Education. 440 Strath Haven Avenue.

Anne Seitz Tokazewski, B.A., North Central College; M.S., Utah State University, Laboratory Instructor in Biology.

Eva F. Travers, B.A., Connecticut College; M.A. and Ed.D., Harvard University, Professor of Education. 416 Park Avenue.

Carlos A. Trujillo,⁶ M.A., Universidad de Chile; Ph.D., University of Pennsylvania, Visiting Associate Professor of Spanish (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, Associate Professor of Political Science. Swarthmore College.

Thomas Valente, B.S., Montana State University, Laboratory Instructor in Biology. Swarthmore College.

Elizabeth A. Vallen,¹ B.A., Case Western Reserve University; Ph.D., Princeton University, Assistant Professor of Biology. Swarthmore College.

Charlotte Veloski, B.S., Drexel University; M.S., Philadelphia College of Pharmacy and Science, Laboratory Instructor in Chemistry.

Judith G. Voet, B.S., Antioch College; Ph.D., Brandeis University, James H. Hammons Professor of Chemistry. 368 Trevor Lane, Bala Cynwyd, PA 19004.

Amy Cheng Vollmer, B.A., William Marsh Rice University; Ph.D., University of Illinois, Associate Professor of Biology. Swarthmore College.

Robin E. Wagner-Pacifiaci,³ B.A., Brown University; M.A. and Ph.D., University of Pennsylvania, Professor of Sociology. 330 North Princeton Avenue.

Mark I. Wallace,³ 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.

1 Absent on leave, fall 1999.

3 Absent on leave, 1999-2000.

6 Spring 2000 (appointment that semester only).

Faculty

Andrew H. Ward, A.B., Harvard University; Ph.D., Stanford University, Assistant Professor of Psychology. 801 Yale Avenue #704.

Michael R. Wedlock, B.S., Hope College; M.S., Ph.D., University of Chicago, Visiting Assistant Professor of Chemistry.

Robert E. Weinberg, B.S., Cornell University; M.A., Indiana University; Ph.D., University of California, Berkeley, Associate Professor of History. 940 Harvard Avenue.

Philip M. Weinstein, A.B., Princeton University; A.M. and Ph.D., Harvard University, Alexander Griswold Cummins Professor of English Literature. 510 Ogden Avenue.

Douglas M. Weiss, A.T.C., Professor of Physical Education. 117 S. Chester Road.

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, Assistant Professor of English Literature. Swarthmore College.

B. Tyrene White, B.A., Middle Tennessee State University; M.A., Ph.D., Ohio State University, Associate Professor of Political Science. 318 N. Chester Road.

Thomas Whitman, B.A., Swarthmore College; Ph.D., University of Pennsylvania, Assistant Professor of Music (part-time). Swarthmore College.

Brenda L. Wido, B.S., Elizabethtown College; M.C.C., Hahnemann University, Laboratory Instructor in Chemistry. 705 Erlen Road, Norristown, PA 19401.

Eric M. Wiener, B.S., Pennsylvania State University; M.S. and Ph.D., University of Missouri–St. Louis, Visiting Assistant Professor of Biology. Swarthmore College.

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.

Timothy C. Williams, B.A., Swarthmore College; A.M., Harvard University; Ph.D., Rockefeller University, Professor of Biology. 314 Rutgers Avenue.

Craig Williamson, B.A., Stanford University; M.A., Harvard University; Ph.D., University of Pennsylvania, Professor of English Literature. 602 Elm Avenue.

Sarah Willie, B.A., Haverford College; M.A. and Ph.D., Northwestern University, Assistant 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.

Colette J. Windish, Maîtrise d'anglais, Université de Paris; Ph.D., Princeton University, Visiting Assistant Professor of French. #3 Crum Ledge.

Sujane Wu, B.A., Soochow University, Taipei, Taiwan; M.A., University of Wisconsin-Madison, Instructor in Chinese (part-time). Swarthmore College.

Ben Yagoda,⁵ B.A., Yale University; M.A., University of Pennsylvania, Visiting Associate Professor of English Literature (part-time).

⁵ Fall 1999 (appointment that semester only).

Standing Committees of the Faculty 1999-2000

Academic Requirements

GROSS,* Charlton,* Cheever, Durgin, Goundie, Halpern, Ledbetter, Warner,* Williamson*

Ad Hoc Group to Review Definition of Positions in Physical Education and Athletics

JACOBS, Hungerford, Kemler Nelson

Faculty Advisory Council to Dean of Admissions

OBERDIEK, Boccio, Bock,* Charlton,* Diaz-Barriga, Mamlet,* McGarity, Valelly, Willie, one dean's staff appointment pending

Copyright Policy Task Force

STEPHENSON, Downing, Grace, Hollister, Maxwell, Seiden, Shiffirin

Council on Educational Policy

KEITH,* Bloom,* Collings, Forrester, Hassett, Pasternack, Smulyan, Vollmer, Whitley '01, Whitfield-Smith '02

Committee on Faculty Procedures

KEITH,* Bloom,* Magenheimer, Merz, Saffran, Talvacchia, Weinstein, Werlen

Computing Services

STEPHENSON, Boccio, Cavanaugh, Downing,* Drumm, Francis, M. Jones, Murphy, Raff, Seiden, three students to be appointed

Cooper

CARPENTER, M. ELDRIDGE* (co-chairs), N. Anderson, Hess, Holloway, R. Hopkins, Levinson, Morrison, Saragosa, Smythe,* Whitman, one dean's staff appointment pending, two students

Curriculum Committee

WILLIAMSON,* DuPlessis, Friedler, Shimamoto, Warner,* Manz '01, Sajdera '01

Fellowships and Prizes

STOTT*/WILLIAMSON (co-chairs), Alston, M. Brown, Charlton,* Deutsch, B. Dorsey, Meunier, Schuldenfrei, Siwicki, M. Westphal,* T. White

Foreign Study

PIKER,* Charlton, G. Evans,* Grant, Guardiola, Howard, Napoli, Talbot, one dean's staff appointment pending

Health Science Advisory

SIMEONE,* Charlton, G. Evans, Purrington, Stout, Vallen, Weiss

Library

SEIDEN,* Bensch, Chireau, Downing, Kitao (SP '00), Mazza, A. Morrison, Purrington, Schall, Stephenson,* P. White

Advisory Council to Physical Education and Athletics

BLACKBURN, Borbee, Devin, A. Johnson, one dean's staff appointment pending, two students to be appointed

Promotion and Tenure

BLOOM,* Cothren, Keith,* Munoz, Voet, Westphal

Research Ethics

T. WILLIAMS, Cheever, Ward

Science Planning

MERZ/SCHALL/KEITH, Brown, Exon, Meeden, Rablen, Sawyers, Shimamoto, Siwicki, Travers, Everbach, M. Hasbrouck, D. Abramowitz, S. Hain, four students to be appointed, two Board members

Women's Concerns

WEINBERG/CHMIELEWSKI (Co-Chairs), Davis, C. Evans, K. Henry, Nackenoff, Rice-Maximin, M. Robinson,* D. Timm-Dinkins,* two students to be appointed

Special Appointments

Division Chairs

Humanities, Friedler
Natural Sciences & Engineering, Shimamoto
Social Sciences, DuPlessis

Marshal

Hungerford

Parliamentarian

Frost

Secretary to the Faculty

Turpin

*staff ex officio

Faculty Representatives to Other Committees

Advisory Council to the Dean (formerly the Academic Support, Exchange, and Alcohol Policy Committees)

GROSS,* Burke, Charlton,* Cobo,* Goundie, C. James, N. Johnson, Moscatelli, Ward, Sams,* three students

Advisory Council to the Vice President for Facilities and Services
Everbach, Exon

Ad Hoc Committee on ADA Planning
SCHALL,* Human Resources director,* G. Evans,* Saffran, M. Westphal*

Animal Use and Care Committee
HIEBERT, Macken, Ristine, Wimberly, Streams, Brenda Perkins, DVM, Yolanda Alcorta (Counsel, Bryn Mawr College)

College Budget Committee
ASLANIAN,* Bloom,* Cavanaugh,* Chijioke, Eldridge,* Faber, Golub, Grinstead, Gross,* Keith,* Mamlet,* Rablen, Schall,* Welsh,* West,* Williamson,* staff appointment by SAC pending, four students

College Judiciary Committee
GROSS,* Durgin (Reg), Hiebert (Reg), R. Eldridge (Alt), Orthlieb (Alt), Weinberg (Alt), Goundie (Observer),* one staff appointment made by dean pending (Reg), two staff appointments made by dean pending (Alt), two students

College Planning Committee
BLOOM,* Aslanian,* DuPlessis,* M. Eldridge,* Friedler,* Gross,* Keith,* Mamlet,* Li, Mullan, Pasternack, Schall,* Shimamoto,* Stephenson,* West,* Williamson,* three students

Community Services Advisory Board
P. JAMES,* D. Anderson, Borbee, Bradley, G. Evans, Francis, Goundie,* Wylie*

Cultural Diversity
SAMS*/WILLIAMSON,* (Co-Chairs), two dean's staff appointment pending, students to be appointed

Equal Opportunity Advisory Committee
O'CONNELL, Human Resources director,* Downing, Echols,* Hunter, Li, Narkin, M. Robinson,* Sams,* Siddiqui, staff appointment by SAC pending,

Faculty and Staff Benefits
ASLANIAN,* Human Resources director,* Benefits director,* Gaustad, Hain, Maio, Staff appointment by SAC pending, Werlen, Williamson*

Honorary Degrees
BLOOM*/WEST* (co-chairs), N. Anderson, Gaustad, Kuharski, Kurth, three Board members to be designated

