
HAVERFORD COLLEGE CATALOG 2002-2003

HAVERFORD COLLEGE

ACADEMIC CALENDAR 2002-2003

SEMESTER I

August

Wednesday 28 First-year and transfer students arrive
Saturday 31 Returning students arrive

September

Sunday 1 Returning students arrive
Sunday 1 Non-academic registration
Sunday 1 Opening Collection - 7:30 p.m. in Marshall Auditorium
Monday 2 Labor Day; Classes begin at Haverford, Bryn Mawr, and Swarthmore
Friday 6 Last day to uncover NNG-CR/NO CR from previous semester
Monday 9&10 Final academic verification at Haverford and Bryn Mawr
Tuesday 10 Last day to register - Class of 2006
Friday 20 Last day to request NNG-CR/NO CR at Haverford and Bryn Mawr
Friday 20 Last day to drop a credit at Haverford and Bryn Mawr

October

Friday 11 Fall break begins @4:00 p.m.
Monday 21 Classes resume @8:30 a.m.
Monday 21-25 Faculty reports of concern to CSSP due
Friday 25 Academic flexibility proposals due
Friday 25 End of 1/2 semester courses
Friday 25-27 Family Weekend/Homecoming

November

Thursday 7&8 Registration for spring semester
Wednesday 27 Thanksgiving break begins @4:00 p.m.

December

Monday 2 Classes resume @8:30 a.m.
Friday 13 Classes end at Haverford & Bryn Mawr
Friday 13 All papers (except those in lieu of exams) and lab notebooks due
Saturday 14&15 Reading period
Monday 16-21 Final examinations for all students through Saturday at 12:00 noon
Saturday 21 Semester I ends at 12:00 noon

January

Monday 6 Final grades due in Registrar's Office by 12:00 noon

SEMESTER II

January

- Monday 20 Classes begin at Haverford, Bryn Mawr, and Swarthmore
Friday 24 Last day to uncover NNG-CR/NO CR from previous semester
Monday 27&28 Final academic verification at Haverford and Bryn Mawr

February

- Friday 7 Last day to request NNG-CR/NO CR at Haverford and Bryn Mawr
Friday 7 Last day to drop a credit at Haverford and Bryn Mawr

March

- Friday 7 End of 1/2 semester courses
Friday 7 Spring break begins @4:00 p.m.
Monday 17 Classes resume @8:30 a.m.
Monday 17-21 Faculty reports of concern to CSSP due
Friday 21 Academic flexibility proposals due

April

- Thursday 10&11 Registration for Semester I, 2003
Friday 11 Sophomore Major Work Plans due in Registrar's Office
Friday 18 Returning students' Financial Aid Applications due

May

- Friday 2 Classes end at Haverford and Bryn Mawr
Friday 2 All papers (except those in lieu of exams) and lab notebooks due
Saturday 3-6 Reading Period (self-scheduled exams may be taken Mon./Tue. only)
Monday 5-7 Senior Comprehensive Examinations
Wednesday 7-10 Final examinations for seniors through Sat. at 5:00 p.m.
Monday 12 Senior grades due in the Registrar's Office by 5:00 p.m.
Wednesday 7-16 Final examinations for underclassmen through Fri. at 12:00 noon
Friday 16 Semester II ends at 12:00 noon
Sunday 18 Commencement - A.M. at Haverford; P.M. at Bryn Mawr
Friday 23 Final grades due in the Registrar's Office by 12:00 noon
Friday 30-June 1 Alumni Weekend

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Archaeology	History of Art
Arts: Dance and Theater**	Italian
Astronomy•	Japanese
Athletic Department**	Latin American and Iberian
Biochemistry and Biophysics*	Studies*
Biology	Linguistics•
Chemistry•	Mathematics•
Chinese	Mathematical Economics*
Classics•	Music
Comparative Literature•	Neural and Behavioral Science*
Computer Science*	Peace and Conflict Studies*
East Asian Studies***•	Philosophy•
Economics•	Physics•
Education and Educational	Political Science
Studies*•	Psychology•
English	Religion
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* Area of Concentration

** Program

*** Major and Area of
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THE COLLEGE

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STATEMENT OF PURPOSE

Haverford College is committed to providing a liberal arts education in the broadest sense. This education, based on a rich academic curriculum at its core, is distinguished by a commitment to excellence and a concern for individual growth. Haverford has chosen to remain small and to foster close student/faculty relationships to achieve these objectives.

The College's rigorous academic program is flexible in form and content to meet the needs of individual students, and rests on the assumption that the able students who come here will use their capacities fully. Haverford's faculty is noted for its strength in both scholarship and teaching, and its members expect to transmit to students their enthusiasm and high standards. The faculty members are teaching at an undergraduate college of arts and sciences by choice and they expect to learn, as well as to teach, in this close relationship with undergraduates.

The full resources of the College, in and out of the classroom, are designed to promote the personal and intellectual growth of students. Through an ambitious program of visiting lecturers and cultural activities, a conscious effort to recruit faculty and students representing diverse backgrounds and perspectives, student self-governance and service programs, an athletic program focused on participation and the scholar-athlete, and through day-to-day living in a residential community, the College seeks to broaden and enrich each person's development. Students are asked to give of themselves, even as they draw new strength from others. We seek to foster the pursuit of excellence and a sense of individual and collective responsibility throughout the entire environment.

Haverford strives to be a college in which integrity, honesty, and concern for others are dominant forces. The College does not have as many formal rules or as much formal supervision as most other colleges; rather it offers an opportunity for students to govern their affairs and conduct themselves with respect and concern for others. Each student is expected to adhere to the Honor Code as it is adopted each year by the Students' Association.

Haverford College, while a non-sectarian institution, has Quaker origins which inform many aspects of the life of the College. They help to make Haverford the special college that it is, where the excellence of its academic program is deepened by its spiritual, moral, and ethical dimensions. These show most clearly in the close relationship among members of the campus community, in the emphasis on integrity, in the interaction of the individual and the community, and in the College's concern for the uses to which its students put their expanding knowledge.

HISTORY

Haverford was founded in 1833 as the Haverford School Association by a group of New York and Philadelphia Quakers acting in a private capacity. It is the oldest institution of higher education with Quaker origins in North America. Initially the school was more of an academy than a college and provided "guarded education [as well as] an enlarged and liberal system of instruction." Based on this philosophy, a seven-member faculty educated 21 Quaker boys in Greek, Latin, natural and moral philosophy, mathematics and literature.

After various vicissitudes, the School became a College in the late 1850's, with the right to grant degrees, and to admit non-Quakers. Under the leadership of Presidents Thomas Chase and Isaac Sharpless, by the turn of the century, the College had become a national institution, competing for students and faculty with leading institutions in the nation.

Haverford has evolved into a college with both a varied academic program and a diverse scholarly community. Today, with over 100 faculty members and a coeducational student body, Haverford has an average enrollment of 1,100 students representing varied ethnic and religious backgrounds and a wide geographic area. It offers a rigorous liberal arts curriculum ranging from the classics and computer science to the fine arts and astronomy.

For most of its first 150 years of existence, Haverford was a men's college. There were exceptions, most notably the Relief and Reconstruction program in the World War II years that attracted a large number of women who were awarded master's degrees. Although Haverford began admitting women as first-year undergraduate students only in 1980, Haverford's commitment to educating women began much earlier, and has been greatly strengthened by cooperation with Bryn Mawr College, which was also founded by Orthodox Friends. This relationship continues to enrich the academic, cultural and extracurricular offerings of both institutions even now that Haverford is fully coeducational with women comprising half of the student body.

The natural beauty of Haverford's 200-acre campus is one of its most cherished assets. The grounds were originally landscaped by an English gardener. In planning new construction on campus, great care is taken to preserve the natural surroundings. The Campus Arboretum Association involves students, faculty, staff and many friends of the College in activities to augment and make more accessible the wide array of trees and other plantings that contribute so much to the campus environment.

The varied architectural styles of the 70 buildings which have been built since the College's founding reflect the tastes of their times and provide a special charm to the campus. Contact between students and faculty is aided by the fact that virtually all students and many faculty members live on or very near the campus.

FACILITIES

Library

The Library at Haverford provides resources and services in support of a liberal arts curriculum. Extensive collections of books, journals, graphics, and manuscripts serve faculty, students, and visiting scholars as they prepare for courses or engage in independent research. Haverford shares with Bryn Mawr and Swarthmore Colleges an automated library system, Tripod (Telnet or HTTP address: **tripod.brynmawr.edu**), which is available 24 hours per day.

Tripod provides members of the tri-college community with access to a combined collection of 2 million volumes. In addition to a complete catalog of the three college libraries, Tripod links to many journal indexes, databases, and electronic editions of journals; it permits Haverford users to request items from the other two libraries, request an interlibrary loan, and access other libraries' catalogs. A delivery service brings resources from Bryn Mawr and Swarthmore to students and faculty. To obtain materials not available in the three colleges, students and faculty may use the interlibrary loan service or visit the wealth of academic, public, and special libraries in the Philadelphia area.

Magill Library maintains a Web site at: <http://www.haverford.edu/library>. Web pages include general information about the Library, announcements of events, and staff addresses; in addition, the Library site links to full text electronic journals, an encyclopedia, government publications, newspapers and other news sources, journal indexes, finding aids for special collections, and many other online reference sources. Users will also find information about Web search engines, guides to resources in the disciplines taught at the College, and research resource pages for specific courses.

The College has four library locations. Magill, which houses the majority of the collections in the social sciences and humanities, is the largest and offers a variety of study environments. Libraries for music, located in Union Building, and for the sciences, located in the Marian E. Koshland Integrated Natural Sciences Center (biology, chemistry, physics, mathematics) and the Strawbridge Observatory (astronomy), serve the needs of particular departments.

In addition to the Library's own collections and those off campus to which Haverford students have access, the most important service the Library offers is an extensive reference and instruction program. For all levels of students from those in the first year to senior thesis writers, librarians work with faculty to design printed materials, web pages, and workshops that teach students both general research skills and those appropriate to the work of specific courses or disciplines. Whether in group presentations or individual research advisory tutorials, librarians help students throughout their projects to shape their thinking about the topic and to provide the bibliographic support needed to locate and obtain the raw materials of research wherever they might be. The instruction program is a vital complement to coursework because it introduces library resources, research strategies, and evaluative skills that enable students to be more confident in their use of the Library and thus more thorough and thoughtful in their studies.

Special collections and work areas in the Library include the following: The

Quaker Collection began in 1867 when the Board of Managers decided to gather "an important reference library, especially for works and manuscripts relating to our own Religious Society." Today, the *Quaker Collection* is an internationally significant repository for both printed and manuscript material about the Society of Friends and includes the journals of important Friends, the papers of leading Quaker families and individuals, Meeting records, archives of Quaker organizations, and material documenting Friends' work with Native Americans and in East Asia. The *Roberts Collection* contains more than 20,000 manuscript letters, including a complete set of the signers of the Declaration of Independence and famous authors, statesmen, educators, artists, scientists, ecclesiastics, and monarchs. The *Philips Collection* of rare books, mostly of the Renaissance period, includes among its outstanding items first editions of Dante, Copernicus, Leo Africanus, Cervantes, the King James Bible, Milton, and the four folios of Shakespeare. The *Rufus M. Jones Collection*, donated by this widely known Quaker philosopher and teacher (Haverford, 1885), consists of his collection of books on mysticism, a complete collection of his published writings, his personal papers, and a reconstruction of his study at 2 College Circle.

Other Special Collections are: the *J. Rendel Harris Collection* of ancient codices; the *Christopher Morley Collection*; the *C. Christopher Morris Cricket Library and Collection*; and the *Haverford Photograph Collection* of 2,400 prints created by more than 100 artists including Ansel Adams, Julia Margaret Cameron, Harold Edgerton, and James Van Der Zee.

Science Facilities

The physics and mathematics departments, the computer science program, and some astronomy research activities are housed in the *Marian E. Koshland Integrated Natural Sciences Center*. Students and faculty members have convenient access to most of the important journals, textbooks, and monographs needed for courses and for research either directly, or through Tripod, the automated library system of Haverford, Bryn Mawr, and Swarthmore Colleges.

The physics, mathematics, and computer science programs place a special emphasis on the use of computers for symbolic manipulation, numerical computation, and the acquisition and analysis of laboratory data. Physics maintains a dedicated instructional computer laboratory containing a network of computers with *Mathematica* software and universal laboratory interfaces for experiments. Computer science has an additional network that also includes a variety of high-speed workstations.

Facilities for the *physics department* include three well-equipped instructional laboratories and ten laboratories for research involving students. Its internationally recognized facility for *nonlinear and fluid dynamics* includes state-of-the-art systems for digital image collection and processing based on high resolution and high speed digital cameras, and instrumentation for remote measurement of fluid flow velocities. The department's *biophysics laboratory* features a video microscopy system equipped for epifluorescence studies of phase transitions in model membrane systems, a quartz crystal microbalance biosensor experiment, and a KSV Langmuir-Blodgett system for depositing films a single molecule thick. Central

biophysics facilities shared with biology and chemistry include a nano-scale workstation which combines atomic force microscopy, fluorescence microscopy, laser tweezers, and a computer-controlled micromanipulator. Its laboratory for *nanofabrication and scanning tunneling microscopy* utilizes an ultra-high vacuum scanning tunneling microscope (STM) with atomic resolution as well as a separate STM which operates in solution, and a quartz crystal microbalance for use in solution. Computational facilities include: a Silicon Graphics workstation with hardware and software for molecular graphics and molecular dynamics calculations (shared with biology and chemistry departments) and a 64-bit Ultra SPARC workstation with several color graphics X-terminals for high performance scientific computing and image processing.

The physics laboratories have an extensive array of modern electronic instrumentation, including a digital logic analyzer, a microcomputer-controlled multi-channel spectroscopy system for nuclear physics, and a variety of computers dedicated to laboratory data acquisition and control. Computer-based experiments are included in most courses in the physics curriculum, starting with the first-year courses. The *electronics laboratory* includes modern digital oscilloscopes at each student workstation. The *advanced physics laboratory* includes a Hewlett Packard real-time spectrum analyzer, thin film evaporator system, sonoluminescence apparatus, and optics facilities for laser experiments such as a vibration-isolated optical table, low-noise photomultipliers, and an optical atom trap apparatus (under construction). The *low temperature* facilities allow experiments on superconductivity and superfluidity.

Complementary facilities in the areas of nuclear physics, quantum optics, magnetic resonance, and solid state physics are to be found at Bryn Mawr College. The two departments cooperate closely.

Facilities for the *chemistry department* in the Marian E. Koshland Integrated Natural Sciences Center enable students to use modern, sophisticated instrumentation extensively at all levels of study. There are four laboratories for course work; two instrument rooms; specialized equipment rooms; and a walk-in cold room. Six further laboratories provide space in which students conduct research projects jointly with the faculty. There is a laser laboratory equipped with nitrogen-dye, helium-cadmium, neodymium-YAG, and diode lasers and detection systems for time-resolved fluorescence, Raman, and cavity ringdown spectroscopies. A computational chemistry laboratory equipped with Windows- and UNIX-based workstations allows students to explore molecular structure and properties using Gaussian, Spartan, and Insight/Discover computational packages.

Major computer-accessed equipment items available for use by students in structured courses and in research tutorial work include two Bruker nuclear magnetic resonance spectrometers (200 MHz and 300 MHz); a Hewlett-Packard 5988A mass spectrometer coupled to a 5890 capillary column gas chromatograph; a Nicolet 950 Fourier transform Raman spectrometer; Nicolet Magna 550 and Perkin-Elmer Spectrum 1000 Fourier transform infrared spectrometers; a SPEX Fluorolog-2 fluorimeter; Perkin-Elmer Lambda-2 and Lambda-6, Shimadzu 160U, and IBM 9420 visible/ultraviolet spectrometers; Hi-Tech SF51 and Olis RSM stopped flow spectrometers; a Perkin-Elmer 341 polarimeter; a Princeton Applied Research 273 elec-

trochemical analyzer; two Rainin and one Hewlett-Packard high-performance liquid chromatographs; and Applied Biosystems 433A and Rainin PS3 automated peptide synthesizers.

In addition to these items, other gas chromatographs, colorimeters, vacuum systems, pH meters, balances, and high precision electrical and optical equipment are available and used in instructional work. The science division machine shop provides for construction of special apparatus.

The *biology department* is housed in the Marian E. Koshland Integrated Natural Sciences Center. *Sharpless Hall* contains eight fully equipped faculty research laboratories, teaching laboratories for introductory-level courses, a media preparation facility, instrument rooms, animal rooms, dark rooms and constant temperature rooms. The *Koshland East Wing* houses our junior laboratory suite, a tissue culture room and a media preparation facility and other support functions. The Koshland Center also includes a microscopy suite, a modern and spacious library with computerized access to the collections at Haverford, Bryn Mawr, and Swarthmore, a 120-seat auditorium, and additional classroom and instrument space.

Haverford has excellent equipment and facilities for the study of modern cellular and molecular biology. In addition to walk-in constant temperature spaces in Sharpless Hall, (-10°C, 4°C, 17°C, 30°C, and 37°C), there are several -70°C freezers, liquid nitrogen storage, a Storm 860 imaging system, ultracentrifuges for preparative and analytical uses, a circular dichroism spectropolarimeter, a UV-vis spectrophotometer, a fluorescence activated cell sorter, an Hitachi electron microscope with digital imaging capability, FPLC and HPLC instruments, scintillation and gamma counters, refrigerated centrifuges, tissue culture incubators and hoods, ELISA readers, densitometers, gel dryers and all of the standard equipment necessary for the pursuit of a sophisticated cell and molecular biology curriculum. In addition, the teaching and senior research laboratories are fully equipped with computers running Macintosh, Windows, or UNIX software and connected to the campus computer network, facilitating electronic access to a large number of other academic institutions and research and teaching sites available via Internet. The department also shares a confocal microscope with the Department of Biology at Bryn Mawr.

The *psychology department* occupies the upper two floors of the newly renovated Sharpless Hall. Microcomputers are used throughout psychology for experimental presentation, data collection, statistical analysis, and the simulation of mental and biological processes. The department facilities include a public room equipped with both PC and Macintosh computers, all of which are connected to a campus network linked to other public facilities, the Internet, individual workstations, and faculty offices. Additional laboratory computers are devoted to student and faculty research projects. The department also houses a digital video-editing facility, and a video/data projector that allows a high-resolution display of digital input as well as standard video input.

Three laboratory suites are devoted to faculty/student research. The cognition laboratory includes a computer-controlled Midi keyboard and music synthesizer system capable of generating a wide variety of stimuli for studies in perception and memory. Other equipment includes audio-sound systems, VCR's, and a computer-

interfaced response system for data collection. The biological psychology laboratory includes a teaching facility, an animal colony, and equipment for computer-controlled experiments in animal learning and behavior, and the recording of physiological responses in humans. Lastly, the human neuropsychology laboratory contains computerized systems for tachistoscopic experiments; image manipulation software; and standardized questionnaire instruments.

Facilities for the *astronomy department* include the *William J. Strawbridge Observatory*, given in 1933 and built around an earlier structure. The observatory has two domes which house 16-inch and 12-inch Schmidt-Cassegrain telescopes. In addition, the observatory has three smaller 8-inch telescopes with outside piers, a solar coelostat, and a 7-foot L-band (1.4 GHz) radio telescope. Instruments include three CCD imaging cameras, a high resolution solar spectrometer, a tip-tilt adaptive optics system, and several smaller instruments. Data are processed at the observatory computer facility that includes two workstations and six terminals. The astronomy library contains 3,000 bound volumes and most of the relevant astronomy journals. All of these facilities are available for use by students.

Academic Computing Center

Computers are an integral part of a Haverford education. All faculty and students have email accounts, space to post Web pages, and high-speed network access available from their offices and dorm rooms. Many courses mix on-line discussion groups, Web resources, and other electronic resources with traditional lectures, in-class discussions and printed materials for a full and varied learning environment.

The Academic Computing Center (ACC), located in *Stokes Hall*, provides computing support for instructional and research needs of the faculty and students. While there is no requirement for students to buy computing equipment, over 95% of our students have their own computers.

Those who choose to use equipment in one of our public labs have access to a generous array of computing resources available free of charge. Located in *Roberts Hall*, the *Haverford College Apartments*, and Magill Library, these labs contain a mix of Macintosh and Windows computers configured with high-speed Internet access and all ACC supported software. A Multimedia Lab in Roberts Hall provides students with access to special equipment and help for creating and editing digitized images, sounds, and video.

Hours in the labs vary, but at least one lab is open 9:00 a.m. to midnight Monday through Thursday; 9:00 a.m. to 5:00 p.m. Friday; 1:00 p.m. to 5:00 p.m. Saturday; and 1:00 p.m. to midnight Sunday. During these hours, labs are staffed with student workers who can assist students in using the equipment. Additionally, any student may work in labs after regularly scheduled hours through a program sponsored by Students' Council.

Additional computer equipment is available in the Language Learning Center, and departmental labs in biology, chemistry, math/computer science, physics/astronomy, and psychology for students taking classes in those disciplines.

An Ethernet network provides 10 or 100 megabit service directly to all offices, classrooms, laboratories, and dormitories. This provides students, faculty, and staff access to local network services such as file servers, and Internet resources such as

the Web and e-mail. External access to the Internet is provided via a full duplex 10 MBs link. Students living on-campus can access this high-speed network free of charge, provided they own the necessary hardware. Faculty and students living off-campus can dial into our network from their homes and access the same networked resources. All students can access the network from the public computing labs.

Academic Computing supports a standard suite of software for e-mail, Web browsing, word processing, Web development, virus protection, and other standard needs. Supported software is available for use in the public labs. Additionally, most of this software is free or site licensed by Haverford and may be used on computers connected to the campus network in offices and dormitories. The virus protection software we provide is required for all users on our network. Our Web site lists these specific supported software packages.

In addition to the standard supported software mentioned above, Haverford often makes special software available for use in particular classes. For example, music students may be given assignments to use ear-training software, whereas chemistry students may use software for molecular modeling. Such software is made available in our public labs, and may also be available via our network or sold in our bookstore at academic pricing.

Faculty may use one of several computer classrooms for hands-on computer labs, or they may use projection equipment in a standard classroom to provide computer-aided instruction and demonstrations. Additionally, faculty may make computer resources available outside of the classroom in several ways. Faculty can post resources on the Web or on our campus network, or they can make specific software or information available in the public labs, departmental labs, or the library. They may also work with students in collaborative online projects.

ACC provides documentation for most supported software packages. In addition, students living in the dormitories may receive free computing support from a Residential Computer Consultant (RCC) living in or near their dorm. ACC also maintains a walk-in Helpdesk where members of the Haverford community can bring their systems or get extra help on various computer issues. Details of our support policy are available on our Web site.

Many of the services provided by the Academic Computing Center are available through the work of our student assistants. In addition to working as RCC's, students staff our public labs, help with hardware repairs, install software, assist with UNIX system administration, help design and maintain Web pages, and work with faculty on various projects. All students are welcome to apply to be student assistants. In addition to an hourly salary, these students obtain extensive computer training and off-hours access to our public labs.

In addition to the above, the Academic Computing Center provides a variety of other services that may be of interest. For more information, please refer to our Web site: <http://www.haverford.edu/acc>.

Language Learning Center

The Language Learning Center in Stokes Hall houses sophisticated multimedia equipment designed to support foreign language learning's increased emphasis on technology as a method of bringing authentic, meaningful culture to students in and

out of the classroom and at all levels of learning. Twenty-eight student workstations equipped with state-of-the-art Macintosh computers and full-size multiscan monitors allow students to utilize the most up-to-date computer software. All student workstations have VCR's for individual film viewing or digitizing. All language curricula media are now digitized and available to students through the web. Materials for use with classes in the Center are broadcast through a high-resolution LCD projector, which features several audio sources, multi-standard (international) VCR and international DVD players, and a Canon visualizer.

Three high-end Macintosh workstations in the Center allow faculty to work alongside the director and specially trained student assistants in developing materials geared toward integrating technology into their teaching. The machines are connected to slide and transparency scanners and color printers.

In the adjacent director's office, a Macintosh Workgroup Server provides networking to foreign language faculty and students campus-wide. The LLC also maintains networked database, CD-ROM, and streaming servers, allowing the facility to continue to serve all materials digitally. The Center provides various "extras" too, that make serving the foreign language faculty's multimedia needs easier, such as video and digital cameras, external Zip and SuperDisk drives, etc.

Language Learning Center software must serve foreign language learners studying both Western and non-Western languages. Microsoft Office 2001 (with proofing tools for English, French, German, Italian, Spanish, and Japanese) meets the word-processing needs of students studying those languages. We also provide specialized word processing for writers in Hebrew, Arabic, Cyrillic, Japanese, or Chinese. Computer dictionaries like Systeme-D, Atajo, or Word Ace (for German), are also available. Scanning software (Photoshop, OmniPage Direct, e. Typist) allows scanning of photos and optical character recognition in Japanese as well as the more commonly taught languages. Daedalus lets language learners write in tandem or in large-group synchronous discussions.

The Haverford College Language Learning Center is staffed for more than 80 hours per week; when the Center is open, there is always capable assistance for the classes that are scheduled in the Center and knowledgeable help available to all users.

Fine Arts

The *Bettye Bohanon Marshall Fine Arts Center* opened in 1987 and contains studios for painting and sculpture, photography darkrooms (both black and white and color), storage areas, student exhibition space, and faculty offices. Located adjacent to the new center is the *Fine Arts Foundry* which is used in the sculpture program. The Fine Arts Foundry also contains a wood shop and studio space.

The *Cantor Fitzgerald Gallery*, named for the Cantor Fitzgerald Company and dedicated in honor of Howard W. Lutnick '83, is located off the Atrium of the *Whitehead Campus Center*. It provides a simple yet elegant environment for historical and contemporary art exhibitions. The exhibition program serves both the College community and the Philadelphia area. Students are encouraged to participate in all aspects of the program from installing works of art to writing essays for exhibition catalogs published by the Gallery. Exhibited works come from the

College's collections and from loaned collections of individuals, galleries, and museums. In addition, each spring the gallery shows works by graduating Haverford and Bryn Mawr fine arts majors. The gallery is open throughout the academic year and is free to the public.

The College's art collections, housed in Special Collections of Magill Library, are inventoried and available for study.

Music

The *Union Music Building* houses classrooms, practice rooms, the music library and listening room, as well as the *MacCrate Recital Hall* for rehearsals and small concerts. The 12 practice rooms in Union Building and Roberts Hall house over 20 pianos, the majority of which are grands. Large concerts take place in the Marshall Auditorium of Roberts Hall which offers a Bösendorfer Imperial concert grand piano, a Schlicker two-manual Baroque style organ, and a Shortridge-Jacquet two manual harpsichord. Additional music resources include a five-octave Zuckerman clavichord, CD-Rom instructional and research stations, and an electronic music lab.

Other Buildings

The *Lyman Beecher Hall Building* was built in 1911, honoring a longtime professor of chemistry. Originally the location of the chemistry department, it now houses the offices and classrooms of various departments. In 1997 Hall Building was renovated by installing an elevator, replacing the antiquated heating system with a central heating and air-conditioning system and new energy efficient windows. *Founders Hall*, a solid stucco-covered stone building constructed in 1833, long provided space for all the operations of the College. It houses a variety of administrative and faculty offices and a few classrooms. In 1905 it was enlarged by a dining hall (the Great Hall), kitchen, and large meeting room (the Common Room). The kitchen and dining hall were relocated to the new *Dining Center* built in 1967. In 1990 Founders underwent a renovation that renewed the plumbing and heating systems, added central air conditioning, and repaired the exterior stucco. Founders now houses various faculty and administrative offices as well as the offices of the president, provost, vice president for finance and administration, and vice president for institutional advancement. *Roberts Hall* was given in 1903 by Lucy B. Roberts in memory of her husband, Charles Roberts. The west portion of Roberts Hall houses seven faculty offices and one seminar room, all with central air conditioning. The *Marshall Auditorium*, renovated in 1983 in honor of Bettye Bohanon Marshall and J. Howard Marshall, II '26, has seating for 736, several music practice rooms, one seminar room, student lounge and a public computer cluster. Health services are provided in the *Morris Infirmary*, given in 1912 by John T. Morris in memory of his brothers James T. and Isaac W. Morris. The building houses a modern dispensary and treatment unit, plus several offices. The *Hilles Building*, given in 1929 in memory of the College's first superintendent and matron, formerly the Laboratory of Applied Science, is being renovated as part of the Marian E. Koshland Integrated Natural Sciences Center. It will be ready by September 2002. In 1949 the *Skating House* was given in memory of Barbara McConnell by her parents. The *Dining Center*, built in 1967, was renovated in

1992 to improve the serving and dishwashing facilities and contains several large and small dining areas. In 1994 the lower level of the Dining Center was renovated to provide audio visual classrooms, student music practice rooms, offices for the Bi-Co News and Yearbook staff, a student lounge, and a student darkroom. The Dining Center kitchen was renovated in 1998-99 to improve the bakery, add cold storage facilities, and improve the food preparation and cooking facilities. The Whitehead Campus Center was finished in 1993 and named in honor of John C. Whitehead '43. It is a 54,000-square-foot structure housing the Admission Office, Bookstore, Mail Room, Central Receiving, The Women's Center, Multicultural Affairs Center, a Coffee Shop, Distinguished Visitors Office, Conference Office, Student and Honor Council Offices, meeting rooms, and guest rooms.

Athletic Facilities

The outdoor facilities include: *Walton Field* for lacrosse, soccer, and track and field events with the synthetic surface 400-meter, eight-lane, *Johnson Track*; the *Class of '88*, *Class of '22 Fields*, which are used for soccer and field hockey in the fall; *Merion Fields* for intramurals and offseason practice; the three fields on 10 acres on Featherbed Lane, including the *Class of 1995 Field*, a varsity softball field, plus additional game, intramural, and practice space; a *skating pond*; *Cope Field* for cricket; the *Class of '16 Field* and *Roy Randall Diamond* for baseball; 12 all-weather *tennis courts* (six courts are named for Norman Bramall and six courts are named for Bettye Marshall); and a *driving range* for golf practice.

Indoor facilities include the *Ryan Gymnasium*, the *John A. Lester Cricket Pavilion*, the *Locker Building* (including a fully equipped *trainer's room* and the *Strouse Weight Room*), and the five *Sesquicentennial Squash Courts*. The basement of the Ryan Gymnasium contains *locker facilities* and the *Henri Gordon Fencing Room*. A basketball court is on the main floor, with one-wall handball and badminton courts. The *Alumni Field House*, donated by alumni and friends of the College in 1957, provides extensive facilities for athletic activities. Renovated in 1984 and 1997, the Field House has a new synthetic floor surface of approximately 60,000 square feet. This surface may be divided into four basketball courts; four tennis courts; four volleyball courts; or a "playing field" for such sports as field hockey, soccer, lacrosse, or baseball. Other features of the Field House are a four-lane, 200-meter track, two long jump pits, high jump and pole vault pits, and a batting cage. Spectator seating capacity exceeds 1,000.

Residence Halls

Haverford's residence halls offer sufficient space to accommodate the entire student body while offering a diversity of housing options and styles. The majority of students on central campus live in single rooms grouped either in suites (single rooms sharing a common living room) or hall groups (single rooms sharing a common entrance door off of a corridor). *Barclay Hall* houses 130 students in singles, doubles, triples, and two-person suites. *Lloyd Hall* has mostly suites for six students, although there are a few suites for two; its total occupancy is 108 students. *Leeds Hall* houses 62 students and has two singles, suites for five, and one double. *Gummere Hall*, with 153 spaces, has a limited number of suites for two and three

students, in addition to singles and four-person hall groups. The *North Dorms—Jones, Lunt, and Comfort*—are comprised of singles, four-person suites, and five-person hall groups. Jones and Lunt house 70 students each, and Comfort has space for 71.

Approximately one-third of the student body lives at the *Haverford College Apartments*, a complex of 21 two-story garden apartments purchased by the College in the 1970s. HCA has one and two bedroom apartments for a total of 168 units. During the 2001-02 academic year 401 students lived in 139 apartments. Apartments in building 15 are set aside for students who want to participate in E-haus. E-haus is an intentional community where students live cooperatively to minimize their environmental impact by emphasizing ecologically sound living in an atmosphere of shared responsibility. The members meet weekly and make decisions through consensus. E-haus organizes at least one campus-wide event per semester and issues a standing invitation to community members to attend the week-day dinners. Many E-haus members serve as resources for activism and communal living in the Bi-College community.

Apartments in building 35 are set aside for students who want to participate in the Asian Cultural Living Group (ACLG). Preference is given to applicants who meet one or more of the following criteria: active participation in the East Asian Cultural Organization (EACO) or South Asian Students' Association (SAS); interest in Asian Studies/culture; interest in Asian-American issues; involvement in multicultural activities that affect and involve Asian students; Asian students seeking a culturally supportive environment.