Lang Scholarship
GROSS,* D. Anderson, Grant, P. James,* Travers, M. Westphal*

Sager
JUDSON, Blanchard, Cobo, Henry, Huber,* P. James, N. Johnson, Moskos, D. Smith, Wedlock, P. White

Swarthmore Asian-American, Latino, Native American and African Heritage Concerns Committee

CHIREAU, R. Jefferson, M. Robinson, Cobo,* G. Evans, P. James, Sams,* two students to be appointed

Swarthmore Foundation
P. JAMES,* Fernald, Francis, Goundie, J. James, Jensen, J. Mullins, Munson, Ridgeway,* Shibles, Stott,* L. Talbot

Faculty Representatives to Committees of the Board

Board Observers
Blackburn, Faber

Property
Exon, Everbach

Social Responsibility
Everbach, Friedler, Keith, Oberdiek

Student Life
Burke, James, N. Johnson, Moscatelli

*staff ex officio

Programs and Concentrations

Asian Studies

BERKOWITZ, Li, Graybill (F '99),
S. Hopkins, Kong, T. White, Westphal

Black Studies

WILLIE, Burke, Carpenter, Chireau,
A. Dorsey, James, Leach, O'Connell,
Rice-Maximin, Schmidt, two students to
be appointed

Comparative Literature

LESJAK, Berkowitz, Bolton, Bradley, Faber,
Hassett, Moskos, Rose, Weinstein, Werlen

Computer Science

MEEDEN, Grinstead, Maxwell, Friedler,
one student

Environmental Studies

EVERBACH, Latham, Horwitz, McGarity,
Nackenoff, Oberdiek, Orthlieb, Speirs,
Swearer, Valelly, Wallace, Westphal

Francophone Studies

LANE/BLANCHARD, DuPlessis, Freeman,
Hess, Grant, Halpern, Hungerford, Lorraine,
Moskos, Rice-Maximin, Wallace, Weinstein,
Windish

German Studies

FABER, Pavsek, Judson, Kurth, Lorraine,
Marissen, Munoz

Interpretation Theory

WEINSTEIN/GRANT, Gergen, Wagner-
Pacifci

Latin American Studies

DIAZ-BARRIGA, Camacho de Schmidt,
Friedman, Gotkowitz, Hassett

Linguistics

NAPOLI, Eldridge, Everbach, Fernald, Munoz

Medieval Studies

BENSCH, Cothren, Bensch, Deutsch,
Marissen, Ross, Turpin, Williamson

Peace and Conflict Studies

FROST, Bayer, Chmielewski, R. Hopkins,
Lacey, Murphy, Ward

Public Policy

MAGENHEIM, Caskey, Hollister, Hopkins,
Iversen, Latham, McGarity, Mendel-Reyes,
Nackenoff, Reeves, Rubin, Travers, Valelly,
Weinberg

Teacher Education

TRAVERS, Faber, Hiebert, Hunter,
N. Johnson, Piker, Smulyan, Weinberg

Women's Studies

N. JOHNSON/LORRAINE, Everbach, Khan,
Lesjak, Nackenoff, Simon

Divisions and Departments

I. DIVISION OF THE HUMANITIES

Sharon Friedler, Chair

Art

Randall L. Exon, Chair

Asian Studies (Program)

Alan Berkowitz, Program Coordinator

Classics

William N. Turpin, Chair

English Literature

Charles L. James, Chair

History

Robert E. Weinberg, Chair

Mathematics and Statistics

Janet C. Talvacchia, Chair

Modern Languages and Literatures

Thompson Bradley, Chair

Music and Dance

James D. Freeman, Chair

Philosophy

Richard Eldridge, Chair

Psychology

Deborah G. Kemler Nelson, Department
Head

Religion

Donald Swearer, Acting Chair

II. DIVISION OF THE NATURAL SCIENCES AND ENGINEERING

Lynne A. Molter, Chair

Biology

Mark Jacobs, Chair

John B. Jenkins, Associate Chair

Chemistry

Judith Voet, Acting Chair

Faculty

Computer Science (Program)

Lisa Meeden, Program Director

Engineering

Faruq M.A. Siddiqui, Chair

Linguistics (Program)

Donna Jo Napoli, Program Director

Mathematics and Statistics

Janet C. Talvacchia, Chair

Philosophy

Richard Eldridge, Chair

Physics and Astronomy

Peter J. Collings, Chair

Psychology

Deborah G. Kemler Nelson, Department Head

III. DIVISION OF THE SOCIAL SCIENCES

Robert S. DuPlessis, Chair

Economics

Ellen Magenheimer, Chair

Education (Program)

Eva F. Travers, Program Director

Engineering

Faruq M.A. Siddiqui, Chair

History

Robert E. Weinberg, Chair

Linguistics (Program)

Donna Jo Napoli, Program Director

Mathematics and Statistics

Janet C. Talvacchia, Chair

Philosophy

Richard Eldridge, Chair

Political Science

Carol Nackenoff, Chair

Psychology

Deborah G. Kemler Nelson, Department Head

Sociology and Anthropology

Braulio Muñoz, Chair

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

Administration

Alfred H. Bloom, B.A., Princeton University; Ph.D., Harvard University, President and Professor of Psychology and Linguistics.

Jennie Keith, B.A., Pomona College; M.A. and Ph.D., Northwestern University, Provost and Centennial Professor of Anthropology.

Paul J. Aslanian, B.A., M.B.A., University of Washington; C.P.A., Vice President for Finance and Planning.

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.

Robin G. Mamlet, A.B., Occidental College, Dean of Admissions.

Lawrence M. Schall, B.A., Swarthmore College; J.D., University of Pennsylvania, Vice President for Facilities and Services.

PRESIDENTS' OFFICE

Alfred H. Bloom, B.A., Princeton University; Ph.D., Harvard University, President and Professor of Psychology and Linguistics.

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.

Margaret M. Giovannini, Administrative Coordinator for the President.

Janet A. Kazio, Administrative Coordinator for the Vice President/Executive Assistant to the President.

PROVOST'S OFFICE

Jennie Keith, B.A., Pomona College; M.A. and Ph.D., Northwestern University, Provost and Centennial Professor of Anthropology.

Barry Schwartz, B.A., New York University; M.A. and Ph.D., University of Pennsylvania, Associate Provost and Dorwin P. Cartwright Professor of Social Theory and Social Action.

Thomas Stephenson, B.S., Furman University; Ph.D., The University of Chicago, Associate Professor of Chemistry and Associate Provost for Information Technology.

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

Cathy Pescatore, Administrative Coordinator.

DEAN'S OFFICE

Robert J. Gross, B.A., Swarthmore College; M.S.S., Bryn Mawr College Graduate School of Social Work; M.A.T., Ed.D., Harvard University, Dean of the College.

Joy Charlton, B.A., University of Virginia; M.A. and Ph.D., Northwestern University, Associate Dean for Academic Affairs.

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.

Tedd R. Goundie, B.S., Muhlenberg College; M.S., Bowling Green State University, Associate Dean of the College for Student Life.

Anna M. Cobo, B.A., St. John's University; M.A., New York University, Assistant Dean of the College and Director of the Intercultural Center.

Timothy E. Sams, B.A., Union College; M.A., SUNY at Albany, Assistant Dean of the College and Director of the Black Cultural Center.

Administration

Gloria Carey Evans, B.A., Western Washington College of Education; M.S., University of Washington; Ph.D., Stanford University, Consultant for Testing and Guidance and Adviser to Foreign Students.

Myrt Westphal, A.B., Occidental College; Ed.M., Boston University, Assistant Dean of the College and Director of Residential Life and Coordinator for Services for Students with Disabilities, Lang Scholarship Advisor.

Karen M. Henry, B.A., Swarthmore College; M.S.S., Bryn Mawr College Graduate School of Social Work, Assistant Dean of the College and Gender Education Advisor.

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

Davirah W. Timm-Dinkins, B.A., Swarthmore College; M.A., Fairleigh Dickinson University, Coordinator of Student Activities.

Patricia James, B.A., Colorado College; M.Ed., Temple University, Director of Community Service Learning.

Ida Leader Miller, B.A., Princeton University, Academic Support Coordinator.

Patricia A. Coyne, Administrative Coordinator.

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David Robinson, Computer Operator.

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Lenny Wilson, B.A., University of Delaware, Garden Supervisor.

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Kelly Ewald, B.S., Drexel University, Manager of Facilities Information.

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Patricia Serianni, B.A., M.Ed., Pennsylvania State University, Associate Director of Financial Aid.

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Andrea Sconier LaBoo, B.A., Swarthmore College; M.A., Pennsylvania State University, HIV Test Counselor.

James E. Clark, B.A., West Virginia University; M.D., Jefferson Medical College, Medical Director, Crozer Chester Medical Center.

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Paul S. Zamostien, B.S., Ursinus College; M.D., Jefferson Medical College, Consulting Gynecologist.

Rima Himelstein, B.S., University of Pennsylvania; M.D., University of Pennsylvania; Internship Residency Mount Sinai Hospital; M.D., Adolescent Medicine; Consultant.

Charles D. Hummer III, M.A., B.A., Amherst College; M.D., Jefferson Medical College; Internship, Pennsylvania Hospital; Residency, Thomas Jefferson University; Fellowship, University of Cincinnati/The Christ Hospital; Orthopedic Consultant.

Kim Paterson, B.S., Cornell University; M.D., Temple Medical School, Residency/Internship, Pennsylvania Hospital, Consultant, Internal Medicine.

Bonnie Ermel, Nursing Assistant.

Carolyn D. Evans, Health Services Administrative Assistant.

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Ushi Tandon, B.S., Pennsylvania State University; M.A., University of Pennsylvania, Administrative Assistant.