In addition to the central campus dormitories and the *Haverford College Apartment* dormitories, there are six dorm houses which were originally private dwellings. *La Casa Hispanica* supports the endeavors of students interested in organizing programs concerned with the cultures and civilizations of the Spanish-speaking world. It contains a faculty apartment and housing for six students in singles. *Cadbury House* also contains a faculty apartment and has housing for 13 students in both singles and doubles. The bedrooms are reserved for students who want a quiet study dorm where alcohol is not permitted at any time. The *Ira DeA. Reid House*, known also as the *Black Cultural Center*, has housing for five students in two doubles and one single. There is a resource library on the first floor. Preference is given to applicants who meet one or more of the following criteria: active in the Black Students' League; a member of the African Diaspora interested in the cultures and politics of Africa and the African Diaspora and seeking a culturally supportive environment; involved in multicultural activities which affect black students. *Yarnall House* has single and double rooms for 13 students, *Drinker House* for 18, and *710 College Avenue* for 11.

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CURRICULUM REQUIREMENTS

Haverford is a liberal arts college. Its curriculum is designed to help its students develop the capacity to learn, to understand, and to make sound and thoughtful judgments. The requirements for the Degree encourage the exercise of these skills in each of the broad fields of human knowledge and a fuller development of them in a single field of concentration.

Guidelines for Liberal Education

Liberal education requires a sense of the breadth of human inquiry and creativity. The human mind has explored the myriad facets of our physical and social environments; it has produced compelling works of art, literature, and philosophy. Every student is encouraged to engage a full range of disciplines—fine arts, the written word, empirical investigation, economy and society—in order to become a broadly educated person. As a step toward this goal, students must fulfill the following requirements:

First-Year Writing Requirement

As an essential tool for academic study, personal expression, and civic life, writing deserves concerted attention in a liberal education. A one-semester writing seminar, a general degree requirement of the College, must be taken by all first-year students. Writing seminars are courses that integrate writing instruction with intellectual inquiry into particular disciplinary or topical foci. They devote attention to strategies for performing critical analysis, constructing sound arguments, and crafting effective prose. WS-T (topically organized) and WS-D (academic discipline based) seminars are offered in both semesters. WS-I sections, taught in the fall semester, do not alone fulfill the writing requirement, but serve as preparation for WS-T or WS-D courses in the spring semester. Students are advised to take other courses as well in which writing receives substantial attention.

Foreign Language Requirement

Proficiency in a foreign language, ancient or modern, serves many ends. It deepens an appreciation of one's own language, increases sensitivity and understanding of the nature of language itself, and enables the student to gain a far more intimate understanding of different cultures than is possible through translations. Further, with regard to specific disciplinary ends, many graduate programs require a reading knowledge of at least two foreign languages.

For all these reasons, Haverford College requires that all students demonstrate proficiency in a foreign language. Proficiency may be acquired and/or demonstrated in any one of the following ways in order to fulfill this degree requirement, which must be completed *by the end of the junior year*:

- (a) An Advanced Placement score of 4 or 5; or
- (b) A score of 600 or higher on a language achievement test of the College Entrance Examination Board; or
- (c) One full year of language study at the level in which the student is placed by the Haverford language department; or
- (d) Language study in a summer program administered by Bryn Mawr College in

the country of the language if that program is an intensive, total-immersion program, fully equivalent to a full year of language study, and certified as such by the chairperson of a Haverford or Bryn Mawr language department; or

(e) Language study in a semester or year-long course abroad conducted in the language of the country under Haverford College's approved International Study Abroad Programs, and as certified in advance by the relevant language department chair at either Haverford or Bryn Mawr, or the Educational Policy Committee when the language has no counter department at either Haverford or Bryn Mawr.

Language courses may be taken at Haverford or at any of the cooperating colleges: Bryn Mawr, Swarthmore, and with advisor and registrar permission, the University of Pennsylvania. The Haverford department, however, must determine placement. Other restrictions which apply to the language requirement are as follows:

1. Language courses taken to fulfill the language requirement do **not** meet divisional distribution requirements; and
2. Courses taken to fulfill the language requirement may **not** be taken NNG at Haverford, CR/NCR at Bryn Mawr or Swarthmore, or P/F at the University of Pennsylvania.

Students for whom English is not their first language should see their deans in order to determine whether they have fulfilled their language requirement.

Social Justice Requirement

Haverford College, in keeping with its Quaker traditions, sees education in part as a means for understanding the historical conditions and cultural mechanisms of social injustice, and for questioning the hierarchies and relationships of power which shape society. The courses that fulfill the social justice requirement vary in content and employ diverse modes of analysis. They raise questions about the meaning of social justice in a number of contexts and provide differing frameworks through which students can confront issues of prejudice, inequality, and injustice. Students must successfully complete at least one course credit that engages in critical analysis of one or both of the following:

1. The structures, workings, and consequences of prejudice, inequality, and injustice; and/or
2. Efforts at political and cultural change directed against, and achievements that overcome prejudice, inequality, and injustice.

The list of relevant courses is compiled annually by the Educational Policy Committee and is available in the Office of the Registrar, where the fulfillment of such a requirement is recorded. For exceptions to this requirement, students should contact the chair of the Committee on Student Standing and Programs for appropriate procedures. Courses meeting this requirement may **not** be taken NNG, CR/NCR, or P/F.

Distribution Requirements

In addition to fulfilling the writing, foreign language, and social justice requirements noted above, students are required to complete a minimum of three course credits in each of the three divisions of the curriculum: humanities, social sciences,

and natural sciences. At least two departments in each division must be represented, and one of the nine course credits must be quantitative as described below. Courses meeting the distribution requirements may not be taken NNG, CR/NCR, or P/F.

Quantitative Requirement

Quantitative reasoning is an extremely important skill. The impact of science and technology in our century has been enormous. Today, those who lack the ability to apply elementary quantitative methods to the world around them are at a severe disadvantage. Therefore, students must successfully complete at least one course credit which focuses on quantitative reasoning. Quantitative courses provide experience in some of the following:

- (a) elementary statistical reasoning;
- (b) other widely applicable types of mathematical reasoning;
- (c) working with, manipulating, and judging the reliability of quantitative data;
- (d) generating and understanding graphical relationships; and
- (e) representing theoretical ideas in mathematical language and using mathematics to obtain concrete numerical predictions about natural or social systems.

These and other courses which satisfy this requirement are so indicated in this catalog. The quantitative requirement must be fulfilled by the end of the junior year and may not be taken NNG, CR/NCR, or P/F.

Departmental Major Requirement

Each student must meet the requirements for a departmental, interdepartmental, or independent major program. During the fourth semester of attendance, or earlier only in the case of transfer students, all students should confer with the major supervisors of the departments in which they wish to major and apply for written approval of a program of courses for their final four semesters. Such programs must provide for the completion, by the end of the senior year, of approximately 12 course credits or the equivalent, at least six of which must be in the major department and the others in closely related fields. Students are accepted into major programs according to the following rules:

- (a) Acceptance is automatic with an earned average of 2.7 or above in preliminary courses in the department concerned;
- (b) Acceptance is at the discretion of the major supervisor if the average in such courses falls between 2.0 and 2.7;
- (c) Acceptance is rare but may be contingent upon further work in the department if the average falls below 2.0;
- (d) *A student who is not accepted as a major by any department will not be permitted to continue at the College.*

Students who have been formally accepted as majors by any department have the right to remain in that department as long as they are making satisfactory progress in the major. Each student is expected to file with the registrar by the date specified in the academic calendar, a copy of his/her major program signed by the major supervisor. Haverford students may major at Bryn Mawr College on the same terms as those that apply to Bryn Mawr students and at Swarthmore College,

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with the proper permissions. The College affirms the responsibility of each department to make the work in the major field as comprehensive as possible for the student. There is need, in the senior year especially, to challenge the student's powers of analysis and synthesis and to foster the creative use of the knowledge and skills that have been acquired in previous studies. There is also the need to evaluate the performance of the senior in the major field, not only to safeguard the academic standards of the College, but also to help the student's self-evaluation at an important moment. In short, synthesis and evaluation in some form are both essential and may be achieved by various means as specified by the major departments in their statement of major requirements:

- (a) A Senior departmental study course culminating in a comprehensive exam; or
- (b) A thesis or advanced project paper; or
- (c) A course or courses specially designed or designated; or
- (d) Some combination of these or other means.

To avoid undue specialization in a major program, the College permits no more than thirteen course credits listed in a single department to be counted toward a major in that department. It is important to note that in light of the rule of thirteen, the College further requires that of the 32 course credits required for graduation, at least nineteen course credits must be taken outside of a student's major field of study. For this purpose, courses that are cross-listed in several departments are considered to be outside the major field of study. There are three exceptions to this limitation:

- (a) The limitation does not apply to certain majors at Bryn Mawr College;
- (b) The limitation does not apply to majors in the classics department; and
- (c) The limitation does not apply to those students who study abroad in programs, such as those at Cambridge or Oxford, where reading in one subject for the entire year is the norm.

Special Majors

A student who has demonstrated unusual maturity and who has special interests and abilities may be permitted to arrange an *interdepartmental major*. At the time the major is selected, the program of courses and the nature of the comprehensive examination will be worked out by the student in consultation with, and subject to the approval of, the chairpersons of the departments concerned, one of whom will be designated as major supervisor for that student. Unlike the option of the double major described below, *only one senior thesis or project is required in such a program*. The permission of the Committee on Student Standing and Programs is also required for an interdepartmental major.

Students with a minimum cumulative grade point average of 3.50 may *double major* by completing the entire requirements of both majors, including thesis requirements. In order to double major, the student must obtain permission from the appropriate dean and the chairpersons of both departments. When deemed appropriate by the two departments, a single thesis may satisfy the thesis requirements of both majors. But a single thesis submitted for a double major may not be used to reduce either the amount or quality of work typically required by each

major program. The single thesis option may be undertaken only with the written agreement of both departments.

A student, finally, may design an *independent major* or incorporate an area of concentration within an interdisciplinary major. Such majors must have the approval of the Committee on Student Standing and Programs. Furthermore, a member of the Haverford College faculty must serve as the student's advisor and also must agree to supervise the student's senior project or thesis. *Students interested in pursuing an independent major at Bryn Mawr College must still apply through Haverford's Committee on Student Standing and Programs and not directly to Bryn Mawr College.*

Credit Requirement

To graduate from Haverford, a student must complete successfully the equivalent of four years of academic work, or a minimum of 32 course credits, 24 of which may be taken at Bryn Mawr, Swarthmore, or the University of Pennsylvania during the academic year, and eight of which **must** be taken at Haverford College on the Haverford campus.

Physical Education Requirement

All students at Haverford are required to participate in some area of the physical education program during their first two years at the College in partial fulfillment of the degree. For physical education purposes, the academic year is divided into four quarters, of which students must successfully complete six quarters within the first two years. Alternative means to satisfy this requirement are available for students with medical conditions preventing exercise. Students will **not** be permitted to register for a fifth semester without having fulfilled this requirement. All cases of failure to fulfill the requirement will be reviewed by the dean and the director of athletics. No student will be permitted to graduate without satisfying this requirement, which is designed to assure exposure to a program from which students may choose wisely those forms of activity which will promote physical welfare and recreational satisfaction during college and beyond. The physical education requirement does **not** carry with it academic credit.

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The responsibility for knowing and meeting the applicable degree requirements as well as the academic regulations of the College rests with each student. If there are any questions regarding these regulations, they should be raised with the student's advisor or dean.

Registration Procedures and Policies

Detailed information concerning registration is issued by the registrar each year and is published in the annual course guide. All deadlines for registration are the same at Haverford and Bryn Mawr. The dates are different at both Swarthmore and the University of Pennsylvania.

Course Load and Credit

Students normally register for four course credits per semester, but since exceptions to this rule exist, they may arrange their programs with some flexibility. With consent of their advisors, students may enroll or pre-enroll for five credits in a given semester, or more than five credits with the approval of their dean. Students may also register for as few as two credits, provided they are making normal progress toward completion of the 32 course credits in four years required for graduation. The latter condition may be met either by having accumulated extra credits or by evidencing, to the Committee on Student Standing and Programs, an ability to make up a deficit in the future.

If a student wishes to carry fewer than four credits in a semester and does not have sufficient extra credits by the end of that semester to be on schedule for the four-year graduation limit, he or she must seek approval of his or her dean, who acts for the committee in such matters. A student dissatisfied with the dean's decision may have the case reviewed by the full committee. *Students permitted a credit overload or an underload during any given semester must pay full tuition, regardless of the number of credits taken.*

Students are expected to achieve the following in order to be making satisfactory progress toward the degree and be advanced to the next grade level:

end of first year -	8.0 course credits;
end of sophomore year -	16.0 course credits;
end of junior year -	24.0 course credits, full senior standing;
end of senior year -	32.0 course credits and fulfillment of all other requirements for the degree.

Should a student fail to achieve any of the above, he/she will *not* be advanced to the next grade level but will, instead, be referred to the Committee on Student Standing and Programs for action regarding the student's continuing status at the College.

No Numerical Grade Option (Pass/Fail)

Students who are carrying four full course credits may elect one course credit for which no numerical grade will be recorded on the transcript unless the course is failed. The grade entered on the record for the NNG course will be "P," if passed, "0.0," if failed, and "W," if withdrawn. Students may extend the option to take an

NNG grade to any courses in excess of the normal load of four course credits, provided they are not behind schedule in total earned credits at that time. Therefore, those on schedule who choose to carry five credits in a given semester may elect the NNG option for two course credits.

The purpose of NNG is to encourage experimenting when the student fears that, despite conscientious work, the grade may be low. If a student desires to take a course NNG, he or she must inform the registrar in writing, on a form obtainable from the registrar, by the third week of classes, of his/her intention to do so. Furthermore, the student's advisor must sign this form indicating approval. When the instructor of the desired course is the student's advisor, the approval of the student's dean may be substituted. Students further have the option to change the NNG designation to a numerical grade upon application to the registrar no later than the end of the first week of classes of the *following* term. Even if the numerical grade is recorded, the course will still count toward the four NNG course-credit limit allowed of each student during his/her Haverford career. Finally, *even if students decide to uncover the NNG after seeing the course grade, the course will not fulfill any degree requirement except cumulative credits.*

Certain courses may not be taken NNG. Among these are courses approved to fulfill the freshman writing requirement; courses meeting the social justice requirement; the quantitative requirement; the distribution requirements; and the foreign language requirement.

The instructor is not informed of the student's election of the NNG option, since that status should in no way affect the student's responsibility in the course. The student and his/her advisor will receive an official grade report showing the actual numerical grade in the course. At the time of choice of a major in the sophomore year, the major advisor and the student may jointly authorize the changing of the NNG designation to a numerical grade in courses which become part of the student's major program. Additional limitations upon the NNG option include:

- (a) No courses may be taken NNG which fulfill any requirement in a student's major;
- (b) During the junior and senior years, courses taken NNG must be outside the division of the student's major department except that, with the permission of the major advisor, such a course may be taken in the division of the major provided it is not offered to meet major requirements;
- (c) All Haverford students are limited to four NNG course credits in their time at the College. Courses in which the instructor decides to use the NNG option for all students are not included in this limit;
- (d) All NNG regulations in effect for courses taken at Haverford apply equally to courses taken at Bryn Mawr, Swarthmore, and the University of Pennsylvania;
- (e) Haverford students may take one course credit NNG or one course credit CR/NO CR each semester, but not both, unless on schedule in earned credits *and* enrolled in five course credits. No student may take two courses CR/NO CR in any one semester;
- (f) Courses taken on Haverford's approved international academic program may *not* be taken NNG.

Course Changes

Course changes may be made during the first seven class days of any semester. After this period, course changes may be made only with permission of the dean of the College. Drops will continue to be permitted through the end of the first three weeks of classes.

Repeating Courses

Students may not count among the 32 course credits required for graduation any course that substantially repeats the content of another course already completed, even though the course numbers may suggest an advancing sequence.

Laboratory/No Laboratory Courses

A laboratory course taken without the laboratory, or a laboratory course taken without the lecture cannot be included among the courses required for graduation or among the courses required outside the major.

Independent Study Courses

Many departments offer independent study courses to encourage independent work by qualified students. These courses provide opportunities to investigate topics not covered in formal courses, do extensive reading on a subject, do fieldwork, or engage in library research. Students wishing to undertake independent study must secure permission for the project from their advisor and from a faculty member willing to supervise it *prior to* registering for the course. Members of the faculty are under no obligation to supervise independent study courses. Such courses done without faculty supervision will not be given college credit. Course requirements are determined jointly by the instructor and the student. Written evaluation of the work performed may be submitted to the registrar in place of a numerical grade.

Students may register for only one credit of independent study per term. These courses are normally of half-credit value unless specified for a full credit by the instructor. To undertake more than one credit of such work, students must secure permission, *in advance*, from the Committee on Student Standing and Programs.

Students may not undertake independent study work in subjects being taught in regular courses. Those wishing to explore more thoroughly a subject covered in an existing course are urged not to undertake an independent study course, but rather to consider the course intensification option described next.

Course Intensification

The College believes that experience in a wide diversity of courses is an essential part of a Haverford education, but the College also recognizes that students may sometimes profit from the opportunity to work more intensively in a smaller number of subjects. Therefore, with their advisor's approval and the instructor's permission, students may register for double credit in one course and, in unusual cases, in more than one course.

In a double-credit course, students undertake an approved program of independent work in conjunction with a regular course and submit a paper or pass an exami-

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nation based on the independent work. Such work is not suitable in all subjects; the instructor of the course must be the final judge of whether it should be attempted.

Year-long Courses

Ordinarily, full-year courses must be carried through two semesters for a student to receive any credit. In some cases, a student may receive credit for one semester without taking the other, but only with the permission of the chairperson of the department concerned. Departmental permission must be in writing on a form obtained from the registrar. *In no case, though, may a student receive credit for the first semester of an introductory modern foreign language course without satisfactorily completing the second semester.*

Continuing in a Failed Course

If a student in a year-long course fails the first semester but is allowed by the instructor to continue, he or she may receive credit for the first semester if the second semester grade is 2.0 or higher. In such cases, the first semester grade will not be changed and the course instructor must state in writing to the registrar at the beginning of the second semester that this arrangement applies.

Auditing a Course

Students who wish to audit a course should obtain permission from the instructor. There are no special charges for auditing and such courses are *not* listed on the student's transcript.

Course Limits at Cooperating Institutions

Students may enroll in courses at Bryn Mawr College, Swarthmore College, and the University of Pennsylvania. At Penn, however, Haverford students are limited to two course credits per semester. Students should note that courses at Penn will be approved by the student's advisor and the registrar only on a space available basis, and only for courses not offered on a regular basis at either Haverford or Bryn Mawr. *Scheduling conflicts are not considered adequate reasons for seeking admission to courses at the University of Pennsylvania.*

A senior electing to take a year-long or a second-semester course at either Swarthmore, Penn or, with permission, at any other college or university, is responsible for verifying before the class begins that the instructor will submit a final course grade to the Haverford registrar by 5:00 p.m. on the day that senior grades are due, as indicated in the academic calendar. If the final grade is not submitted by that date and the course is required for graduation, the senior should not expect to graduate until the following May.

Continuing Students

Students who intend to continue at Haverford College must complete registration during the time designated in both the academic calendar and the instructions for registration, as published in the annual course guide. If students do not register on time and do not receive permission from their deans to delay registration, it will be assumed that they are not returning to Haverford. In such cases, their enrollment,

financial aid, and housing, if any, will be considered available for assignment to others. Additionally, there is a late registration fee of \$40.00 for each approved registration that is filed after the appropriate deadline, and a late verification fee of \$25.00 for late course confirmation. *These fees apply to all students registering in Haverford courses, regardless of their home institution.*

Grading

The following numerical grades are awarded at Haverford College:
4.0 (highest grade); 3.7; 3.3; 3.0; 2.7; 2.3; 2.0; 1.7; 1.3; 1.0; 0.0 (failing grade).

Equivalent letter grades universally understood:

A (highest grade); A- ; B+; B ; B- ; C+; C ; C- ; D+; D; F (failing grade).

In addition to the numerical grades issued at Haverford, the following letter grades may also be used:

CIP—Course in Progress - Grade added at the end of second semester;

P—Pass in a Haverford NNG (Pass/Fail) course;

INC—Approved Incomplete;

W—Approved Withdrawal;

NGR—No Grade Reported - Grade awarded at end of full-year course;

CR—Credit or Pass in a Bryn Mawr or Swarthmore

CR/NO CR (Pass/Fail) course;

NCR—Fail/No Credit in a Bryn Mawr or Swarthmore

CR/NO CR (Pass/Fail) course;

WEA—Written Evaluation Attached, explicitly stating pass or failure.

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1. A course may not be counted toward a student's major requirement if the grade submitted is below 2.0;
2. A grade of CIP may be submitted at the end of the first semester for senior research courses conducted throughout the year and for certain other courses agreed upon by the instructor and the dean of the College, and so announced at the beginning of the course;
3. If a student drops a course or is required by the instructor to drop it after the penalty date (see academic calendar), the grade recorded is 0.0. If, however, a student is permitted to withdraw from a course by the dean of the College for unusual reasons—normally those beyond the student's control, such as illness—the grade then recorded is W;
4. Semester, yearly, and cumulative averages are based upon Haverford, Bryn Mawr, Swarthmore, and the University of Pennsylvania numerical grades only, and only during the academic year (September through May). *All other work is regarded as transfer credit, including that taken through Haverford's approved International Study Abroad programs, Bryn Mawr and the University of Pennsylvania summer sessions, and all credit granted for advanced placement, the International and French Baccalaureates, the German Abitur, the British "A" Levels, the Swiss Maturite, as well as those courses taken at colleges and universities in the United States and abroad. Course credit **may** be granted for this academic work, with appropriate grades (C or higher for college credit, B or higher*

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- for "A" Levels), and with appropriate scores for all ungraded work, but grades will **not** appear on the Haverford transcript, nor will the grades or scores earned become a part of any Haverford student's cumulative grade point average;
5. The grade of 0.0 (failure) will be given for any course for which no grade is reported on time, or for which an INC is reported without previously-approved supporting documentation duly submitted to the registrar;
6. When an INC is granted, a final date for completing the course must be specified. Failure to complete the course by the specified date will result in a failing grade (0.0);
7. Some students who fail a course because they do not complete the work or those who withdraw from a course may still wish to see the work from the course through. In such cases, the student has two options: he/she may pursue the work because it is interesting and not for credit or a grade. Alternatively, the student might approach the same instructor with whom the course was taken and ask if he or she would sponsor and grade the work during the next semester. The record would then show a grade of 0.0 or W for one semester, and a grade reflecting successful completion in the second semester;
8. In certain senior seminars, a department may choose to give a brief written evaluation of performance instead of a numerical grade. In such cases, the grade recorded will be WEA, and will serve in place of a numerical grade. Where such evaluation is to be used, this fact will be announced to the students at the time of registration. *All students in a course must be graded according to the same system;*
9. *Requests for Changes in Grades* — Students who believe they have sufficient reason to request a grade change must inform the instructor of their request within two weeks of the receipt of grades at the end of each semester. If the instructor believes the grade recorded is too low or too high and the dean of the College concurs, the grade will be changed;
10. *Disputed Grades* — A student who believes that the grade submitted by the instructor in a course is wrong, and who fails to convince the instructor of an error, may appeal the case to the chair of the department concerned. If the chair cannot be persuaded, the next (and final) appeal is to the provost of the College. Students should consult their deans before entering upon such a course of action. They should recognize, moreover, that Haverford subscribes to the principle of academic freedom for its faculty, in light of which the provost is ordinarily unable to authorize a change of an instructor's grade. Thus, the principal value of an appeal to the provost is a possible identification of a pattern of inequities, in which case an investigation into the facts of the matter would be undertaken;
11. Finally, a student who receives a low grade in an examination, because of special circumstances such as illness, may petition the instructor and the dean of the College for a special examination. If the request is granted, the grade for the special examination will replace the grade originally received in the mid-year or final examination. In computing the final grade in that course, the new course grade will replace the old one on the student's transcript, and the semester average will be revised accordingly. To invoke a review under this provision, the student must have notified the instructor immediately after stopping work on the examination, giving details to support the request for a special examination.
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Deadlines

All required work in a course is due at the times specified by the instructor, but in no event later than the dates specified in the academic calendar. All written work in courses, except final examinations or papers in lieu of examinations, is due as scheduled by the instructor, but no later than the last day of classes for that semester. Papers in lieu of examinations are due as scheduled by the course instructor, but not later than the last day of the examination period for that semester.

Extensions and Incompletes

Extensions and incompletes *for course work not completed by the last day of the examination period for that semester* are granted only in case of illness or when other extenuating circumstances of the most compelling nature are involved. A student who wishes to request an extension or an incomplete should secure the appropriate form from the registrar and, if the instructor approves the request, specify on the form the work to be done and the final due date. The form should then be submitted to the student's dean for final approval.

To have an extension or an incomplete processed by the registrar, a student must follow the procedures outlined above. Ad hoc arrangements or commitments contrary to the regulations herein described or any arrangements to which the student's dean has not been a consenting party will not, in all likelihood, be honored. It should be noted, finally, that both procedure and deadlines differ from Haverford's at Bryn Mawr, Swarthmore, and the University of Pennsylvania. Students are responsible for informing themselves about the rules regarding such matters at these institutions.

ACADEMIC YEAR '02-'03 EXTENSION/INCOMPLETE, DEADLINES

Semester I

Extension work is due on Thursday, Dec. 26, 2002

Incomplete work is due on Friday, Jan. 10, 2003

Semester II

Extension work is due on Monday, May 19, 2003

Incomplete work is due on Friday, June 6, 2003

The course instructor has jurisdiction over requests for extra time to complete assignments or permission to schedule make-up examinations during the semester. A student who wishes to make such a request should speak directly with the appropriate instructor. No form is required.

Class Attendance

As a general rule, students are expected to attend classes unless excused. In some courses, class attendance is a requirement for satisfactory completion of the course. Lack of attendance in some cases may be grounds for dropping the student and assigning a failing grade. *It is the student's responsibility to learn from the instructor how class attendance will be regarded in each course.*

ACADEMIC REGULATIONS

Graduation Honors

Final honors at graduation are awarded to students who have undertaken and completed academic work of high quality. Such Honors are of two kinds: those awarded by the departments and those awarded by the College.

1. Departmental Honors

The exact nature of departmental honors work and the criteria used in judging it are listed in the departmental statements in the catalog. For such honors, the work in the department must be considerably superior to that required for graduation, including a demonstration of the student's competence, insight, and commitment to the field of interest. Individual departments may award Honors to students whose departmental work has been of high quality, and High Honors to those who have demonstrated both high quality and originality, indicating an unusual degree of competence.

2. College Honors

The Committee on College Honors and Fellowships will consider all students whose overall performance is exceptionally high for the following college honors awarded at Haverford College: *magna cum laude* or *summa cum laude*. In addition, the committee will consider students nominated by members of the faculty.

Whereas distinguished performance in the major is the criterion for departmental honors, the award of college honors recognizes students whose work has been outstanding overall. Special attention is given to study that goes beyond the requirements of the major. Such study can be interdivisional, as evidenced by superior work outside one's major division; interdisciplinary, as evidenced by superior work in more than one department of a single division; by superior work in several converging domains of knowledge represented by an area of concentration or the equivalent; or, by other evidence of superior work beyond the requirements of the major and the College.

Both *magna cum laude* and *summa cum laude* are awarded by the faculty on recommendation of the Committee on College Honors and Fellowships. *Summa cum laude* is awarded rarely, to students of exceptional merit.

Residency and Other Requirements for the Degree

Students, other than transfer students, may arrange for reduced programs of six or seven semesters by taking advantage of several options:

1. They may take five course credits per semester instead of the normal load of four;
2. They may use up to *four course credits* earned in combination of approved pre-Haverford study, including approved summer study at other institutions while a student at Haverford; or
3. They may study at another American college or university or at a Haverford-approved program abroad for a semester or a year.

It is important to note that any combination of options will need to provide for a minimum of six semesters in residence at Haverford College and at least 24 Haverford course credits. Such "Haverford" course credits may be taken at

Haverford or any of the three cooperating institutions—Bryn Mawr, Swarthmore, or the University of Pennsylvania—to be counted as credits while in residence at Haverford. Students, however, must realize that no student may graduate from Haverford College without having taken a minimum of *eight course credits at Haverford College on the Haverford campus*. In cases of transfer students, decisions about residence and credit requirements are made by the deans, but transfer students must complete a minimum of 16 Haverford course credits and four semesters in residence to be considered for a degree at the College.

Students who choose to take advantage of one of the reduced programs as described above must reduce their study away credits proportionately.

Academic Flexibility Program

Since different students have different needs, abilities, and goals, Haverford seeks to provide each of its students as much flexibility as possible. Thus, there may be cases when the general regulations prevent a student from making the best use of educational opportunities at Haverford. Provision is made, therefore, for changing the normal requirements in certain individual circumstances.

Power to act on requests for exceptions to any of the academic regulations is the responsibility of the Committee on Student Standing and Programs. This body is a standing committee of the faculty, consisting of three faculty members, the director of multicultural affairs, one of the deans, and three students appointed by the Students' Council. It is to this committee that a written proposal for a special course program promoting the student's best intellectual development should be submitted. This proposal must also be signed by the student's advisor and dean.

Students with exceptional abilities or exceptional preparation, or both, are encouraged to consider whether a program out of the ordinary may help them make the most of their opportunities. A program for academic flexibility which describes the alternative program and why it is being requested should be discussed by the student and his or her advisor and dean and submitted by the deadline listed below:

Friday, Oct. 25, 2002

(for Semester II of the '02-'03 Academic Year)

Friday, March 21, 2003

(for Semester I of the '03-'04 Academic Year)

After consideration by the student's dean, such proposals will be forwarded to the Committee on Student Standing and Programs for its approval. If the committee does not approve the proposal, the student may appear in person to appeal its decision.

The College suggests consideration of the following as examples of special programs which might be pursued:

A. Enrichment and Independent Study

Students with outstanding records who have the approval of the appropriate departmental chairpersons and the Committee on Student Standing and Programs may depart from the usual course patterns as follows:

1. A student admitted to the *thesis program* may enroll in the senior year for as few as three credits per semester and complete a thesis based on independent work;

ACADEMIC REGULATIONS

2. A student admitted to an *interdepartmental program* must first have been accepted as an interdepartmental major. The program, which may include a reduced course load and a thesis, will also include some advanced independent work relating to both departments, which need not be in the same division;

3. A student admitted to a *concentrated program* will be permitted more than the usual amount of concentration, taking two double-credit courses in the major field, or one closely related, in two or three of the last four semesters. Students who meet the standards set by departments for honors may be granted departmental or interdepartmental honors for these programs.

B. Credit for Non-Collegiate Academic Work

By petition to the Committee on Student Standing and Programs, a student may request the granting of credit for non-collegiate, supervised academic work undertaken away from the College (OC credit). There may be important educational opportunities for a student to work in a non-university research laboratory, to do a supervised archaeological study on site, etc., for which the College will grant academic credit. Such work may receive up to four course credits provided the following conditions are met:

1. The work is closely supervised by a person who is a faculty member at a college or university or who clearly holds the same qualifications;
2. The student's academic advisor approves the activity. If the work is in an area outside the advisor's field, approval will also be required from a Haverford faculty member competent in the area of the project;
3. The project results in a product judged to be satisfactory by the field supervisor and the Haverford faculty member;
4. In most cases, the work is unpaid.

For each Haverford course credit earned in this manner, a student will be charged tuition at the rate of \$3,450 per course credit. If credit is granted for such work by another academic institution, the credit may be transferred to Haverford without further tuition charges. Before credit can be transferred, however, the procedures for approval as outlined above must be followed.

Students are reminded that all proposals for international study during the academic year must be submitted to the Educational Policy Committee through the International Academic Programs Office.

C. Graduation in Fewer than Eight Semesters

Sufficiently mature students, if they possess outstanding ability or are judged to have legitimate reasons for special consideration, may be allowed to graduate without accumulating all of the prescribed credits other than major departmental requirements in the following manner:

1. Graduation in Six Semesters

Students who have clearly defined career goals and strong motivation to achieve them may wish to consider a program for graduation in three years. This program can allow graduation with 30 course credits, all of which must be earned in residence during the academic year (September through May), provided that overall performance is at a high level and that, in addition to the usual requirements, special requirements are fulfilled.

In order to ensure breadth in the student's program, some subject or acceptable combination of subjects outside the division of the major department must be pursued for four consecutive semesters. These must be approved in advance by the student's advisor and by the Committee on Student Standing and Programs. In addition, one of the courses must involve a research project on a topic approved in advance by the advisor and culminating in a thesis approved by both the department and the committee. No course taken with the NNG option can be counted toward the 30 course credits required for graduation, unless required for the major.