Robert A. Puri, A.B., Rutgers University; M.B.A., Seton Hall, Library Accounts Manager.

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Minda Hart, B.A., Pennsylvania State University; M.S., Drexel University, Interlibrary Loan Specialist.

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David A. Loynds, B.S., Swarthmore College, Technical Services Assistant.

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Allison Enke, M.S., B.S., Southwest Missouri State University; Doctoral Candidate, Temple University Clinical Psychology Program, Psychology Intern.

MacAndrew Jack, B.A., Tufts University; M.A., University of Tulsa; Doctoral Candidate, Temple University Clinical Psychology Program, Psychology Intern.

Galina Mindlin, R.N., Medical College of Academy of Medical Science, Russia; M.D., Ph.D., First Moscow Medical School, Russia, Psychiatric Resident.

Madeleine Page, B.A., Glendon College, Canada; Ed.M., Harvard University, Doctoral Candidate, Widener University Institute of Graduate Clinical Psychology, Psychology Intern.

Jill Ragozzino, B.A., Earlham College, M.S.S., Bryn Mawr College Graduate School of Social Work and Social Research, Clinical Social Work Fellow.

Birgitte Haselgrove, Administrative Assistant.

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German Studies: Eleonore Baginski, B.S., St. Joseph's University, Administrative Coordinator.

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Wesley College, Administrative Assistant.

Religion: Eileen McElrone, Administrative
Assistant.

Sociology and Anthropology: Rose Maio,
Administrative Coordinator.

Women's Studies: Jen Gifford, Administra-
tive Assistant.

Visiting Examiners 1999

ART

Professor Joseph Byrne, *Trinity College*
Judy Moonelis, *Rhode Island School of Design*
Professor Donna Sadler, *Agnes Scott College*
Professor Stanley Kenji Abe, *Duke University*
Professor Patricia Mathews, *Oberlin College*

ASIAN STUDIES

Professor Stanley Kenji Abe, *Duke University*
Professor Barrett McCormick, *Marquette University*

BIOLOGY

Dr. Laurie Tompkins, *National Institutes of Health*
Professor Ann Herzig, *Bryn Mawr College*
Professor John Terborgh, *Duke University-Center for Tropical Conservation*
Professor James Gould, *Princeton University*
Professor John Dighton, *Rutgers University*
Professor Patrick Piggot, *Temple School of Medicine*
Professor Rocky Tuan, *Thomas Jefferson University-Jefferson Medical College*
Professor Gerald Grunwald, *Thomas Jefferson University-Jefferson Medical College*
Professor Mitchell Singer, *University of California-Davis*
Professor Carl Huether, *University of Cincinnati*
Professor Arthur Zangerl, *University of Illinois-Urbana-Champaign*
Professor Ted Abel, *University of Pennsylvania*
Professor Andrew Binns, *University of Pennsylvania*
Professor Eleanor Pollak, *University of Pennsylvania Medical Center*
Professor Jonathan Raper, *University of Pennsylvania Medical School*
Professor Janice Voltzow, *University of Scranton*
Professor Robert Curry, *Villanova University*
Professor David Hooper, *Western Washington University*

BLACK STUDIES

Professor Jacqueline Mattis, *University of Michigan*

CHEMISTRY

Professor Michael Toney, *Albert Einstein College of Medicine*
Professor Michael Summers, *University of Maryland, Balt. Co*

Professor Stephen Dimagno, *University of Nebraska*
Professor James Keller, *University of Notre Dame*

CLASSICS

Professor Peggy Knapp, *Carnegie Mellon University*
Professor Fred Paxton, *Connecticut College*
Professor Judith Ginsburg, *Cornell University*
Professor Charles Brittain, *Cornell University*
Professor Barbara Holdrege, *University of California, Santa Barbara*
Professor Joseph Farrell, *University of Pennsylvania*
Professor Donna Sadler, *Agnes Scott College*

COMPUTER SCIENCE

Professor Scot Drysdale, *Dartmouth College*
Professor Douglas Blank, *University of Arkansas, Fayetteville*

ECONOMICS

Professor Janet Ceglowski, *Bryn Mawr College*
Professor Katherine Swartz, *Harvard School of Public Health*
Professor Eric Smith, *University of Pennsylvania; University of Essex, England*
Professor David Ross, *Bryn Mawr College*
Professor Thomas Dee, *Georgia Institute of Technology*
Professor Daniel Hamermesh, *University of Texas-Austin*
Loretta Mester, *Federal Reserve Bank of Philadelphia*
Radwan Shaban, *World Bank*

EDUCATION

Professor Kathleen Shaw, *Temple University*
Professor Cynthia Lightfoot, *Penn State Delaware County*

ENGINEERING

Professor James Baish, *Bucknell University*
Professor John Molyneux, *Widener University*
Akawasi Boateng, *Fuel and Combustion Technology*

ENGLISH LITERATURE

Professor Peggy Knapp, *Carnegie Mellon University*
Professor Cassandra Laity, *Drew University*
Professor Theresa Tenuan, *Haverford College*
Professor Todd Haynes, *Filmmaker*

Professor Maria DiBattista, *Princeton University*
Professor Meredith Skura, *Rice University*
Professor Timothy Corrigan, *Temple University*
Professor Patricia Yaeger, *University of Michigan*
Professor Ann Cvetkovich, *University of Texas-Austin*
Professor David Huddle, *University of Vermont*
Professor Thadious Davis, *Vanderbilt University*
Maureen Owen, *Poet, and Editor of Telephone Magazine and Telephone Books Press*

GERMAN STUDIES

Professor Dorothy Ostmeier, *University of Washington*

HISTORY

Professor Sarah Deutch, *Clark University*
Professor Fred Paxton, *Connecticut College*
Professor Douglas Egerton, *Lemoyne College*
Professor Lora Wildenthal, *Massachusetts Institute of Technology*
Professor Marc Epprecht, *Trent University, Peterborough*
Professor Louise McReynolds, *University of Hawaii*
Professor Benjamin Nathans, *University of Pennsylvania*
Professor Paul Grendler, *University of Toronto*
Professor Rudy Koshar, *University of Wisconsin-Madison*
Professor Sherman Cochran, *Woodrow Wilson Center*

LINGUISTICS

Professor Carlos Otero, *University of California-Los Angeles*
Professor John Moore, *University of California at San Diego*
Professor Ellen Kaisse, *University of Washington*

MATHEMATICS & STATISTICS

Professor Rhonda Hughes, *Bryn Mawr College*
Professor Nancy Hingston, *Institute for Advanced Study, Princeton, NJ*
Professor Elaine Zanutto, *University of Pennsylvania*

MODERN LANGUAGES – CHINESE

Professor Chiu-Mi Lai, *Lewis and Clark College*

MODERN LANGUAGES – FRENCH

Professor F. Nick Nesbitt, *Miami University-Ohio*
Professor Roland Simon, *University of Virginia*

MODERN LANGUAGES – GERMAN

Professor Imke Meyer, *Bryn Mawr College*

MODERN LANGUAGES – LITERATURE

Professor Robert Lima, *Pennsylvania State University*

MODERN LANGUAGES – RUSSIAN

Professor George Pahomov, *Bryn Mawr College*

MODERN LANGUAGES – SPANISH

Professor Carlos Trujillo, *Villanova University*

MUSIC

Dr., Jan Hamer, *Curtis Institute of Music*
Professor Cynthia Folio, *Boyer College of Music, Temple University*

PHILOSOPHY

Professor Charles Brittain, *Cornell University*
Professor Liam Murphy, *School of Law, New York University*
Professor Lawrence Thomas, *Syracuse University*
Professor Lisa Downing, *University of Pennsylvania*
Professor Ladelle McWhorter, *University of Richmond*
Professor Richard Feldman, *University of Rochester*

PHYSICS & ASTRONOMY

Professor Jan Tobochnik, *Kalamazoo College*
Professor Timothy Sullivan, *Kenyon College/Lucent Technologies*
Professor Robert Hallock, *University of Massachusetts*
Professor Stephen Ratcliff, *Middlebury College*

POLITICAL SCIENCE

Professor William LeoGrande, *American University*
Professor Sara Shumer, *Haverford College*
Professor Joshua Miller, *Lafayette College*
Professor Barrett McCormick, *Marquette University*
Professor Ronald Kahn, *Oberlin College*

Visiting Examiners

Professor Mark Pollack, *University of Wisconsin*
Professor Kenneth Finegold, *Eastern Washington University*
Professor Jonathan Mercer, *Harvard University*
John Harbeson, *U.S. Institute of Peace*

PSYCHOLOGY

Professor Kimberly Cassidy, *Bryn Mawr College*
Professor Earl Thomas, *Bryn Mawr College*
Professor Lisa Brown, *University of Florida*
Professor Jacqueline Mattis, *University of Michigan*
Professor John Shotter, *University of New Hampshire*

PUBLIC POLICY

Professor Katherine Swartz, *Harvard School of Public Health*
Radwan Shaban, *World Bank*

RELIGION

Professor John Strong, *Bates College*
Professor Leonard Primiano, *Cabrini College*
Professor David Dawson, *Haverford College*
Professor Kenneth Koltun-Fromm, *Haverford College*
Professor Millicent Feske, *St. Joseph's University*
Professor Barbara Holdrege, *University of California, Santa Barbara*

SOCIOLOGY & ANTHROPOLOGY

Professor Thomas Dumm, *Amherst College*
Professor Cindy Wong, *City University of New York*
Professor Jeffrey Olick, *Columbia University*
Professor Nancy Minugh-Purvis, *Hahnemann University of the Health Sciences*
Professor Donald Kulick, *New York University*
Professor Kim Fortun, *Rensselaer Polytechnic Institute*
Professor Becky Thompson, *Simmons College*
Professor Anne Meneley, *Trent University*
Professor Stuart Kirsch, *University of Michigan*
Professor Roberta Iversen, *University of Pennsylvania*
Professor Barbara Harlow, *University of Texas-Austin*
Professor Jamer Hunt, *University of the Arts*
Professor Paul Brodwin, *University of Wisconsin-Milwaukee*
Joseph Stork, *Human Rights Watch*