Students who wish to graduate under this program must enroll for five course credits in each semester. They are urged to consult their dean as early as possible and should also be in contact with the departments of anticipated major work. Choice of a major should be made by the end of the first semester of the sophomore year. All students who already have been granted six semester programs must, by April 15 each year, confirm to their dean in writing their intention to continue in these programs. Students who begin in the six-semester program may revert to a program of 32 course credits completed in seven or eight semesters at any time.

2. Graduation in Seven Semesters

Students may meet the normal requirements of 32 Haverford approved course credits by enrolling for five course credits for four semesters and for four course credits for three semesters. The selection of this pattern will allow students to spend a full semester away from the campus at some time during their college careers.

While there is no deadline for declaring seven-semester programs, early notification will be of help to both the student and the College. Students considering such programs are urged to consult their dean as early as possible, but not later than the end of their first year. All students who already have been granted such seven-semester programs must, by April 15 each year, confirm to their dean in writing their intention to continue in these programs.

Although most students are expected to graduate in four academic years, some may be permitted to take more time. Examples would include students with physical disabilities which prevent them from carrying a full course load; students whose programs would be substantially enhanced by another semester of work; and students who wish to engage in activities for which academic credit at Haverford is not appropriate. In all cases of such extended programs, the student must secure prior approval of the Committee on Student Standing and Programs.

D. B.A./M.A. Program

Haverford students of unusual ability who might normally complete a B.A. degree in three years may, for special reasons, stay at Haverford for an additional year in an M.A. program. Such a student might utilize the resources of Haverford, Bryn Mawr, Swarthmore, or the University of Pennsylvania. Students would have to be accepted by the department or departments involved and have the approval of the Committee on Student Standing and Programs for the specific program concerned. The awarding of the master's degree must be approved by the committee.

A student interested in a B.A./M.A. program should follow a six-semester B.A.

ACADEMIC REGULATIONS

sequence and, in the fall of the third and senior year, should request the committee to consider the M.A. proposal and the student's qualifications for it.

Areas of Concentration

Areas of concentration exist at Haverford in order to afford students a formal opportunity to pursue an area of study distinct from, but relevant to, their choice of major. Students who undertake such study select their concentration courses from among the existing courses offered by the departments, including the department of general programs.

To fulfill an area of concentration, a student must normally complete six course credits selected with the aid of an informal faculty committee for that concentration, drawn from at least two departments of the College. Of the six course credits, no fewer than two and no more than three of them will also form part of the student's major. In this respect, concentrations differ from the traditional minor, which is conducted entirely within one single department other than the student's major department, and which may be wholly unrelated to that department. Haverford's concentrations follow one of three models:

1. The six course credits for forming the concentration are drawn from a number of participating departments. The courses selected by each student must be drawn from two or more departments; no fewer than two and no more than three will form part of the student's major;
2. Two (or three) departments form an interdisciplinary area of concentration in which students take a core of interrelated courses from each department. These courses are drawn both from within the major and from allied departments. One or two specified courses in an allied department may be substituted for major requirements. However, the combination may not normally add more than four courses to the number of courses required by that major;
3. The area of concentration requires a core of courses drawn from an area that does not necessarily offer a major, which are related to two departments that offer a major. The six course credits of the concentration include at least two but no more than three course credits in the student's major. Students **MUST** elect an area of concentration at the same time they declare a major: that is, during their fourth semester of attendance. As with the major, **earlier elections are not permitted.**

Haverford College currently offers study in the following areas of concentration: Africana studies, biochemistry and biophysics, computer science, East Asian studies (also offered as a major and a minor), educational studies, feminist and gender studies, Latin American & Iberian studies, mathematical economics, neural and behavioral sciences, and peace and conflict studies.

Minors

Many departments and academic programs at both Haverford and Bryn Mawr offer minors. Students should see entries for individual departments, programs and areas of concentration in either/both catalogues for details. The minor is not required for the bachelor of arts degree or the bachelor of science degree.

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First-Year Program

Since the College requires that students be exposed to areas of knowledge and ways of thinking which may be new to them and which may radically change their ideas about eventual specialization, and since it is important that this diversified experience be gained early, the faculty strongly recommends that first-year students take no more than one course in any department in either semester of the first year. For the same reasons, sophomores normally will not be permitted to take more than two courses simultaneously in any one department. The Committee on Student Standing and Programs exercises general supervision over unusual combinations of courses.

First year students and their advisors select a program of courses for the first semester during the orientation (Customs) period. The courses open to first-year students are generally numbered below 200, but if qualified, first year students may be permitted by the department concerned to take more advanced courses. Students will be helped to plan a course of study for the first four semesters, taking into account the "Guidelines for Liberal Education" and the degree and distribution requirements.

Post-Graduate Study

Many Haverford College students plan to enter upon further courses of study after graduation. As a liberal arts college, Haverford arranges its curriculum so that students with such plans are able to meet the entrance requirements of graduate and professional schools. The College does not, however, attempt to anticipate in its own curriculum the work of any graduate or professional school. It is the conviction of the faculty that the best preparation for graduate work is a liberal education with sound training in basic disciplines, to which more specialized training may be added later.

Students intending to enter a professional school are free to choose a major in accord with their principal abilities and interests, since professional schools such as those of business administration, education, law, medicine, or theology usually accept students on the basis of merit regardless of their choice of major and, except in the case of medical schools, without specific course requirements. The requirements of most state boards of medical licensure are such that all students who hope to be admitted to a medical school must present a minimum of eight semester courses in the natural sciences, each of which must include laboratory work: two in biology, four in chemistry, and two in physics.

Students planning to do graduate work in a departmental subject such as economics, mathematics, history, etc., should consult with the chairperson of the department at Haverford which most nearly corresponds to the department of proposed work in graduate school. This advisor will be able to give guidance in the selection of courses and in the choice of major (which will not necessarily be in the department of intended graduate study), and to answer other questions.

Students planning to go to professional schools should seek early advice from the Career Development Office or from the College's preprofessional advisors. Schools of business, law, medicine, and some other graduate schools require appli-

cants to take special admission tests. Arrangements for taking these tests are the responsibility of the student concerned.

International Study

Upon request, qualified students in good academic and disciplinary standing may be granted permission to spend a semester or a year studying in a foreign country. The College recognizes approximately 50 programs in international colleges and universities; approval for study in these programs and the granting of commensurate Haverford credit are automatic. The College has specific arrangements with several international universities, including Cambridge and Oxford Universities in the United Kingdom, which allow students to study in those institutions for a year. Students who study abroad for the semester or the year pay regular tuition and, in many cases, room and board fees to Haverford. The College, in turn, is responsible for paying the program fees directly to the institution abroad. An allowance for the cost of a round-trip airfare will be deducted from tuition. Some financial aid may be available for eligible students, although priority will be given to those whose major programs and concentrations most depend on international study. An advisory committee of faculty and the associate dean of the College and director of international academic programs determine the preference rankings in this instance. Students interested in studying abroad should consult the director of international academic programs early in their sophomore year. In recent years, Haverford students have studied at the University of Melbourne, the London School of Economics, the University of Nairobi, the University of Costa Rica, and the University of the West Indies among many others. Approximately 39% of the junior class studies abroad for either a semester or a year.

In the rare case where a student may wish to attend a program not on the approved list, the following procedure is required:

1. The student must collect all pertinent information about the program, including catalogs, course descriptions, modes of evaluation of academic performance, and list of faculty;
2. The student must present the material to the associate dean and director of international academic programs a full year in advance (November 1 or March 1). The director will review and evaluate the program.
3. In the event that the associate dean and director of international academic programs regards the program as commensurate with programs on the approved list, the student must prepare a petition for consideration by the Educational Policy Committee, which is charged by the faculty to make the final decision. The petition must explain why the existing approved programs do not fulfill the student's academic needs and how the proposed program meets those needs. A statement from the student's major faculty advisor, endorsing the program and explaining how it complements the work of the major, must accompany the petition. A statement from a member of the faculty who is familiar with the program will also be required. In order to assure the quality of programs on the approved list, an on-site visit and evaluation by a Haverford faculty member is required before approval is granted. The petition is also forwarded to the Student Study Abroad Advisory

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Board for its recommendation prior to its being sent to the Educational Policy Committee. Students who do not request and receive permission to study abroad through the International Academic Programs Office will not receive Haverford credit for their work. The Educational Policy Committee will not consider retroactive proposals under any circumstances. Students who do not wish to pay tuition to Haverford College and/or receive Haverford College credit, may not attend the approved programs. International Study information, including brochures, procedures, and applications, is available from the Office of the Associate Dean of the College and director of international academic programs.

Study at Other American Colleges

Some students may also study at another college or university in the United States for the enrichment to be gained through different or more diversified liberal arts offerings. Some go simply to experience college life in a setting contrasting with that at Haverford. The College has formal exchange programs with Claremont McKenna and Pitzer Colleges in California, Spelman College in Georgia, and Fisk University in Tennessee. Permission forms for such study, to be signed by the student's advisor and dean, are available in the Office of the Registrar. All courses must be approved in advance by the chair of the department in question. In order to provide a semester's credit at Haverford (four course credits), a program at another institution must represent at least one-eighth of the degree program there; and similarly, in order to provide a year's credit at Haverford, the program must represent one-quarter of the degree at the other institution.

Students who expect to study away from Haverford for a semester or a year must confirm their intention in writing to their dean, using the same timetable as that for deans' leaves. They should also inform their dean when they have been accepted by the institution to which they have applied. Naturally, they will have discussed at an earlier time tentative plans with their advisor and dean. They should, finally, be especially careful to see to it that their total program provides an adequate number of credits outside the major department and that it meets Haverford's distribution requirements.

Note: Students may not attend programs abroad through an American college or university and receive credit at Haverford unless they go through the Office of International Academic Programs.

Independent Study While Not in Residence

Students who wish to carry independent study credit while away from the College should secure the approval of their advisors and that of the instructor(s) involved before submitting the written proposal to the dean for final approval. If approved, students will be charged at the special student rate of \$3,450 per credit.

Summer Study at Another United States Institution

A student wishing to obtain Haverford credit for summer school at another United States institution should follow the procedures as outlined below:

1. The student should secure from the registrar a form entitled, "Approval for Summer School Work;"

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2. With the form, the student should secure the approval of his/her faculty advisor, dean, and the chairperson of the Haverford department which corresponds to the field in which the work is to be done. Note that advance approval is required for obtaining Haverford credit. Approval sought retroactively will, in all likelihood, be denied;
 3. In seeking approval, the student should first complete the descriptive information about the course (name, number, amount of credit conferred at the other institution, and the institution's name). The student should also present a catalog, listing the course descriptions;
 4. The faculty advisor's signature should represent an approval of the course as a part of the student's program at Haverford. Such approval should be based on the suitability of the course for Haverford credit;
 5. Faculty assigning credit proceed on the principle that at any institution, each course counts as a fraction of the credit required for the degree. At Haverford, the minimum graduation requirement is 32 credits, equal to 128 semester hours. Therefore, summer credit equivalents must be identical to academic year equivalents for transfer credit to be considered at Haverford.

Other regulations governing summer study in the United States

1. Courses taken in summer school will **not** satisfy Haverford course requirements for the major unless prior written approval is granted by the major supervisor;
2. A summer course must not be a repeat of or at a lower level than a course already a part of the student's Haverford academic record;
3. To receive Haverford credit for courses taken in summer school, a student must earn a grade at least one full grade above the lowest passing Haverford grade: at least a 2.0 on the Haverford scale, or a grade of "C" on the A-F scale;
4. Permission for credit must be secured **before** the course is taken;
5. For summer work at Bryn Mawr College, only the permission of the student's dean is required;
6. In all cases of summer school work, including courses taken at Bryn Mawr and the University of Pennsylvania, students should have *official* transcripts forwarded to the Haverford College registrar. Unofficial grade reports will **not** be accepted for evaluation;
7. Students should realize, finally, that summer school credit, if accepted by Haverford, will *transfer* to Haverford simply as course credits. Course titles and credit values will be indicated on the record, *but in no instance, including summer work at Bryn Mawr College and the University of Pennsylvania (both in the U.S. and abroad), will grades earned appear on the Haverford record; likewise, in no instance will the grades earned appear as part of the student's cumulative grade point average at Haverford.*

Summer Study Abroad

Both Bryn Mawr College and the University of Pennsylvania summer programs abroad have been approved for Haverford academic credit. The Committee on Student Standing and Programs encourages students to explore these programs in making summer plans. In these cases only, students should follow the procedures

SPECIAL ACADEMIC PROGRAMS

outlined above for summer school study at another institution in the United States.

All other requests to study for Haverford academic credit outside the United States during the summer must be reviewed and approved by the Committee on Student Standing and Programs. Since these requests for credit are subject to the faculty rules concerning the granting of credit in general for any summer course, students should follow the procedures outlined for summer school study at another institution in the United States. *Additionally*, students must submit a brief petition to the Committee on Student Standing and Programs requesting credit approval.

Included in the petition should be the following:

1. Course professor and his/her academic credentials;
2. Information about the program offering the course;
3. Course description, length of program, hours in class, and reading list if available; and
4. Method of grade evaluation (types of material, exams, etc.).

The proposal should be typewritten with the appropriate signatures and must contain all requested information. The Committee on Student Standing and Programs may refuse to consider proposals without the required signatures or without sufficient supporting data.

Students wishing to request credit for international study during the 2003 summer must submit their petitions to the Committee on Student Standing and Programs via the Office of the Dean of the College no later than March 21, 2003.

Advanced Placement Credit

Entering students should arrange to have advanced placement scores forwarded directly to the Office of the Registrar at Haverford College. The registrar will award one course credit for an AP score of 5 and one-half course credit for a score of 4. No credit is awarded for scores under 4. The maximum AP credit awarded to any student may not exceed four course credits.

The procedures outlined above under Haverford's special academic programs implement the faculty's decision that each student may avail him or herself of many special academic opportunities during the years at Haverford. Credits earned in summer school, in the Advanced Placement program, in "A" Levels, in the International Baccalaureate Program, the French Baccalaureate Program, the German Abitur, and the Swiss Maturite, or in college courses taken either before matriculation at Haverford or during the summers while a student at Haverford will be recorded in such a way that the total for any one student *does not exceed four course credits*. Students should note that divisional distribution is not awarded to any such work, with the exception of summer credits earned during one's years at the College.

Leaves of Absence

Leaves of absence can contribute greatly to the general education of some students. The College seeks to make it a fairly simple matter to arrange a leave. The authority to grant leaves and to specify their type, duration, and terms rests with the deans.

Since the number of students admitted for any fall term depends upon the num-

ber of students returning, a student who requests a leave of absence late in the summer has effectively denied someone else a place at the College. If that student has also been assigned College housing, he or she is severely inconveniencing other students. Thus, a fine of \$500 will be imposed upon students requesting leaves of absence after August 1 of any given year.

If, after a semester has begun, a student for any reason leaves the College (Dean's Leave, Study Away, International Study, College Leave), he or she must vacate his or her dormitory room by a date determined by his or her dean in consultation with the student. In such cases, a pro-rated fee for room (and board, if applicable) will be assessed. At Haverford, leaves of absence fall into two categories:

Dean's Leave

Students in good academic standing may request leave without conditions which, if granted, will be for a specific period of time (one, two, or more semesters). Should a student fail one or more courses or otherwise perform poorly before the leave goes into effect, the student's dean or the Committee on Student Standing and Programs may impose conditions or, in some cases, revoke the leave and replace it with a College Leave.

Applications for such unconditional leaves must be submitted in writing to the student's dean not later than the final day of registration for the semester the student wishes to commence the leave (Nov. 8, 2002 for Semester II leaves, or April 11, 2003 for a Semester I leave). Return from such a leave is automatic as long as the student provides written confirmation of intent to return. A student should write his or her dean by March 1 for a Fall Semester return, or by December 1 for a Spring Semester return. A student wishing to extend a leave should send a written request, giving reasons, to his or her dean. Failure to do so will mean that the student will be automatically placed on College Leave. The dates for these requests are the same as those for statements of intent to return.

Dean's Leaves may also be granted with conditions in certain cases. For example, students might, because of illness or other personal problems, miss the deadlines for requesting leave. Or they might, uncharacteristically, fail a course or experience some other atypical academic difficulty. In such instances, the student's dean may impose conditions to be met to the dean's satisfaction before re-admission can be granted. Failure to satisfy the conditions will be cause for changing the leave from a Dean's Leave to a College Leave, as will the condition that follows.

If, while on a Dean's Leave from Haverford, a student is admitted as a transfer to another institution, he or she must transfer out of Haverford. Failure to do this will automatically change the Dean's Leave to a College Leave, revoking automatic return to Haverford.

College Leave

This category covers all other leaves and applies, as a rule, to students who are asked to take leave for academic, disciplinary or medical reasons. Return from College Leaves is not automatic. Students who wish to return must reapply to Haverford College through the Office of Admission and must receive a recommendation to that office by a dean. Students are expected to present to admission offi-

SPECIAL ACADEMIC PROGRAMS

cers convincing evidence of readiness to return. To that end, reapplying students will be asked to provide, whenever possible or pertinent, the names of persons on the faculty or in the administration well enough acquainted with the student to be able to comment on the student's development during the time away. *Deadlines for reapplying are the same as those for Dean's Leave.*

Power to act on requests for all special programs (described above) and exceptions to any of the academic regulations is in the hands of the Committee on Student Standing and Programs, except where it is specifically assigned to the deans, or in the case of international study, during the academic year, to the Educational Policy Committee. Any student who believes that either a special program or an exception to an academic regulation would promote his or her best intellectual development is invited to present a written proposal to the committee, the charge of which follows:

The Committee on Student Standing and Programs

The Committee on Student Standing and Programs (CSSP), a standing committee of the faculty, is composed of three faculty members (one from each of the three divisions of the College) appointed by Academic Council, three students (one of whom must be a sophomore) appointed by Students' Council, the director of multicultural affairs, and one of the deans. The committee is charged with reviewing students' academic performance regularly. Where relevant, the committee also consults with the student's dean, members of the athletic department, members of the counseling staff (to the extent consistent with confidentiality), and the admission office in discussions on the standing of individual students.

In the performance of its duties, the committee relies on the faculty to provide information on students in academic difficulty and those who stand in the lowest decile of a class, regardless of their absolute grade at mid-term; to report final grades at the end of the semester; and with informal notes and phone calls to the deans or the chair of the committee, to identify those students who have aroused the concern of individual instructors.

Once such students are identified, the committee then determines what steps are most likely to assist these students in achieving success in their academic work, and suggests or requires that these steps be taken. Each case that comes before the committee is treated individually within the context of College policy.

In dealing with students' academic deficiencies, the committee has the authority to set requirements for students' continued enrollment, which may include taking additional work or a demonstration of improvement in the level of achievement, or to require them to take a College Leave for a minimum of one year. Students are accountable to themselves and to the College, through the committee, for the use to which they put their talents and the resources of the College. This accountability means that students who are passing may be dropped and ones who are failing may, on occasion, be permitted to continue. Although they may be permitted to continue at the College by the committee, students who fail to pass all of their courses will be considered academically deficient, as will those who barely pass their courses in any semester beginning with the sophomore year. To permit stu-

dents who are academically deficient to continue at the College, the committee must be convinced of the probability that they will do work which is at least consistently adequate.

Second-semester seniors should note that simply meeting the College requirements and accumulating 32 credits is not sufficient to ensure graduation. For example, a student who has earned 30 or 31 course credits by the end of his or her seventh semester, and then fails two out of four credits attempted in the eighth semester, may not be permitted to graduate. Similarly, seniors who fail courses in their major may be judged to have failed to meet the academic standards of the College and may not be permitted to graduate, even if they have satisfied the required number and range of courses.

In carrying out its charge, the committee meets at the middle of each semester to review reports of concern from the faculty. After the review, the committee sends letters to some students alerting them to CSSP concern about their situation and urging them to see appropriate people, such as advisors, instructors, deans, counselors, etc. CSSP will also alert the students to the consequences of failure, and may impose a strict academic warning.

In a few cases, where there has been a history of failure or where a complete academic collapse is in evidence, the committee may consider a College Leave for a student. Such consideration more often occurs at the end of a semester, when a similar but more intensive review of student records is conducted.

When the committee is considering asking a student to leave the College, the decision will be postponed to a second meeting, and the student and his or her advisor will be notified that such action is possible. The student will be invited to appear before the committee, if he or she wishes, and is encouraged to invite an advisor or other faculty member who knows him or her well to be present also. If the student does not appear, the committee will make a decision in the student's absence and will inform him or her of it in writing.

Students placed on College Leave by action of the committee may appeal to the president of the College **on procedural grounds only**. Their individual appeals must be in writing, must state the grounds for the appeal, and must be received by the president within seven days of receipt of the committee's letter.

Intercollegiate Cooperation

Haverford has long enjoyed a close cooperative relationship with its near neighbor, Bryn Mawr College. In recent years, Swarthmore College has joined the two schools in a relationship that gives students from all three colleges access to courses and to most of the academic facilities on the three campuses. As a consequence, students at all three colleges have the advantages offered by a small college, together with the academic resources of a much larger, combined institution. The major programs of Bryn Mawr and Haverford Colleges are open equally to students of both. In many cases, Haverford students may also major at Swarthmore College. Linguistics is one example of a major at Swarthmore College that some Haverford students have recently completed. Each student must satisfy the general college distribution requirements of the institution at which he or she is matriculat-

SPECIAL ACADEMIC PROGRAMS

ed, but is free to choose courses from the three curricula. Students majoring at a school other than the home college have this option noted on their academic records. *The academic regulations of the college where a course is given apply to all enrolled students, regardless of the home college. Administrative interpretations and decisions are made by the deans of the college where the course is given.*

Each semester, at least 50 percent of the students at Haverford and Bryn Mawr take at least one course on the other campus. Class schedules and, in many cases, course offerings are coordinated. Jointly operated college buses carry students between the campuses from early morning through the evening.

Cooperation between Haverford and Bryn Mawr is extensive also in extracurricular activities. A monthly calendar of events on both campuses is published jointly. A dormitory exchange program between the two colleges has been in operation for many years; currently, more than 40 students from each college live on the other campus. Similar arrangements have been worked out with Swarthmore College. A meal exchange program enables students at the three colleges to use the dining facilities at all three, and more than 80 percent of the extracurricular activities organized at Haverford operate jointly with Bryn Mawr.

In addition to the cooperative agreement with Bryn Mawr and Swarthmore, Haverford has made arrangements with the University of Pennsylvania that permit full-time students the right to enjoy library privileges and, upon presentation of the proper credentials, to enroll for courses there without added expense. Laboratory fees, which are not included under reciprocal agreements with Swarthmore or the University of Pennsylvania, must be paid by the student. Students taking courses at the University of Pennsylvania must make their own transportation arrangements, and are limited to two courses per semester at the university.

COURSES OF INSTRUCTION

Departments49

Numbering Systems50

DEPARTMENTS

Africana and African Studies*	Growth and Structure of Cities
Anthropology•	History
Archaeology	History of Art
Arts: Dance and Theater**	Italian
Astronomy•	Japanese
Athletic Department**	Latin American and Iberian Studies*
Biochemistry and Biophysics*	Linguistics•
Biology	Mathematics•
Chemistry•	Mathematical Economics*
Chinese	Music
Classics•	Neural and Behavioral Science*
Comparative Literature•	Peace and Conflict Studies*
Computer Science*	Philosophy•
East Asian Studies***•	Physics•
Economics•	Political Science
Education and Educational Studies*•	Psychology•
English	Religion
Feminist and Gender Studies*•	Romance Languages
Fine Arts	Russian
French•	Sociology•
General Programs	Spanish•
Geology	Writing Program**
German•	

* Area of Concentration

** Program

*** Major and Area of
Concentration

• Minor

NUMBERING SYSTEM AND SYMBOLS

NUMBERING SYSTEM

001-009 indicate elementary courses.

100-199 indicate first-year and introductory courses.

200-299 indicate second-year courses.

300-399 indicate advanced courses.

400-499 indicate special categories of work (e.g., 480 for independent study courses).

- a the letter “a” following a number indicates a one-credit course given in the first semester.
- b the letter “b” following a number indicates a one-credit course given in the second semester.
- c the letter “c” following a number indicates a one-credit course given two hours a week throughout the year.
- d the letter “d” following a number indicates a half-credit course given during September-October.
- e the letter “e” following a number indicates a half-credit course given during November-December.
- f the letter “f” following a number indicates a half-credit course given throughout the first semester.
- g the letter “g” following a number indicates a half-credit course given during February-March.
- h the letter “h” following a number indicates a half-credit course given during April-May.
- i the letter “i” following a number indicates a half-credit course given throughout the second semester.
- j the letter “j” following a number indicates a half-credit course given throughout the year.

Full-year courses (*two credits*) carry a numerical designation only. They must be carried through two semesters. In some cases, one semester of such a course may be taken with credit, but only with permission of the chairperson of the department concerned.

The following designations refer to the distribution system:

SO – Course which fulfills a social science requirement

NA – Course which fulfills a natural science requirement

HU – Course which fulfills a humanities requirement

QU – Course which fulfills the quantitative requirement

AFRICANA AND AFRICAN STUDIES

AFRICANA STUDIES

Africana studies is a developing synthetic field that brings a global frame of reference and a variety of disciplinary perspectives to the study of Africa and the African Diaspora. Drawing on anthropology, economics, history, linguistics and literature, music, philosophy, political science and sociology, the field reflects processes of emancipation, decolonization and development—against a background of international economic change—in Africa itself and in societies worldwide with populations of African origin.

REQUIREMENTS

Africana studies is a bi-college program, offered as a minor at Bryn Mawr or as an area of concentration at Haverford. Requirements for the program: (1) General Programs/General Studies 101a, "African Civilizations;" (2) five more courses from the list reproduced in the college catalogs, or from a list of new courses periodically approved; (3) at least one of these courses must deal with the African Diaspora; (4) a senior thesis or seminar length essay in an area of Africana studies. Students are urged to include in their program courses beyond the introductory level that deal with continental Africa and the African Diaspora. Successful completion of the Africana studies minor/concentration is noted on student transcripts at graduation.

Students majoring in a department that requires a thesis satisfy the requirement by writing on a topic approved by his or her department and by the coordinator[s] of the Africana studies program. If the major department does not require a thesis, an equivalent written exercise that is, a seminar length essay—is required. The essay may be written within the framework of a particular course or as an independent study project. The topic must be approved by the instructor in question and by the coordinator[s] of the Africana studies program.

In addition to meeting these common requirements, students concentrating in Africana studies at Haverford College must also satisfy a distribution requirement. Of the six courses they take, at least two, but no more than three, must be taken in their home department; the remaining three to four courses must be taken in at least two other departments.

General Programs/General Studies 101a, "African Civilizations," provides a foundation and a frame of reference for advanced work. Students are advised to enter the Africana studies program by taking this course as early as possible and to complete it by the end of the junior year.

Coordinators:

Haverford

Associate Professor *Koffi Anyinéfa*, Department of French

Bryn Mawr

Associate Professor *Linda-Susan Beard*, Department of English

AFRICAN STUDIES

Haverford and Bryn Mawr Colleges, along with the University of Pennsylvania and Swarthmore College, are members of the African Studies Consortium. The four institutions have established an Undergraduate Center for African Studies, headquartered at the University of Pennsylvania. The center is supported in part by the U.S. Department of Education. Consortium resources allow students on the four campuses to pursue a wide variety of interests in African studies.

REQUIREMENTS

General Programs/General Studies 101a, "African Civilizations," is the foundation course for African studies as well as for the Africana studies program at Haverford and Bryn Mawr Colleges. The course is suitable for first-year students, utilizes on-site resources of the four campuses, and enrolls undergraduates from all four institutions. This course is co-taught each year by two instructors from different disciplines.

A full African studies program includes the introductory foundation course; study of an African language or languages; study abroad at an African university; and advanced course work on Africa at any of the four institutions.

African languages are regularly offered at the University of Pennsylvania (Yoruba, Hausa, Amharic, Wolof, Swahili) and Bryn Mawr College (Introductory Swahili).

Haverford and Bryn Mawr Colleges regularly sponsor public talks about African issues, featuring visiting African scholars from several disciplines.

STUDY ABROAD

A semester or a year of study in Africa can be arranged through Study Away. The Consortium maintains study agreements with University of Zimbabwe, University of Ghana, and University of Nairobi, Kenya. In the past students have also enrolled at other African universities, such as C.A. Diop University, Dakar, and Gaston Berger University, Saint-Louis, both in Senegal.

Coordinators:

Haverford

Associate Professor *Koffi Anyinéfa*, Department of French

Bryn Mawr

Associate Professor *Linda-Susan Beard*, Department of English

AFRICANA AND AFRICAN STUDIES COURSES

COURSES AT HAVERFORD COLLEGE:

ENGLISH

270b **Portraits in Black**

363a **John Brown's Body: Violence, National Fantasy and Bodies that Matter**

FRENCH

252 **Cinéma Français/Francophone et (Post)-Colonialisme** (Cross-listed in comparative literature)

312 **Advanced Topics: "Littérature Antillaise"** (Cross-listed in comparative literature)

AFRICANA AND AFRICAN STUDIES

GENERAL PROGRAMS

101a **African Civilizations**

277b **African American / Latino Autobiography and Memoirs**

HISTORY

343b **Topics in African American Intellectual History: "Black Paris: Art and Ideology in a Modernist Diaspora 1925-1975"**

RELIGION

132b **Varieties of African American Religious Experience**

231a **Religious Themes in African American Literature**

242a **Topics in African American Religious History**

330a **Seminar in the Religious History of African American Women**

332b **Seminar in Theoretical Approaches to the Study of Black Religion**

SOCIOLOGY

235b **Class, Race, and Education**

COURSES AT BRYN MAWR COLLEGE:

ANTHROPOLOGY

223 **Anthropology of Dance**

253 **Childhood in the African Experience**

CLASSICAL AND NEAR EASTERN ARCHAEOLOGY

101 **Introduction to Egyptian and Near Eastern Archaeology**

230 **Archeology and History of Ancient Egypt**

ECONOMICS

314 **Economics of Poverty and Discrimination**

EDUCATION

200 **Critical Issues in Education**

210 **Language/Power/Advocacy in Education**

266 **Schools in American Cities**

ENGLISH

207 **Big Books of American Literature: Representing the Intersections of Nation, Class, Race, Gender**

218 **Law and Literature**

234 **Postcolonial Literature in English**

255 **Counter-Cinema**

279 **Modern African Fiction**

331 **Queer Theory/Queer Literature**

343 **Translating America**

FRENCH

207 **Missionnaires et Cannibales**

320 **La France et ses Orient**

GENERAL STUDIES

103 **Introduction to Swahili Language and Culture I**

105 **Introduction to Swahili Language and Culture II**

HISTORY

202 **American History: Civil War to Present**

245 **Recent U.S. History**

POLITICAL SCIENCE

243 **African/Caribbean Perspectives in World Politics**

SOCIOLOGY

215 **Challenges and Dilemmas of Diversity**

SPANISH

215 **La Literatura Afro-Hispanica**

Anthropology is the holistic and comparative study of human beings. Anthropologists study people from a variety of perspectives—historical, biological, social, and cultural. At Haverford we teach socio-cultural anthropology: the comparative study of social organization, family life, subsistence, exchange, politics, ritual, religion, and expressive culture in diverse human communities. Socio-cultural anthropologists aim to promote knowledge and broaden intercultural understanding through sustained participant-observation fieldwork; they study small-scale indigenous and rural communities, state societies and urban populations, and, increasingly, transnational politics and cultures.

The anthropology major at Haverford teaches students the methods of social and cultural analysis and introduces them to the history of anthropology through a combination of courses in social theory and ethnography. Students are encouraged to think critically and self-reflectively about several areas of theoretical concern and intellectual inquiry, including:

- (1) The problem of ethnography: the interpretive skills, analytic frameworks, and descriptive genres through which anthropologists have sought to represent their own and other societies.
- (2) Comparative social structure and comparative social process: how persons are linked, related or opposed in various social orders or social fields, and how such relations are reproduced over time; modes of production, power, and knowledge.
- (3) The “person” as understood or constituted in various cultural systems: categories such as social class, gender and sexuality, age and generation, caste, ethnicity, national affiliation, and race.
- (4) Meaning, communication, and symbolic process: The department encourages interest in material culture and visual anthropology (e.g., art, architecture and spatial order, film, video and cassette media, etc.).
- (5) Anthropological understandings of history: problems of historical transformation, and the intellectual legacies and limitations of social evolutionist models, including theories of progress, development and modernization.

Associate Professor Laurie Kain Hart, chairperson, on leave fall 2002

Assistant Professor Maris Boyd Gillette

Assistant Professor Zolani Noonan-Ngwane

Assistant Professor of Peace Studies and Anthropology Martin Hébert

John R. Coleman Professor of Social Sciences Wyatt MacGaffey, Emeritus

Visiting Assistant Professor Tejaswini Ganti, fall 2002

Affiliated Faculty at Bryn Mawr College

Professor Gary McDonogh (Growth and Structure of Cities)

Faculty of the Department of Anthropology, Bryn Mawr College

MAJOR REQUIREMENTS

Students are required to take a total of 10 courses in the major, including four required courses within the department. Individual programs require the advisor's approval.