THEATRE STUDIES

Professor Helena White, *University of the Arts*
Professor Helen Richardson, *University of Utah*
Paul Owen, *Actors Theater of Louisville*

Degrees Conferred

May 31, 1999

BACHELOR OF ARTS

- Jason Douglas Albright, *English Literature*
Michael Limyongpeng Anderson, *Economics*
Suzanne Elisabeth Andrews, *Theatre Studies and Sociology & Anthropology*
Aviva Arad, *Religion*
Smitha Arekapudi, *Economics*
Mason Royden Astley, *English Literature*
Sarah Kate Atkins, *Sociology & Anthropology*
Kyle Aveni-Deforge, *Biology*
Ijeoma Chinwoke Azonobi, *Psychology*
Maya Anne Bacon, *Political Science*^{1,8}
Caroline Jeannette Bader, *Economics*
Anderson Thornton Bailey, *English Literature*
Jennifer Claire Barager, *English Literature*⁶
Laura Kendall Barandes, *English Literature and Sociology & Anthropology*
Kirran Zia Bari, *Economics*
Holly Felicity Barton, *Russian*
Tobie Barton, *Political Science*⁶
George Arthur Bealefeld III, *Philosophy*
Stacey Lynn Bearden, *Mathematics*
Leal Casey Beck, *Biology*
Jill Ann Belding, *English Literature*
Brian Andrea Bell, *Economics*
Julia Bennett Berkman, *Art*
Kate Bernstein, *Special Major: Film & Cultural Studies*⁶
Amit Bouri, *Sociology & Anthropology*
Keelyn Demont Bradley, *Theatre Studies and Political Science*
Timothy Richard Bragg, *Biology*
Simone Ruth Brant, *Economics and Special Major: Environmental Science*
Nicole Danielle Breazeale, *Special Major: Education & Political Science*
Timothy Crawford Bretl, *Mathematics and Engineering*
Jennifer Celeste Briggs, *English Literature*¹¹
Rachel Mary Elizabeth Brooker, *Special Major: Dance & Biology*
Brantley Lloyd Bryant, *Medieval Studies*
Rachel Sagner Buurma, *English Literature and Sociology & Anthropology*
Andrew Augustine Caffrey III, *Biology and Mathematics*
Jean Anne Calise, *English Literature*
Mark Lloyd Charette, *Sociology & Anthropology*
Jennifer Zi-Yun Chen, *History*
Saima Martin Chowdhury, *Economics and Political Science*
Martine Bourque Claremont, *Biology*
Matthew Parker Coddington, *Special Major: Computer Science*
Casey Simone Cohn, *Special Major: Education and Sociology & Anthropology*
Edward Donald Cohn, *History*
Jaclyn Leah Coutts, *Political Science and German*
Amity Ching-Yee Cox, *Special Major: Dance & Spanish*
Sarah Newbold Cross, *Psychology*
Nimish Rajesh Dave', *Economics*
Andrea Michelle Simpson Deese, *English Literature*
Erin Martindale Denney, *Biology*
Ila Shekhar Deshmukh, *Special Major: Education & Political Science*
Ethan Thomas Seath Devine, *Spanish*²
Amy Foldes Dickson, *Biology*
Christopher Michael DiLeo, *Special Major: Computer Science*⁹
Patrick Tien Donaghy, *Psychology*
Chloe Anise Dowley, *Special Major: Education and Sociology & Anthropology*
Alex William Dubea, *Sociology & Anthropology*
Apryl Ann Dunning, *Psychology*
Keith William Earley, *Special Major: Linguistics and Biology*
Jill Martha Eaton, *Special Major: Environmental Studies*⁹
Shamsah Ebrahim, *Special Major: Biochemistry*
Sarah Alethea Elwell, *Special Major: Education & English*
Gregory Ronald Emkey, *Biology*
Emre Eren, *Sociology & Anthropology*⁶
Derin Raif Esmer, *Sociology & Anthropology*
Sean Michael Ewen, *Chemistry*

1 with the concentration in Black Studies

2 with the concentration in Computer Science

3 with the concentration in Environmental Studies

4 with the concentration in Francophone Studies

5 with the concentration in German Studies

6 with the concentration in Interpretation Theory

7 with the concentration in Latin American Studies

8 with the concentration in Peace and Conflict Studies

9 with the concentration in Public Policy

10 with the concentration in Women's Studies

11 Pennsylvania Teacher Certification

Degrees Conferred

Daniel Joseph Fanaras, *Economics*⁹
 Jessica Ruth Fenn, *English Literature*
 Erin Olivia Figueira, *English Literature*
 John Marsh Finkbiner, *Chemistry*
 Christopher Daniel Flood, *History*
 Amber Ailisa Frank, *Special Major: Linguistics and Theatre Studies*
 Anne Elizabeth Frankenfield, *Special Major: Psychobiology*¹¹
 John Rufus Frazer, *Mathematics and Religion*
 Eric Bruce Freedman, *Sociology & Anthropology*
 Joshua James Freker, *Sociology & Anthropology*
 Ethan Jared Friedman, *Biology*
 Benjamin Kalter Fritz, *Political Science and Economics*
 Ryan Karlton Fruh, *Economics*
 Erin Kay Fulkerson, *Biology and Art*
 McKenzie Warren Funk, *Philosophy*
 Janice Kreinick Gallagher, *Political Science*
 Seth McGregor Garber, *Special Major: Biochemistry*
 Cordelia Helen Garrett-Goodyear, *Psychology*
 Janine Elizabeth Gent, *Special Major: Education & Spanish Literature*
 Frederick Eli Gerson, *Art History*
 Rachel Elisabeth Goldmann, *Special Major: Linguistics and Psychology*
 Benjamin Louis Goldsmith, *History*
 Edward Dujari Gonzalez, *Economics*⁹
 Tina Yushan Gourd, *Special Major: Education, and Sociology & Anthropology*¹¹
 Ilmi Muhaiyaddeen Elijah Granoff, *Philosophy and Special Major: Biological Anthropology*
 Daniel Patrick Green, *Economics*
 Erin Melissa Greeson, *Art*
 Carrie Danielle Griffin, *Psychology*
 Donna Elizabeth Griffin, *Biology*
 Robert Stewart Griffin, *Biology*
 Eric Paul Haeker, *Music*
 Julian A. Haffner, *Political Science*
 Jennifer Lynn Hagan, *Political Science and Art History*
 Katherine Jane Hall, *Special Major: Astrophysics and Music*

Megan Corbett Hallam, *Psychology*
 Emily Elisabeth Hanawalt, *History*
 Nathaniel Ross Hanson, *Biology*
 Jessica Lynn Harbour, *History*
 Simon George Harding, *Theatre Studies*
 James Edward Harker, *Sociology & Anthropology*
 Patrice Nicole Harper, *Special Major: Education & Psychology*
 Amy Lucile Harrington, *Biology*¹⁰
 Austin Winfield Harris, *Economics*
 James Paul Harris, *Political Science*
 Jennifer Elena Harvey, *Biology*
 Anne Katherine Heidel, *Political Science*
 Stephanie Chiyoko Herring, *Special Major: Biochemistry*
 Lurah May Hess, *Mathematics*
 Karen Leslie Hiles, *English Literature and Music*
 Kelly Bourke Hilgers, *Psychology*
 Ashley Somer Hill, *History and Religion*
 Aaron William Hirschhorn, *Special Major: Psychobiology*
 Aisha Nayo Hobbs, *Theatre Studies*
 Anne Robbins Holland, *Religion*
 Jennie Burr Hounshell, *Political Science and Biology*
 Matthew Weldon Howard, *Religion and Political Science*
 Mong-Ying Ani Hsieh, *Economics and Engineering*
 Benjamin Patrick Huff, *Physics*
 Diana Katharine Hunt, *Chemistry*
 Susan Elizabeth Hunt, *Biology*
 Marie-Christine Hyland, *Religion*
 Gregory Andrew Ingber, *Theatre Studies*
 Paula Magdalena Ioanide, *Philosophy*
 Aarti Iyer, *Psychology*
 Fathmatta Diana Jalloh, *Political Science*
 Vanessa Nicole Jann-Jordan, *Political Science*
 Maiah Anna Jaskoski, *Political Science*⁷
 Christine Laura Jeuland, *Religion and Special Major: Psychobiology*
 Erika Elaine Johansen, *English Literature*
 Christopher Mays Johnson, *Special Major: Linguistics & Language*

1 with the concentration in Black Studies
 2 with the concentration in Computer Science
 3 with the concentration in Environmental Studies
 4 with the concentration in Francophone Studies
 5 with the concentration in German Studies
 6 with the concentration in Interpretation Theory

7 with the concentration in Latin American Studies
 8 with the concentration in Peace and Conflict Studies
 9 with the concentration in Public Policy
 10 with the concentration in Women's Studies
 11 Pennsylvania Teacher Certification

- Ellen Summer Johnson, *Special Major: Linguistics*
- Darragh Theresa Jones, *Political Science and German*
- Phillip Owen Jones, *Art History*
- David Aaron Kagle, *Biology*
- Matthew Jason Kahn, *Political Science*
- John Fred Kaltenstein, *Political Science*
- Leena Raj Kansal, *Special Major: Psychobiology*
- Nevin Margolis Katz, *Biology*
- Gerry Philip Kaufman, *Political Science*
- Charles Michael Keegan, *Psychology*
- Wendy Elizabeth Kemp, *Psychology*
- Ayesha Haseen Khan, *Political Science and Economics*⁹
- Haejin Kim, *Biology*
- Min-Kyung Kim, *Biology*
- Valencia King, *Chemistry and Sociology & Anthropology*
- Andrew John Kinney, *History*
- Joshua Berk Knox, *Special Major: Environmental Policy & Science*³
- Kirstin Suzanne Knox, *Biology*
- Darby Richard Kopp, *English Literature*
- John Joseph Kosinski, *History*⁵
- Jessica Carew Kraft, *Sociology & Anthropology*
- Sara Elizabeth Kramer, *Music*
- Maria Jeannette Krisch, *Chemistry*
- Gabrielle Kaya Kruks-Wisner, *Sociology & Anthropology*^{7,8}
- Matthew John Kutowski, *Religion*
- Laureen Dumadag Laglagaron, *Economics and Sociology & Anthropology*⁹
- Jessica Lee Lane, *Special Major Education and Sociology & Anthropology*
- John Samuel Lavinsky, *Philosophy*
- Wendy Louise Lawrence, *Biology and Economics*
- Christine Noel Lee, *Psychology*
- Hyorim Lee, *Comparative Literature*
- Rabonne Lee, *Sociology & Anthropology and Political Science*
- Sun Ha Lee, *Philosophy*
- Yvonne Claire Lee, *Special Major: Biochemistry*
- Jamie Beth Lehrer, *Political Science*
- Dana Laurier Lemelin, *Sociology & Anthropology and German*
- Kendra Rose Liddicoat, *Biology*
- Joshua Harlan Lifton, *Physics and Mathematics*²
- Matthew H. Lillvis, *History*
- Sharon Fay Linden, *English Literature*
- Kirstin Tasia Lindermayer, *Biology*
- Rebecca Louie, *Special Major: Cultural Studies*
- Walter Jaren Luh, *Physics*
- Andrew Christian Lund, *Political Science*
- William Alexander Lundry, *Political Science*
- Andrew Adam MacBeth, *Special Major: Electrical & Computer Science*
- Megan Elizabeth MacDowell, *Biology*³
- Robert Anthony Mack, *Psychology*
- Michael Anthony Mahowald, *Biology*
- Amy Deborah Markey, *Special Major: Linguistics*¹¹
- Nathaniel Halton Mason, *Sociology & Anthropology*
- Andrew Neal Mast, *English Literature*
- Benedict Francis Maulbeck, *Comparative Literature*⁷
- Anne Walsh McGarran, *Political Science*⁷
- Maria Isabelle McMath, *Sociology & Anthropology*
- Cameron Brook McPhee, *Special Major: Feminist Cultural Studies*⁶
- Mary Dorothy Meiklejohn, *English Literature*
- Andrea Meller, *Sociology & Anthropology*⁷
- Matthew Joseph Menendez, *Economics and Political Science*
- Timothy James Merkel, *Chemistry*
- Mandara Beth Meyers, *Political Science*¹⁰
- David McKay Mimno, *Latin*²
- Tirian Mink, *Biology*³
- Margaret Amalia Moeser, *Political Science*
- Anoosheh Moghbeli, *Biology*
- Savitri Monga, *Economics*
- Cara Faye Moye, *Special Major: Linguistics*
- Claudia Ximena Munoz, *Biology*
- Kenneth James Munroe, *Sociology & Anthropology*
- Nathan Eric Myers, *English Literature*
- William Michael Nessly, *German*
- Matthew Todd Newcomer, *Psychology*

1 with the concentration in Black Studies

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9 with the concentration in Public Policy

10 with the concentration in Women's Studies

11 Pennsylvania Teacher Certification

Degrees Conferred

- Elizabeth Hadley Nickrenz, *English Literature*
 Elisabeth Nigrini, *Biology*
 Naveen Mayor Nirgudkar, *Economics*
 Elizabeth Manson Norman, *Sociology & Anthropology*
 Elizabeth Suzanne O'Malley, *English Literature and History*
 Helen Elizabeth Oliver, *Economics*⁹
 Jeanne Marie Opar, *Biology*
 Channaly Sun Oum, *Religion*
 Charles Kiriakos Parlapianides, *Economics*
 Mariah Peelle, *Special Major: Biological Anthropology*⁷
 Jeremy David Peterson, *Special Major: Biological Anthropology*
 Victoria Margaret Pettitt, *Sociology & Anthropology*
 Cathryn Joanne Polinsky, *Special Major: Computer Science*
 Imran Uriah Posner, *Sociology & Anthropology and Biology*
 Anne Drew Potter, *Art*
 John Joseph Purdy, *Economics*
 Jonathan Howland Pyle, *Physics and History*
 William Cumming Quale, *Special Major: Linguistics*
 Holly Elaine Quinn, *Russian*
 Jean Ann Quinn, *English Literature*
 Ashwin Laxminarayana Rao, *Special Major: Biochemistry*
 Adam Zaki Rashid, *Economics and Engineering*
 Alyssa Rachel Rayman-Read, *Political Science*
 Jonathan Eliot Reed, *Economics*⁶
 David Peake Reese, *Sociology & Anthropology*
 Toki Rehder, *Sociology & Anthropology*
 Rachel Rose Gutman Reich, *Biology*
 Emily Shippen Rice-Townsend, *Religion*¹⁰
 John Arden Rieffel, *Special Major: Computer Science and Engineering*
 Gordon Stuart Seator Roble, *Biology*
 Nikyia Dawn Rogers, *Art*
 Joshua David Roth, *Economics and Psychology*
 Roberto Jose Ruiz, *Art History*
 Abigail Lauren Salerno, *Special Major: American Studies*
 Scott Cooper Samels, *French*
 Joaquin Sanchez, *Economics and Political Science*⁹
 Sarah Lindley Sanford, *Theatre Studies*
 Danielle Elizabeth Sass, *Biology*⁷
 Abigail Elizabeth Schade, *History*
 Michael Witwicki Schall, *Art*
 Timothy Michael Schofield, *Economics and Political Science*
 Sara Marissa Schulman, *Economics*
 Heather Lee Schwartz, *English Literature*
 Julie Jill Schwendiman, *Philosophy and Physics*
 Jai Wook Shin, *Biology*
 Jonathon Shlens, *Special Major: Computer Science and Physics*
 Craig Allen Shockley, *Physics*²
 Sarah Elizabeth Singleton, *English Literature*
 Anthony Peter Skiadas, *Biology*
 Nicholas Patrick Slimack, *Special Major: Psychobiology*
 Christopher Sean Slotterback, *Economics*²
 Casey Smith, *Special Major: Biochemistry*
 Jessica Ellen Smith, *Art*
 Jessica Ruth Smoler, *Biology*¹¹
 Deborah Isobel Stein, *English Literature*
 Shana Beth Stein, *Biology*
 Benjamin Kendrick Steinbock, *Political Science*⁹
 Shane Christain Steiner, *Ancient History*
 Lynne Michelle Steuerle, *Mathematics*¹¹
 Jonathan Robert Stevens, *Special Major: Psychobiology*
 John Tyler Fedor Stevenson, *Religion*
 Emily Ruth Stewart, *Religion*³
 Susan Elise Stratton, *Religion and Economics*
 Barbara Bains Strickland, *English Literature*
 Ann Leilani Strom, *Philosophy*
 Anthony James Sturm, *Economics*
 Margaret Wen-Ching Su, *Economics and Asian Studies*
 Anna Elise Sugden-Newbery, *Biology*
 Dzevad Sukilovic, *Psychology*
 Rachel Sullivan, *Sociology & Anthropology*
 Naomi Caren Sultan, *Philosophy*
 Elisabeth Commanday Swim, *Comparative Literature*

1 with the concentration in Black Studies

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9 with the concentration in Public Policy

10 with the concentration in Women's Studies

11 Pennsylvania Teacher Certification

Damon William Taaffe, *Economics and Political Science*
 Simone Meng Tai, *Art History*
 Yuhki John Tajima, *Physics*
 Denise Tenorio, *Political Science*
 Sagar Thakali, *Economics and Engineering*
 Danielle Elizabeth Thomas, *Biology*
 Alastair Stewart Thompson, *Medieval Studies*
 Amber T. Thompson, *Economics*
 Hillary Abbott Thompson, *Philosophy and Political Science*
 Jennifer Elizabeth Tiitsman, *Religion*¹⁰
 Scott Christopher Charles Timm, *Special Major: Education & Biology*¹¹
 Tichianaa Timmons, *Psychology*
 Anna Degraff Tischler, *Biology*
 Anna Maria Tocci, *Sociology & Anthropology*^{7,8}
 Ka Man Mark Tong, *Economics and Engineering*
 Mason Tootell, *Religion*
 Emily Jeannette Topper, *English Literature*
 William M. Tracy, *Economics*
 Lisa June Triplett, *Sociology & Anthropology*
 I-Lien Tsay, *English Literature*
 Miho Tsujii, *Sociology & Anthropology*
 Michael Joseph Turick, *Mathematics*
 Erica Owyang Turner, *Political Science*
 Noam Unger, *Sociology & Anthropology and Religion*
 David Charles Urban, *English Literature and Medieval Studies*
 Richard Matthew Vezina, *Special Major: Education and Sociology & Anthropology*
 Eric Jeremiah Vonwettberg, *Biology*
 Elizabeth Williams Vose, *Art*¹⁰
 Audrey Helena Walton-Hadlock, *Political Science and Music*
 Stephanie Yunyi Wang, *Political Science and Special Major: Chinese Studies*
 Sarah Loveday Welsh, *Special Major: Dance & Art*
 Roger Andrew Werner, *Comparative Literature*
 Benson Michael Wilder, *Biology*
 Benjamin Thomas Williams, *Special Major: Astrophysics*