- (1) One 100-level introductory course, either: Anth 103a, Introduction to Anthropology (fall) or BMC Anth 102 (spring), Introduction to Anthropology; or Anth 110b, Anthropology of Food and Eating; or Anth 155a, Themes in the Anthropology of Religion.

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- (2) Anthropology 210b, History and Theory of Anthropology
(3) One area course, such as Anthropology 241, Mediterranean; Anthropology 245, Africa; Anthropology 243, East Asia; or a similar course on another campus.
(4) One other 200-level course in this department.
(5) One 300-level course in this department.
(6) Anthropology 450a and 450b Senior Thesis Seminars. The remaining courses may be courses offered in the department, in an anthropology department on another campus, or in approved related fields. Courses outside the department must be approved by the student's advisor. (Note: When required courses are not offered, equivalents will be designated.) Students are expected to familiarize themselves with the use of e-mail and the faculty server.

MINOR REQUIREMENTS

The minor in anthropology consists of six courses, including: an Introduction to Anthropology (this requirement may be satisfied by an Introduction to Anthropology at either campus, or by other introductory courses); Anthropology 210b, History and Theory of Anthropology; an ethnographic area course; and three other courses at the 200 or 300 level, including one course at the 300 level. As a general rule, a minimum of three courses must be taken in the Haverford department.

COURSES

103a Introduction to Anthropology SO/SJ

M. Gillette and Z. Noonan-Ngwane

An introduction to the basic ideas and methods of social anthropology. Examines major theoretical and ethnographic preoccupations of the discipline from its origins to the present, such as family and kinship, production and reproduction, history and evolution, symbolism and representation, with particular attention to such issues as race and racism, gender and sexuality, class, and ethnicity. Not open to students who have completed Bryn Mawr Anthropology 102. (Satisfies the social justice requirement.)

110b Anthropology of Food and Eating SO

M. Gillette

An introduction to anthropological modes of inquiry and interpretation through an examination of food and eating. Primarily concerned with symbolism, social stratification, and the relationship between local and translocal orders. Includes such topics as meat, rituals of sacrifice, etiquette, eating disorders, famine, and transnationalism.

155a Themes in the Anthropology of Religion: Ritual SO

Z. Noonan-Ngwane

What is it that rituals actually do? Are they enactments (affirmations) of collective ideals or are they arguments over these ideals? Are they media for political action or are they expressions of teleological phenomena? The course is a comparative study of ritual and its place in religious practice and political argumentation. Concrete case studies will include an initiation ritual in South Africa, the Communion Sacrament in Christianity, a Holocaust commemorative site in Auschwitz, and the cult of spirit-possession in Niger. Emphasis on writing, frequent essays.

202b Among Men: Construction of Masculinities SO

Z. Noonan-Ngwane

A comparative exploration of the socio-cultural politics of gender, with particular reference to masculinity, the course combines an intellectual historical approach (i.e.) how the related

notions of maleness, manhood and masculinity have featured in the history of social thought and a thematic focus on issues such as the men's movements, popular culture, queer movement, etc. While the course will be grounded on an anthropological notion of the social basis of power, culture and identity formation, the readings will nonetheless be interdisciplinary—including historical narratives, literature and film ethnographies (from Africa and the United States) and critical work from fields such as queer, feminist and postcolonial studies.

204a Anthropology of Gender SO

Staff

The cultural construction of gender and sexuality, kinship, inheritance, and marriage; the performative dimensions of sexual identity; the cultural politics of motherhood; myths of patriarchy; ideologies of masculinity and femininity. Not open to students who have completed Anthropology 216b or Bryn Mawr Anthropology 106.

205b Social Anthropology SO

M. Gillette

The distinctive concerns and methods of social anthropology are examined through the study of systems of production, social reproduction, and exchange in selected field areas. Systems of kinship and descent; marriage and the creation of affinity; ideologies of relatedness.

Prerequisite: Anthropology 102, 103 or 110.

206a Anthropology of Art SO

L. Hart

Art as a Western institution: Art and anti-art in the 20th century. The power of images, icons and iconography. History and sociology of collecting "primitive" art. African art in cultural context. *Prerequisite:* One course in Anthropology, Art or permission of the instructor.

207a Visual Anthropology SO

Staff

Explores the history and development of anthropology's relationship to the visual, specifically photography and film, both as a mode for representing culture and a site of cultural practice. Examines the emergence of as well as the contestations around the genre known as ethnographic film and its relationship to wider debates about documentary and non-fictional film practice. *Prerequisite:* One other course in Anthropology.

208a Museum Anthropology SO

M. Gillette

The rise and proliferation of museums and museological consciousness in comparative perspective. Topics to be considered include: objects and their potential meanings and values. Collection, ownership, and relations of power. Exhibitions, imperialism and colonialism. Creating (disciplining) museum publics. Narrative genres in museums: ethnographic, nationalist, traumatic, artistic. Museological entertainment: theme parks and "ironic museums." Politics of representation, ownership, and voice: contemporary squabbles over art, artifacts, and displays.

209b Anthropology of Education: State of the Debate SO

Z. Noonan-Ngwane

Education and schooling in anthropological literature. We will compare the concepts of "socialization" in British social anthropology with "cultural transmission" in American cultural anthropology to look for the different ways in which the role of education in social repro-

duction and transformation has been framed over time. In addition to basic works by thinkers such as Durkheim, Malinowski, Mead, Benedict, and Boas, we will read a selection of ethnographies of schooling from the United States, Africa, and Japan.

210b History and Theory of Anthropology SO

Z. Noonan-Ngwane

The development of anthropological thought in the West. Enlightenment theories of society and the human subject, the solidification of the study of social organization and change in the 19th and early 20th centuries (Marx, Durkheim, and Weber). Structural functionalism, culture and personality, structuralism, political and economic anthropology, ecological and material culture studies.

216b Women and Power in Comparative Perspective SO/SJ

M. Gillette

This course explores issues of power and its operation through examining women and women's experience. Course readings combine theoretical materials on power and women's empowerment with ethnographic studies that allow us to investigate theoretical questions in specific contexts. We consider the nature of power, the sources of social inequality, and the potential for powerful action on individual and collective levels. (Satisfies social justice requirement.)

235a Social Practice of Media SO

T. Ganti

This course will examine cross-culturally how the mass media — print and electronic, old and new — have become critical to the constitution of subjectivities, collectivities, and histories in the contemporary world and are the primary means for the circulation of symbolic forms across space and time. Attention is paid to how the production, reception, and circulation of media forms and technologies are integrated into social practice at the local, national, and transnational levels.

241a Anthropology of the Mediterranean SO

L. Hart

The study of Mediterranean societies and the problematics of ethnographic production. Debates over the particularity of, and continuity in, Mediterranean cultures. Classic and recent monographs, as well as local and expatriate fiction. Emphasis on the Muslim and Christian Eastern Mediterranean.

243a Anthropology of East Asia SO/SJ

M. Gillette

The comparative study of Chinese and Japanese societies. Anthropological perspectives on the coercive dimensions of social and cultural systems. Gender, kinship and family organization. Death, ancestors and mortuary ritual. Voluntary associations. Money, exchange and commodity forms. (Satisfies the social justice requirement.)

244a Anthropology of South Asia SO

T. Ganti

This course introduces the cultures and societies of the Indian subcontinent (India, Pakistan, Bangladesh, Nepal, Sri Lanka). It will focus not only on the history and ethnography of South Asia, but also on the major concepts and debates in the anthropological study of the region. Topics will include caste, kinship, gender, nationalism, ethnic conflict, development ideologies, popular culture, and the South Asian diaspora.

244b Anthropology of China SO

M. Gillette

Social institutions, cultural idioms, and forms of representation in and of Chinese society over the past 150 years. Through investigations of ethnographic monographs, missionary records, memoirs, and realist fiction, we develop skills in social analysis and cultural critique, and enrich our understanding of contemporary Chinese society.

247a Anthropology and Literature: Ethnography of Black South African Writings 1888-1988 SO

Z. Noonan-Ngwane

Through analysis of the development of writing in colonial and apartheid South Africa this course examines the "crisis of representation" of the past two decades in literature and anthropology. We will consider debates about the textual status of ethnographic monographs and the more general problems of writing and social power. Specifically, we will look at how such writing contributed to the construction and transformation of black subjectivity. Course material will include 19th and 20th century texts by black South Africans including life narratives, particularly collaborated autobiographies by women in the 1980s.

255b Anthropology of Religion SO

Staff

Anthropological theories of religion, and anthropological approaches to religious cosmology, practice, and experience. Ethnographic case studies. Topics include: problems in defining "religion;" the role of religious specialists and the social consequences of ritual expertise; spirits and spirit possession; the politics of religious "authenticity" and "syncretism;" witchcraft and social control; diagnosis, healing, and death; and the role of religious ideas in the promotion and subversion of social inequalities.

257b Ethnic Conflict SO/SJ

L. Hart

The comparative study of ethnic identity and collective violence. Ideological systems of classification and differentiation, such as kinship, race, class, ethnicity and nationality. Case studies of contemporary struggles and conflicts, informed by classic and recent anthropological theory. *Prerequisite:* One other course in anthropology or peace studies or permission of the instructor. (Satisfies the social justice requirement.)

259b Ethnography of Islam SO

Staff

Comparative ethnographies of Muslim societies. Islam as a field of anthropological inquiry and theorizing. Ethnographic representation and the construction of ethnographic authority. Islam in the Western imagination.

261a Memory, History, Anthropology SO

M. Gillette

The social aspects of memory. Collective representations and memorial genres. Institutional memory and the effects of institutions on individual memory. Memory in oral and literate societies. Memory as a political act and a tool of political legitimacy. Mourning and trauma. Role of narrative in memory and the relationship between non-narrative forms and memory. How memory relates to the present and to the past. The course will examine a number of influential theoretical texts on memory and look at selected case studies.

263a Anthropology, Space and Architecture SO

L. Hart

Space, place, and architecture in anthropological theory; the contributions of anthropology to our understanding of the built and imagined environment in diverse cultures. Topics include: the body and its orientation in space; the house, kinship and cosmology; architecture as a communicative/semiotic system; space and sociopolitical segregation and integration; space and commodity culture. *Prerequisite:* One other course in anthropology or architecture, or permission of the instructor. May be taken for Bryn Mawr Cities credit.

270b Psychoanalysis and Anthropology SO

L. Hart

This course will trace areas of convergence of anthropology and psychoanalysis from the beginnings of the discipline of anthropology to the present through selected topics, including: kinship, society and the self: sexual difference; the interpretation of dreams; anthropological hermeneutics, ethnographic fieldwork and clinical practice (listening, transference, counter-transference), magic and fetishism, individual and collective violence. *Prerequisite:* One course in socio-cultural anthropology or consent of the instructor.

280a Indigenous Movements (MesoAmerica) SO

M. Hébert

An examination of indigenous activity in the Americas and Oceania from the colonial period through the present, this course will focus on issues such as first contacts and the establishment of domination structures, indigenous politico-religious movements, and the interaction of indigenous people with modern states. In this last context, we will examine cultural survival and revival movements, Indigenism, autonomist claims and praxis, as well as armed struggle as efforts toward recognition and demarginalization. *Prerequisite:* One course in anthropology or peace and conflict studies.

310b Modes of Thought SO

L. Hart

Anthropology as a discipline concerned with the translation of cultures. Propositions concerning “modes of thought” or “belief” in traditional and modern societies, debates about rationality and models of social and cultural evolution. *Prerequisite:* One other course in anthropology, sociology or philosophy.

320a Politics and the Imaginary SO

M. Hébert

The use of symbols, rituals, and myths in politics appears to be one of the great cross-cultural constants. In this course, we will examine the role and nature of these reputedly “irrational” elements in a wide variety of social and cultural settings ranging from small indigenous communities to modern political institutions. We will also look at the functions of symbolic struggles (re-interpretation of the past, myth making, propaganda, public relations) in peaceful as well as aggressive mobilizations.

322b Field Methods in Peace and Conflict Studies SO

M. Hébert

This course will address the problem of how to gather reliable data on a given conflict. In doing so, we will take a critical look at traditional sources used in conflict studies, such as the media and official accounts, and we will try to expand them by taking a look at first-hand data gathering in conflict settings. During the semester, students will conduct their own

research on some local conflict using written and first hand accounts while reflecting on methodical questions as well as the ethical issues surrounding the researcher's position in social conflicts.

350a Social and Cultural Theory: Writing, Self and Society

Z. Noonan-Ngwane

An upper-level comparative introduction to recent debates on literacy, the course will focus specifically on writing and its implication in the production of personhood, social meaning and relations of power. The course will be based on a close reading of two primary texts that address the art and politics of literary production: Cynthia Ozick's *Usurpation (Other People's Stories)* and Philip Roth's *The Ghost Writer*. We will also use theoretical texts to analyze the above stories around themes such as orality, writing and the politics of meaning (Austin, Searle, Derrida); authorship, authority and history (Bloom, Foucault, Gilbert, and Gubar).

357a Political Anthropology SO

Staff

The comparative study of formal and informal politics in a range of societies; the changing interpretive framework of political anthropology with attention to the nation-state and the domestic domain. *Prerequisite:* One other course in anthropology or political science.

361a Advanced Topics in the Anthropology of China SO

Examines social and cultural institutions as they have developed in Chinese society over the past 150 years. Each time the course is offered it will focus on a particular theme, such as: social stratification, Chinese religion, governance and nation-building. Course materials will consist primarily of ethnographic monographs, with missionary records, memoirs, and realist fiction included where appropriate. The course is intended to develop skills of social analysis and to deepen the student's understanding of Chinese society. *Prerequisites:* One course in anthropology, East Asian studies, or permission of instructor.

365a Advanced Readings in Visual Anthropology SO

T. Ganti

This is an advanced course in visual anthropology which explores the history and development of anthropology's relationship to visual practices both as a mode for representing culture and as a site of cultural practice. One of the central themes of the course is the relationship between representation, power, and knowledge as manifest in cross-cultural representation. The course touches on more recent work within visual anthropology that moves away from ethnographic film to focus on questions of cultural aesthetics, styles, and visual culture more broadly.

450a Senior Thesis Seminar: Contemporary Theory and Practice

Staff

Contemporary Theory and Practice is the first of a two-course sequence for seniors in Anthropology. The seminar includes readings in contemporary social and cultural theory as well as methods of research. Topics will vary yearly. Students will prepare a statement of thesis research and will complete a literature review during the semester. *Prerequisite:* Senior standing in anthropology at Haverford.

Staff

Supervised Research and Writing is the second in the two-course sequence for seniors in Anthropology. Students will complete a thesis writing workshop. *Prerequisite:* Senior standing in anthropology at Haverford.

460a Teaching Assistantships

Staff

Discussion leader and course assistant in Anthropology 103 or Anthropology 110; includes responsibility for selected tutorials. Final Paper. *Prerequisite:* Consent of the instructor(s).

480 Independent Study

Staff

COURSES OFFERED AT BRYN MAWR COLLEGE INCLUDE:

Department of Anthropology:

102 **Introduction to Anthropology**

190 **Form of the City**

203 **Human Ecology**

207 **Conflict & Conflict Management**

208 **Human Biology**

209 **Human Evolution**

210 **Medical Anthropology**

222 **Expressive Arts & the Politics of Identity in Central Asia**

223 **Anthropology of Dance**

224 **Anthropology of Law**

225 **Paleolithic Archaeology**

228 **East African Social, Political, and Cultural Development**

229 **Comparative Urbanism**

231 **Cultural Profiles Modern Exile**

236 **Evolution**

240 **Traditional & Pre-Industrial Technology**

303 **History of Anthropological Theory**

304 **Modernism & Postmodernism**

361 **Advanced Topics in Political Anthropology**

365 **Techs of the City: Vice, Virtue, and Citizenship**

Growth and Structure of Cities Program:

185 **Urban Culture and Society**

235 **Elite and Popular Culture: The Social Practice of Media**

ARCHAEOLOGY — CLASSICAL AND NEAR EASTERN AT BRYN MAWR COLLEGE

The curriculum of the department focuses on the cultures of the Mediterranean regions and the Near East in antiquity. Courses treat aspects of society and material culture of these civilizations as well as issues of theory, method, and interpretation.