Adrian Ivan Wilson, *Special Major: Biological Anthropology*
 Catherine Bertha Wirth, *Special Major: Environmental Anthropology*
 Michelle Marie Wirth, *Special Major: Psychobiology*
 Aaron Jon Wong, *English Literature*
 Tina Wong, *History*
 Korey Matthew Wright, *Economics*
 Lynda Kathleen Yankaskas, *Comparative Literature*¹⁰
 Georgine Grace Yorgey, *Biology*
 Eugene Kiyoshi Yoshida, *Political Science*
 Joel Solomon Yurdin, *Philosophy*
 Michal Zadara, *Theatre Studies*
 Yu Zhu, *Economics*
 Sarah Elizabeth Zuercher, *Religion*

BACHELOR OF SCIENCE

Holly Lynn Baker, *Engineering*
 Roger Andrew Bock, *Engineering*²
 Timothy Crawford Bretl, *Engineering and Mathematics*
 Ian Patrick Brown, *Engineering*
 Reuben Shandel Canada, *Engineering*
 Dwayne Vincent Chambers, *Engineering*
 Mong-Ying Ani Hsieh, *Engineering and Economics*
 Desiree H. Joseph, *Engineering*
 Shawn Michael McAdams, *Engineering*
 Melissa Rodden Morrell, *Engineering*
 David Stone Phillips, *Engineering*
 Adam Zaki Rashid, *Engineering and Economics*
 John Arden Rieffel, *Engineering and Special Major: Computer Science*
 Michael Harrison Sheer, *Engineering*
 Yura Shubin, *Engineering*
 Sagar Thakali, *Engineering and Economics*
 Ka Man Mark Tong, *Engineering and Economics*
 Jennifer Alice VanderVeer, *Engineering*
 Carl Knox Wellington, *Engineering*
 Andrea Nancy Cornell Wolfe, *Engineering*

1 with the concentration in Black Studies

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6 with the concentration in Interpretation Theory

7 with the concentration in Latin American Studies

8 with the concentration in Peace and Conflict Studies

9 with the concentration in Public Policy

10 with the concentration in Women's Studies

11 Pennsylvania Teacher Certification

Awards and Distinctions

HONORS AWARDED BY THE VISITING EXAMINERS

HIGHEST HONORS:

Michael LimYongPeng Anderson, Kate Bernstein, Brantley Lloyd Bryant, Elizabeth Hadley Nickrenz, Aaron Jon Wong, Joel Solomon Yurdin

HIGH HONORS:

Jennifer Claire Barager, Timothy Crawford Bretl, Rachel Sagner Buurma, Andrew Augustine Caffrey III, Edward Donald Cohn, Nimish Rajesh Dave', Sean Michael Ewen, Jessica Ruth Fenn, Ethan Jared Friedman, McKenzie Warren Funk, Janice Kreinick Gallagher, Ilmi Muhaiyaddeen Elijah Granoff, Daniel Patrick Green, Robert Stewart Griffin, Katherine Jane Hall, Nathaniel Ross Hanson, Jessica Lynn Harbour, James Edward Harker, Anne Katherine Heidel, Kelly Bourke Hilgers, Benjamin Patrick Huff, Paula Magdalena Ioanide, Aarti Iyer, Wendy Elizabeth Kemp, Andrew John Kinney, Maria Jeannette Krisch, Wendy Louise Lawrence, Yvonne Claire Lee, Walter Jaren Luh, Nathaniel Halton Mason, Mandara Beth Meyers, David McKay Mimno, Cara Faye Moye, Rachel Rose Gutman Reich, Scott Cooper Samels, Sara Marissa Schulman, Heather Lee Schwartz, Jonathon Shlens, Deborah Stein, Tyler Fedor Stevenson, Anna Elise Sugden-Newbery, Damon William Taaffe, Anna DeGraff Tischler, Kelly Jeannette Topper, Ilie Tsay, Erica Owyang Turner, Tina Wong, Lynda Kathleen Yankaskas, Georgine Grace Yorgey

HONORS:

Jason Douglas Albright, Smitha Arekapudi, Anderson Thornton Bailey, Kirran Zia Bari, Martine Bourque Claremont, Christopher Daniel Flood, Eric Bruce Freedman, Ryan Karlton Fruh, Carrie Danielle Griffin, Emily Elisabeth Hanawalt, Simon George Harding, James Paul Harris, Erika Elaine Johansen, Matthew Jason Kahn, John Fred Kaltenstein, Jessica Carew Kraft, John Samuel Lavinsky, Joshua Harlan Lifton, Andrew Christian Lund, Andrew Neal Mast, Mary Dorothy Meiklejohn, Elisabeth Nigrini, Jeremy David Peterson, Jonathan Howland Pyle, Ashwin Laxminarayana Rao, Alyssa Rachel Rayman-Read, David Peake Reese, Abigail Lauren Salerno, Abigail Elizabeth Schade, Michael

Witwicki Schall, Jonathan Robert Stevens, Barbara Bains Strickland, Ann Leilani Strom, Simone Meng Tai, William M. Tracy, Lisa June Triplett, Noam Unger, David Charles Urban, Michal Zadara

ELECTIONS TO HONORARY SOCIETIES

PHI BETA KAPPA:

Michael LimYongPeng Anderson, Suzanne Elisabeth Andrews, Sarah Kate Atkins, Leal Casey Beck, Roger Andrew Bock, Timothy Crawford Bretl, Brantley Lloyd Bryant, Andrew Augustine Caffrey III, Nimish Rajesh Dave', Amy Foldes Dickson, Chloe Anise Dowley, Amber Ailisa Frank, Ethan Jared Friedman, McKenzie Warren Funk, Rachel Elisabeth Goldmann, Tina Yushan Gourd, Robert Stewart Griffin, Katherine Jane Hall, Emily Elisabeth Hanawalt, Jessica Lynn Harbour, Aaron William Hirschhorn, Jennie Burr Hounshell, Aarti Iyer, Maia Anna Jaskoski, Ellen Summer Johnson, Matthew Jason Kahn, Andrew John Kinney, Gabrielle Kaya Kruks-Wisner, Matthew John Kutolowski, John Samuel Lavinsky, Yvonne Claire Lee, Walter Jaren Luh, Megan Elizabeth MacDowell, Mandara Beth Meyers, Nathan Eric Myers, William Michael Nessly, Anne Drew Potter, Holly Elaine Quinn, Sara Marissa Schulman, Heather Lee Schwartz, Jonathon Shlens, Deborah Isobel Stein, Susan Elise Stratton, Anna DeGraff Tischler, Eric Jeremiah VonWettberg, Audrey Helena Walton-Hadlock, Stephanie Yunyi Wang, Catherine Bertha Wirth, Aaron Jon Wong, Georgine Grace Yorgey, Joel Solomon Yurdin

SIGMA XI:

Leal Casey Beck, Roger Andrew Bock, Timothy Crawford Bretl, Andrew Augustine Caffrey III, Martine Bourque Claremont, Erin Martindale Denney, Amy Foldes Dickson, Shamsah Ebrahim, Sean Michael Ewen, Ethan Jared Friedman, Erin Kay Fulkerson, Seth McGregor Garber, Ilmi Muhaiyaddeen Elijah Granoff, Robert Stewart Griffin, Katherine Jane Hall, Nathaniel Ross Hanson, Simon George Harding, Stephanie Chiyoko Herring, Kelly Bourke Hilgers, Aaron William Hirschhorn, Jennie Burr Hounshell, Mongying Ani Hsieh, Benjamin Patrick Huff, Diana Katharine Hunt, Desiree H. Joseph,

David Aaron Kagle, Leena Raj Kansal, Wendy Elizabeth Kemp, Haejin Kim, Valencia King, Kirstin Suzanne Knox, Maria Jeannette Krich, Wendy Louise Lawrence, Yvonne Claire Lee, Joshua Harlan Lifton, Kirstin Tasia Linder Mayer, Walter Jaren Luh, Andrew Adam MacBeth, Michael Anthony Mahowald, Shawn Michael McAdams, Melissa Rodden Morrell, Claudia Ximena Muñoz, Elisabeth Nigrini, Jonathan Howland Pyle, Ashwin Laxminarayana Rao, Rachel Rose Gutman Reich, John Arden Rieffel, Gordon Stuart Seator Roble, Danielle Elizabeth Sass, Julie Jill Schwendiman, Jai Wook Shin, Jonathon Shlens, Craig Allen Shockley, Anthony Peter Skiadas, Jonathan Robert Stevens, Anna Elise Sugden-Newbery, Ka Man Mark Tong, Jennifer Alice VanderVeer, Eric Jeremiah VonWettberg, Carl Knox Wellington, Michelle Marie Wirth, Andrea Nancy Cornell Wolfe, Georgine Grace Yorgey

TAU BETA PI:

Timothy Crawford Bretl, Roger Andrew Bock, Shawn Michael McAdams, Carl Knox Wellington

FELLOWSHIPS

The Susan P. Cobbs Prize Fellowship to Massey Burke '00

The Sarah Kaighn Cooper Scholarship to Jacob Krich '00

The Hannah A. Leedom Fellowship to Shamsah Ebrahim '99, Andrew Petusky '95, Sarah Sanford '99, and Cameron Warner '97

The Joshua Lippincott Fellowship to Daniel Barolsky '97, Andrew Han '94, Simon Harding '99, Aaron Hultgren '98, Joanne Weill-Greenberg '96, and Rebecca Winthrop '96

The Thomas B. McCabe, Jr. and Yvonne Motley McCabe Memorial Fellowship to Corey Michael Mulloy '94

The Mellon Minority Undergraduate Fellowship to Wonda Joseph '00, Berlin Vincent Kelly '00, Sasha Leinster '01, Alma Ortiz '00, Stacey Wagaman '01, and Zoe Whitley '01

The Lucretia Mott Fellowship to Smitha Arekapudi '99, Christine Jeuland '99, Toki Rehder '99, and Sara Schulman '99

The Martha E. Tyson Fellowship to Susan Bisson '92, Rachel Louise Henighan '97, and Leah Oppenheim '96

AWARDS AND PRIZES

The Stanley Adamson Prize in Chemistry to Peter Hutchinson '00

The Jonathan Leigh Altman Summer Grant to Elijah Porter '00 and Jennifer Slaw '00

The American Chemical Society Scholastic Achievement Award to Yvonne Lee '99

The American Chemical Society Undergraduate Award in Analytical Chemistry to Thalia Mills '00

The American Chemical Society Undergraduate Award in Polymer Chemistry to Polina Kehayova '01

The American Institute of Chemists Student Honor Award to Maria Krich '99

The Solomon Asch Award to Rachel Goldmann '99 and Aarti Iyer '99

The Boyd Barnard Prize to Aaron Friedman '00
The Paul H. Beik Prize in History to Jessica Harbour '99 and Andrew Kinney '99

The Tim Berman Memorial Award to Keith Earley '99

The Black Alumni Prize to Wonda Joseph '00, Frank Mote '00, and Zoe Whitley '01.

The Brand Blanshard Prize in Philosophy to Sun Ha Lee '99

The Sophie and William Bramson Prize to Kevin Kish '98

The Brinkmann Prize to Timothy Bretl '99
Chemistry Department Service Awards to Seth Garber '99 and Rebecca Schmitt '00

The Susan P. Cobbs Scholarship to Massey Burke '00

The CRC Press Freshman Chemistry Achievement Award to Leslie Murray '02

The Alice L. Crossley Prize in Asian Studies to Jessica Lynn Harbour '99

The Dance Program Interdisciplinary Award to Simon Harding '99 and Sarah Sanford '99

The Deans' Awards to Annie Bacon '99, Stacey Bearden '99, Amit Bouri '99, Andrew Caffrey '99, Reuben Canada '99, Eric Freedman '99, Tina Gourd '99, Matthew

Awards and Distinctions

Howard '99, Gerry Kaufman '99, Ben Maulbeck '99, Maria McMath '99, Cathy Polinsky '99, Richard Vezina '99

The Department of English Literature Freshman Writing Prize for the Class of 2001 to Vani Natarajan '01

The Department of English Literature Summer Writing Stipend to Neil DiMaio '00 and Kia Hayes '00

The Robert Dunn Award to Marc Jeuland '01

The William C. Elmore Prize in Physics to Walter Luh '99

The Lew Elverson Trophy to Tim Schofield '99

The Robert Enders Field Biology Award to Jessica Scott '00, Kenneth Kim '01, Guido Grasso-Knight '00, Leah Deni '01

The Gonzalez-Vilaplana Prize for Outstanding Achievement in Chemistry to Yvonee Lee '99 and Maria Krisch '99

The John Russell Hayes Poetry Prizes to Nathan Myers '99 and Lena Sze '01

The Samuel Hayes III Research Grant to Anya Freiman '00

The Eleanor Kay Hess Award to Heather Marandola '01 and Kristen English '01

The Philip M. Hicks Prize for Literary Criticism Essay to Cameron McPhee '99 (first prize) and Matthew Richey '01 (second prize)

The Jesse H. Holmes Prize in Religion to Jennifer Tiitsman '99 and Matthew Kutolowski '99

The Gladys Irish Award to Holly Baker '99

The Ivy Award to Benedict Maulbeck '99

The Michael Keene Award to Nii Addy '01

The Naomi Kies Award to Chloe Dowley '99, Mandara Meyers '99, Erica Turner '99, Elisabeth Nigrini '99, Nicole Breazeale '99, and Andrea Meller '99 of the Swarthmore Community Learning Project

The Kwink Trophy to James Paul Harris '99

The Lande Field Biology Award to Anna Hess '00

The Leo Leva Memorial Prize in Biology to Anna Sugden-Newbery '99 and Georgine Yorgey '99

The Linguistics Prizes to Ellen Johnson '99 (theoretical linguistics) and Amber Frank '99 (applications linguistics)

The McCabe Engineering Award to Timothy

Crawford Bretl '99

The Norman Meinkoth Field Biology Award to Irene Garcia '02 and Dan Lieberman '00

The Morris Monsky Prize in Mathematics to Amy Marinello '02

The Lois Morrell Poetry Award to Kirstin Linder Mayer '99

The A. Edward Newton Student Library Prizes to Hugh Weber '00 (first prize), Sasha Issenberg '02 (second prize), and Karen Hiles '99 (third prize)

The Oak Leaf Award to Gabrielle Kruks-Wisner '99

The May E. Parry Award to Jill Belding '99 and Donna Griffin '99

The Drew Pearson Prize to Nathan Ashby-Kuhlman '02

The Perdue Award to Frank Mote '00

The William Plumer Potter Prizes in Fiction to Deborah Stein '99 (first prize), Jessica Fenn '99 (second prize), and Rebecca Louie '99 (third prize)

The Ernie Prudente Award to Stephanie Herring '99 and Matt Kahn '99

The Dinny Rath Award to Cathy Polinsky '99

The James H. Scheuer Environmental Fellowship to Anna Hess '00

The Frank Solomon Jr. Student Art Prize to Erin Fulkerson '99, Anne Potter '99, Nikyia Rogers '99, and Michael Schall '99

The Hally Jo Stein Memorial Award for Dance to Rachel Brooker '99

The Karen Dvonch Steinmetz '76 Memorial Award to Anjolie Idicula '98

The Peter Gram Swing Prize to Eric Haecker '99 and Sara Kramer '99

The Melvin B. Troy Award to Marié Abe '01 and Michael Duffy '01 (music); Tobie Barton '99 and Sarah Welsh '99 (dance)

The Vollmecke Service Award to Melissa Rodden Morrell '99

The Hans Wallach Research Fellowship in Psychology to Michael Waddington '00

The Jerome H. Wood Prize in Latin American Studies to Gabrielle Kruks-Wisner '99

Enrollment Statistics

ENROLLMENT OF STUDENTS BY CLASSES 1998-99

	MEN	WOMEN	TOTAL
Seniors	150	187	337
Juniors	150	164	314
Sophomores	167	191	358
Freshmen	169	193	362
	<u>636</u>	<u>735</u>	<u>1,371</u>
Graduate Students	0	0	0
Special Students	11	6	17
TOTAL	647	741	1,388

GEOGRAPHICAL DISTRIBUTION OF STUDENTS 1998-99

Alabama.....	4	Puerto Rico.....	2	Japan.....	7
Alaska.....	4	Rhode Island.....	1	Kenya.....	1
Arizona.....	5	South Carolina.....	3	Malaysia.....	1
Army Post Offices.....	2	South Dakota.....	1	Mauritius.....	1
California.....	113	Tennessee.....	10	Mexico.....	3
Colorado.....	13	Texas.....	20	Nepal.....	2
Connecticut.....	43	Utah.....	4	Netherlands.....	1
Delaware.....	22	Vermont.....	14	Nicaragua.....	1
District of Columbia.....	14	Virgin Islands.....	2	Nigeria.....	1
Florida.....	32	Virginia.....	32	Pakistan.....	2
Georgia.....	20	Washington.....	28	Panama.....	1
Hawaii.....	6	West Virginia.....	4	Peoples Republic of China.....	9
Idaho.....	4	Wisconsin.....	12	Peru.....	1
Illinois.....	21	Total U.S.A.....	<u>1,262</u>	Poland.....	1
Indiana.....	9	Argentina.....	1	Romania.....	2
Iowa.....	4	Bangladesh.....	1	Russia.....	3
Kansas.....	2	Barbados.....	1	Saudi Arabia.....	1
Kentucky.....	7	Belarus.....	1	Sierra Leone.....	1
Maine.....	22	Botswana.....	1	Singapore.....	2
Maryland.....	66	Brazil.....	3	South Africa.....	1
Massachusetts.....	81	Bulgaria.....	2	South Korea.....	10
Michigan.....	26	Cambodia.....	1	Sri Lanka.....	1
Minnesota.....	21	Canada.....	4	St. Vincent.....	1
Mississippi.....	1	Colombia.....	3	Sudan.....	1
Missouri.....	7	El Savador.....	1	Sweden.....	1
Montana.....	2	France.....	1	Taiwan.....	1
Nebraska.....	2	Germany.....	3	Tanzania.....	1
Nevada.....	4	Ghana.....	6	Thailand.....	2
New Hampshire.....	9	Greece.....	1	Trinidad & Tobago.....	3
New Jersey.....	93	Guatemala.....	1	Turkey.....	5
New Mexico.....	10	Guyana.....	1	Ukraine.....	1
New York.....	204	Haiti.....	1	United Kingdom.....	9
North Carolina.....	22	Hong Kong.....	3	Venezuela.....	3
Ohio.....	35	Hungary.....	1	Total from Abroad.....	<u>126</u>
Oklahoma.....	2	India.....	4	GRAND TOTAL.....	<u>1,388</u>
Oregon.....	16	Ireland.....	1		
Pennsylvania.....	181	Jamaica.....	3		