Professor Stella Miller-Collett

Professor Richard S. Ellis

Professor James C. Wright, chairperson

Associate Professor A. A. Donohue

Assistant Professor Peter Magee, major advisor

Lecturer Jean MacIntosh Turfa

MAJOR REQUIREMENTS

The major requires a minimum of 10 courses. Core requirements are Archaeology 101 and 102, one course in ancient history, and two semesters of the senior conference. Additional requirements are determined in consultation with the major advisor. Additional coursework in subjects related to archaeology may be offered in Greek, Latin, classical studies, Hebrew, history of art, growth and structure of cities, anthropology, and geology.

Each student's course of study to meet major requirements will be determined in consultation with the undergraduate major advisor in the spring semester of the sophomore year. Students considering majoring in the department are encouraged to take the introductory courses early in their undergraduate career and should also seek advice from department faculty. Students who are interested in interdisciplinary concentrations or in spending a junior year abroad are strongly advised to seek assistance in planning their major early in their sophomore year.

REQUIREMENTS FOR HONORS

A semester-long research project, culminating in a lengthy paper written under the supervision of a member of the department, is required to be considered for honors. Students can register for honors, a unit of independent study (403) either semester of the senior year, at the invitation of the department and the supervising faculty member. Honors are granted if the final paper is considered of superior quality (3.3 or above).

LANGUAGES

Majors who contemplate graduate study in Classical fields should incorporate Greek and Latin into their programs. Those who plan graduate work in Near Eastern or Egyptian may take appropriate ancient languages at the University of Pennsylvania, such as Akkadian, Sumerian, and Middle Egyptian. Any student considering graduate study in archaeology should study French and German.

FIELDWORK

The department strongly encourages students to gain fieldwork experience and assists them in getting positions on field projects in North America and overseas. The department is undertaking three field projects in which undergraduates may be invited to participate.

The Tarsus Regional Project in Turkey, co-sponsored by Bryn Mawr College and Bogaziçi University in Istanbul, is currently investigating the Gözlü Kule mound at Tarsus, in Cilicia, and its vicinity. Both undergraduate and graduate students in archaeology participate in this project.

Beginning in the summer of 2002 the department, under the direction of Professor James Wright, will collaborate with the Fourth Inspectorate of Prehistoric and Classical Antiquities of the Greek Ministry of Culture in a multi-year excavation of a Mycenaean (Late Bronze

Age) chamber tomb cemetery at Ancient Nemea, Greece. Undergraduate and graduate students in archaeology will participate regularly in this project, which will focus on excavation techniques, skeletal analysis, and museum studies.

Also beginning in winter of 2002, during semester break, Professor Peter Magee will continue his excavations at Muweilah in the United Arab Emirates. Undergraduate and graduate students in archaeology may participate in this project.

STUDY ABROAD

Study abroad is encouraged if the program is approved by the department. Major credit for courses taken is given on a case-by-case basis. Normally credit will not be given for courses that are ordinarily offered by the department.

COURSES

101 The Uses of the Past: Introduction to Egyptian and Near Eastern Archaeology HU

R. S. Ellis

A historical survey of the archaeology and art of the ancient Near East, Egypt and the prehistoric Aegean. Three hours of class, one hour of special topics each week. *Offered semester I.*

102 The Uses of the Past: Introduction to Greek and Roman Archaeology HU

S. Miller-Collett

A historical survey of the archaeology and art of Greece, Etruria and Rome. Three hours of class, one hour of special topics each week. *Offered semester II.*

110 The World Through Classical Eyes Classical Studies HU

A. A. Donohue

This course surveys the ways in which the ancient Greeks and Romans perceived and constructed their physical and social world. The evidence of ancient texts and monuments will form the basis for exploring such subjects as cosmology, geography, travel and commerce, ancient ethnography and anthropology, the idea of natural and artificial wonders, and the self-definition of the classical cultures in the context of the oikoumene, the "inhabited world." *Not offered in 2002-03.*

201 Preclassical Greek Art and Archaeology HU

A. A. Donohue

The art and archaeology of Greece and its Mediterranean neighbors between the end of the Bronze Age and the Persian invasion (ca. 1100 - 480 B.C.E.), the period which saw the rise of the city-state, the introduction of democracy, and the spread of Greek civilization by colonization and trade. The architecture, painting, sculpture, and minor arts will be studied with attention to their historical and cultural contexts. *Not offered in 2002-03.*

202 Classical Greek Art and Archaeology HU

A. A. Donohue

The art and archaeology of Greece and its Mediterranean neighbors between the Persian invasion of 480 B.C.E. and the rise of Macedonia in the mid-fourth century B.C.E., the period which saw the rise of Athens, the achievements of the Periclean democracy, and the dissolution of Athenian power in the wake of the Peloponnesian War. The architecture, painting, sculpture, and minor arts will be studied with attention to their historical and cultural contexts. *Not offered in 2002-03.*

203 Ancient Greek Cities and Sanctuaries

J. C. Wright

A study of the development of the Greek city-states and sanctuaries. *Not offered in 2002-03.*

ARCHAEOLOGY — CLASSICAL AND NEAR EASTERN AT BRYN MAWR COLLEGE

204 Iron Age, Italian, and Etruscan Art and Archaeology HU

J. M. Turfa

The art and archaeology of peninsular Italy from the Iron Age down to the period of the Early Republic of Rome, with special focus on the culture of the Etruscans and their interaction with the Greeks and Romans. *Not offered in 2002-03.*

205 Greek Sculpture

A.A. Donohue

One of the best-preserved categories of evidence for ancient Greek culture is sculpture. The Greeks devoted immense resources to producing sculpture that encompassed many materials and forms and served a variety of important social functions. This course examines sculptural production in Greek and neighboring lands from the Bronze Age through the fourth century B.C., with special attention to style, iconography, and historical and social context.

208 Ancient Near Eastern History HU

R. S. Ellis

The history of ancient western Asia (Mesopotamia, Anatolia, Syria/Palestine) from the middle of the fourth millennium B.C.E. to the rise of the Persian Empire, emphasizing the written and archaeological sources. Topics include the rise of urbanism and state organization, the development and consequences of literacy, and the degree to which the contributions of different ethnic groups can be distinguished. *Not offered in 2002-03.*

209 Aegean Archaeology

J. C. Wright

The prehistoric cultures of the Aegean area concentrating on Minoan Crete, Troy, the Aegean Islands, and Mycenaean Greece. *Not offered in 2002-03*

212 Art and Archaeology of the Hellenistic World HU

A. A. Donohue

An examination of the material culture of the extended Mediterranean region, with special attention to the role of the figural arts in the political and cultural transformation of the classical world. *Not offered in 2002-03.*

214 The Evolution of Civilization in the Aegean

J. C. Wright

Prehistoric and protohistoric human societies in the Aegean basin (western coast of Turkey, Aegean Islands, mainland of Greece). Topics are the appearance of humans in the Palaeolithic; the origins of agriculture and villages; craft production, exchange and the emergence of interaction spheres; the evolution of the Minoan and Mycenaean state-level societies; their collapse and the condition which led to the formation of the historic Greek period of city states. Methodological approaches will be comparative, drawing upon examples from the Near East and the New World. Special sessions will explore the role of women, theories of matriarchy and the "mother goddess," and the role of alcoholic beverages in societal formation. *Not offered in 2002-03.*

222 Alexander the Great

S. Miller-Collett

Alexander the Great achieved heroic status in his own time. This provided a basis for the Alexander mythology that endures to today in the popular media. The course uses archaeological and historical evidence through the centuries to reconstruct the life and afterlife of the figure of Alexander.

223 Ancient Near Eastern Architecture and Cities (Also called Growth and Structure of Cities 223)

R. S. Ellis

Building techniques, forms, and functions of structures, settlements, and cities; effects of environment and social structure. *Not offered in 2002-03.*

224 Women in the Ancient Near East

P. Magee

A survey of the social position of women in the ancient Near East, from the earliest sedentary villages to empires of the first millennium B.C. Topics include critiques of traditional concepts of gender in archaeology and of theories of matriarchy. A number of case studies serve to illustrate the historicity of gender concepts; women's work in early village societies; the meanings of neolithic female figurines; the position of women in early states; the institution of the "Tawanna" (queen) in the Hittite empire; the indirect power of women such as Semiramis in the neo-Assyrian palaces. Reliefs, statues, texts, and more indirect archaeological evidence are the basis for the discussion of the historical examples. *Offered semester II.*

226 Anatolian Archaeology HU

P. Magee

The archaeology and cultural history of Anatolia (modern-day Turkey) from prehistory to Classical times. A historical and archaeological overview of topography and monuments. Topics will include economy, religion, and social systems. *Not offered in 2002-03.*

230 Archaeology and History of Ancient Egypt HU

R. S. Ellis

The cultural, social, and political development of Egypt from the beginning of settled communities in the Nile Valley to the end of the New Kingdom (about 5000 to 1100 B.C.E.), in both of the African and of the wider Near Eastern contexts. Emphasis will be on the archaeological remains, but will also make use of documentary evidence. *Not offered in 2002-03.*

236 Syro-Palestinian Archaeology HU

TBA

The archaeology of the Levant and its relationships with surrounding cultures from the Neolithic Period through the end of the Iron Age. Topics include the history of research and focus on the relationships among cultures within the area. *Not offered in 2002-03.*

238 Land of Buddha

P. Magee

The course uses archaeological evidence to reconstruct social and economic life in South Asia from c. 1200 to 0 BCE. We examine the roles of religion, economy, and foreign trade in the establishment of powerful Kingdoms and Empires which characterized this region during this period.

240 Mesopotamia before 1600 B.C.E.

R. S. Ellis

An examination of the development of Sumerian, Babylonian, and Assyrian culture from the origins of village life to the fall of the Old Babylonian Dynasty. After a brief overview of the origins of food production and of Neolithic development, particular attention is paid to the origins of urbanism, writing, long-distance trade, and other characteristics of social complexity; the Sumerian city-states of the Early Dynastic period and their social, religious, and eco-

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conomic life; the appearance of other ethnic groups and their effect on cultural development; the founding and the fall of supra-regional empires; and the archaeological evidence for the life and ideologies of the ancient Mesopotamians. *Not offered in 2002-03.*

241 Mesopotamia after 1600 B.C.E.

R. S. Ellis

This course will examine the development of Babylonian and Assyrian culture from the so-called Dark Age following the end of the Old Babylonian Dynasty, through the time of the "International Age" of the late second millennium B.C.E., the critical period of the transition from the Bronze to the Iron Age at the end of the millennium, the establishment and development of the Assyrian and Babylonian empires, and the eventual absorption of Mesopotamia by the Achaemenid Persian Empire. Attention will be given to the evidence for economic development and change as seen in the archaeological record, to technological change and its effect on society and culture, to the influence of foreign contacts and new peoples on Mesopotamian culture, and to the ways in which religious ideas and political aspirations inform the art of the times. *Not offered in 2002-03.*

302 Greek Architecture HU (Also called Cities 302)

J. C. Wright

The Greek architectural tradition and its historical development. *Offered semester I.*

303 Classical Bodies HU

A. A. Donohue

An examination of the conceptions of the human body evidenced in Greek and Roman art and literature, with emphasis on issues that have persisted in the Western Tradition. Topics include the fashioning of male and female; concepts and standards of beauty and their implications; conventions of visual representation; the nude; clothing and its symbolism; the athletic ideal; physiognomy; medical theory and practice; the visible expression of character and emotions; and the formulation of the "classical ideal" in antiquity and later times. *Not offered in 2002-03.*

304 The Etruscans

J. M. Turfa

An exploration of Etruscan culture from its origins in the Late Bronze Age to its gradual demise under Roman domination, with emphasis on its impact on the art and literature of Roman, Medieval and Renaissance Italy, and the modern world. The archaeology of this non-Indo-European ethnic group includes DNA analysis of modern populations, new appreciation of the modes of urbanization (earlier in Italy than in many areas), and studies of funerary practices, commerce, language, and technology. Intensive studies of Etruscan art and architecture include pottery, tomb painting, and terracotta manufacture. *Not offered in 2002-03.*

305 Ancient Athens: Monuments and Art HU

S. Miller-Collett

Detailed analysis of the monuments. Archaeology and art of ancient Athens—the home of such persons as Perikles, Sophocles, and Plato. The course considers the art and monuments of ancient Athens against the historical background of the city and is a case study in understanding the role of archaeology in reconstructing the life and culture of the Athenians. *Not offered in 2002-03.*

308 Methods and Techniques of Pottery Analysis HU (Also called Anthropology 308)

P. Magee

Pottery as a fundamental means of establishing the relative chronology of archaeological sites and of understanding past human behavior. Included are theories, methods and techniques of pottery description, analysis, and interpretation. Topics include typology, seriation, ceramic characterization, production, function, exchange, and the use of computers in pottery analysis. Laboratory work on pottery in the department collections. Prerequisite: Permission of the instructor. *Not offered in 2002-03.*

312 The Eastern Mediterranean in the Late Bronze Age: Economic and Cultural Interaction Among the Cultures of the Levant, Cyprus, Anatolia, Egypt, and the Aegean

J. C. Wright

Study of the politics and powers in the Eastern Mediterranean circa 1500 to 1100 B.C. - the Egyptian and Hittite empires, the Mitanni, Ugarit and Syro-Palestinian politics, Cyprus, and the Mycenaeans. Topics: metallurgy, mercantile systems, seafaring, the Sea Peoples, systems collapse, interpretive issues when working with archaeological and historical sources.

315 Cities and Sanctuaries of the Ancient Mediterranean HU

J. C. Wright

An exploration of urban models, with reference to the types of settlement and sanctuary encountered, with ethnic variations, throughout the Mediterranean basin following the Bronze Age up to the Roman Empire. Models include old cities developing from agglomerations of villages or as fortified acropolis sites; colonies initiated as emporia/commercial enterprises sponsored by multiple ethnic groups or by a "mother city." Sanctuaries are analyzed according to their different cults. Models developed in modern scholarship are examined critically with reference to the ancient literary sources and to recent archaeological finds.

Not offered in 2002-03.

316 Trade and Transport in the Ancient World

J. M. Turfa

Issues of trade, commerce, and production of export goods will be addressed, with regard to the Aegean cultures of the Late Bronze Age, and the wider Mediterranean of the first millennium B.C. Crucial to these systems is the development of the means of transportation for land and sea. Readings from ancient texts will be integrated with the evidence of archaeological/underwater excavation and information on the commodities traded in antiquity. *Offered semester II.*

318 Peasants, Traders, Bureaucrats: Economics in the Ancient Near East

P. Magee

An introduction to economic organization, including production, distribution, and consumption in the Ancient Near East. After introducing some of the basic concepts, the character and problems of textual and archaeological sources are discussed. *Not offered in 2002-03.*

324 Roman Architecture HU (Also called Latin 324 and Growth and Structure of Cities 324)

R. Scott

The architecture of the Republic and the early Roman Empire. *Not offered in 2002-03.*

332 Archaeology Field Techniques

P. Magee

Learning to excavate, survey, and understand the resultant information is an important skill

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for field archaeologists. In this course we review advances in field technique, conduct mock-surveys and excavations, and analyze data. We will also examine how field techniques have affected (or been in response to) shifts in archaeological theory.

351 The Phoenicians HU

J. M. Turfa

Study of the origins of the Phoenicians in the Late Bronze-Early Iron Age and their dispersal throughout the Mediterranean, with special attention to the interactions in the West through the period of the Punic Wars. *Prerequisite:* 204, 237 or permission of the instructor. *Not offered in 2002-03.*

398/399 Senior Conference

J. M. Turfa and A. A. Donohue

A weekly seminar on common topics with assigned readings and oral and written reports.

ARTS PROGRAM AT BRYN MAWR COLLEGE

Courses in the arts are designed to prepare students who might wish to pursue advanced training in their fields and for those who want to broaden their academic studies with work in the arts that is conducted at a serious and disciplined level.

Senior Lecturer **Linda Caruso-Haviland**, Director of Dance

Senior Lecturer **Mark Lord**, Director of Theater, Chairperson

Senior Lecturer **Madeline Cantor**, Dance

Senior Lecturer **Karl Kirchwey**, Director of the Creative Writing Program

Senior Lecturer **Hiroshi Iwasaki**, Designer and Technical Director of Theater

Lecturer **Thomas Lloyd**, Director of the Haverford-Bryn Mawr Choral Program

Lecturer **Heidi Jacob**, Director of the Haverford-Bryn Mawr Orchestral Program

Adjunct Lecturer **David Brick**, Dance

Adjunct Lecturer **Nancy Doyne**, Creative Writing

Adjunct Lecturer **Carol Hill**, Creative Writing

Adjunct Lecturer **Rachel Simon**, Creative Writing

Mellon Fellow **Yutian Wong**, Dance

Guest Lecturers in Creative Writing:

Peter Cameron, Jessica Hagedorn, James