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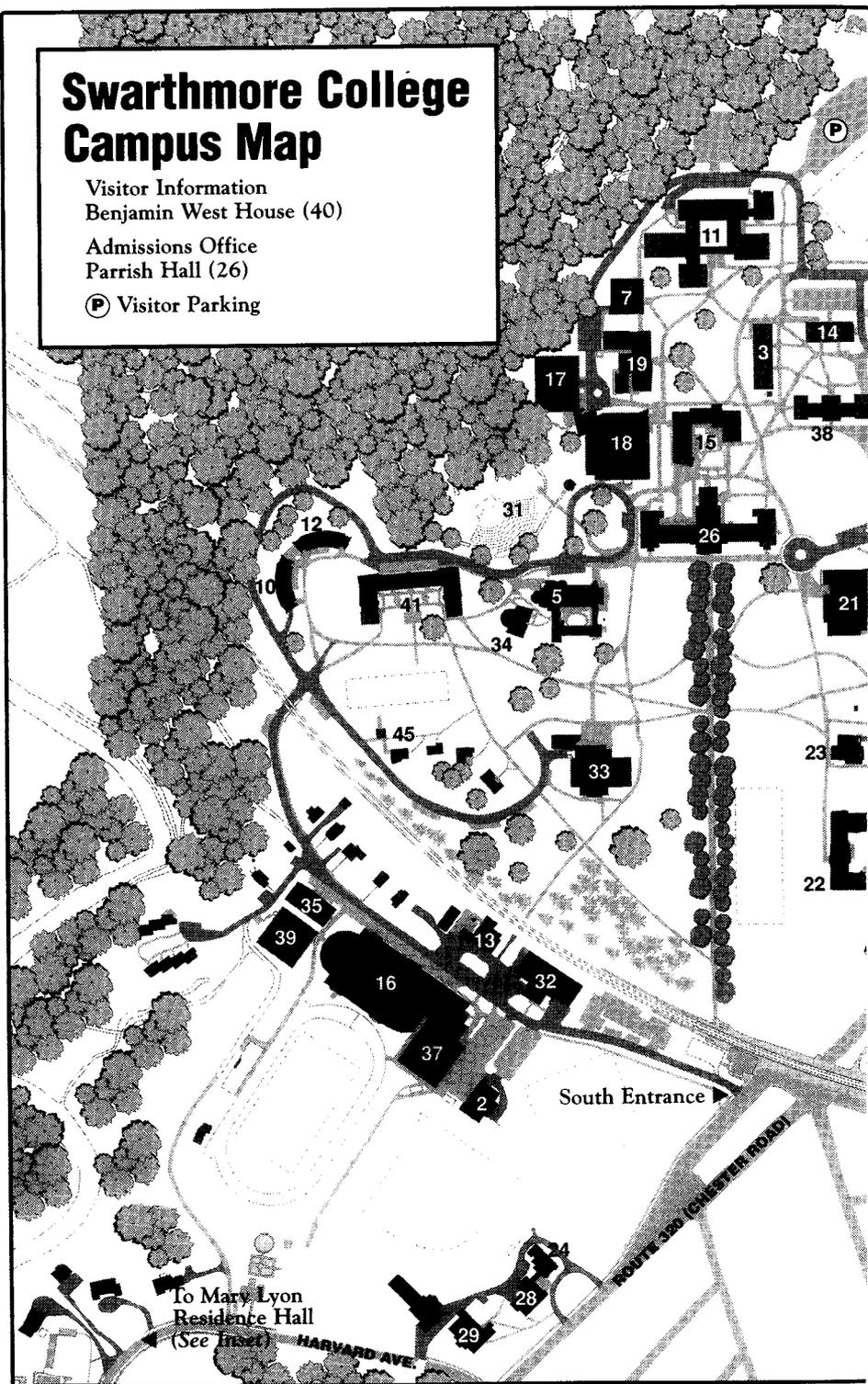


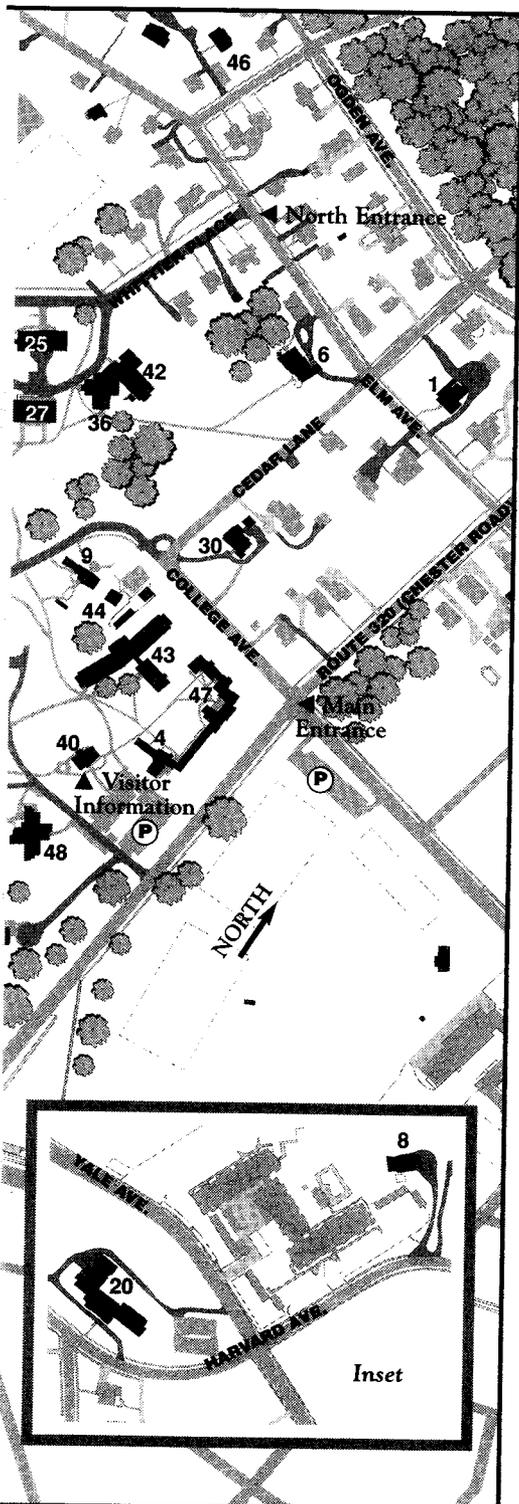
Swarthmore College Campus Map

Visitor Information
Benjamin West House (40)

Admissions Office
Parrish Hall (26)

Ⓟ Visitor Parking





1. Ashton House—College guest house
2. Barn
3. Beardsley Hall—Art History, Studio Art, Computing Center
4. Bond and Lodges—Student residence and meeting rooms
5. Clothier Memorial Hall—Table Social Center, snack bar, student offices, bookstore, Intercultural Center
6. Courtney Smith House—President's residence
7. Cornell Science and Engineering Library
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, Mathematics and Statistics, 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, Credit Union, coffee bar
16. Lamb-Miller Field House
17. Lang Music Building—Music, Underhill Music Library
18. Eugene M. and Theresa Lang Performing Arts Center—Theatre, Dance, English Literature
19. Martin Building and Animal Laboratory—Biology, Kirby Lecture Hall
20. Mary Lyon Building—Student residence (Inset)
21. McCabe Library
22. Mertz Hall—Student residence
23. Old Tarble
24. Palmer Hall—Student residence
25. Papazian Hall—Philosophy, Psychology, Engineering Laboratory
26. Parrish Hall—Admissions Office, administration offices, student residence, mail room
27. Pearson Hall—Education, Linguistics, Religion, Human Resources, Foreign Study Office
28. Pittenger Hall—Student residence
29. Roberts Hall—Student residence
30. Robinson House—Black Cultural Center
31. Scott Amphitheater
32. Service Building—Maintenance, Grounds, and Environmental Services
33. Sharples Dining Hall
34. Sproul Observatory—Astronomy, Computer Science, Alumni and Gift Records
35. Squash Court Building
36. Swarthmore Friends Meetinghouse
37. Tarble Pavilion—Physical Education
38. Trotter Hall—Political Science, History, Classics
39. Ware Pool
40. Benjamin West House—Visitor information, Public Safety, Communications
41. Wharton Hall—Student residence
42. Whittier House
43. Willets Hall—Student residence
44. Wister Greenhouse
45. Women's Resource Center
46. Woolman House—Student residence
47. Worth Hall—Student residence
48. Worth Health Center

Directions for Reaching Swarthmore College

DRIVING

From Pennsylvania Turnpike, going East

From Exit 24 (Valley Forge) take I-76 East (Schuylkill Expressway) about 2½ miles to I-476 South. Take I-476 approx. 13 miles to Exit 2, Media/Swarthmore. At bottom of exit ramp, follow sign for Swarthmore by turning left onto Baltimore Pike. (See below for “. . . the rest of the way.”)

From Pennsylvania Turnpike, going West

From Exit 25A (Norristown) follow signs for I-476 South. Stay on I-476 approx. 17 miles to Exit 2, Swarthmore/Media. At bottom of exit ramp, follow 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 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 2, Media/Swarthmore. At bottom of exit ramp, follow sign for Swarthmore by turning right onto Baltimore Pike. (See below for “. . . the rest of the way.”)

“. . . the rest of the way”

Stay in right lane and in less than ¼ mile turn right onto Route 320 South (watch turns on Route 320). Proceed through second light at College Avenue to the first driveway on your right to visitor parking at the Benjamin West House. The Benjamin West House is the College’s visitor center and has someone there to hand out maps and directions 24 hours.

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 Local (R3) takes 21 minutes to reach the campus.

AIR

An express train runs from the airport to 30th Street Station where you can take the SEPTA Media Local (R3) train directly to the Swarthmore campus. The combined fare is about \$8.00, and the trip requires about one hour. Taxi service is also available. The fare is approximately \$20.00, 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 bottom of exit ramp, follow sign for Swarthmore by turning right onto Baltimore Pike. (See above for “. . . rest of the way.”)

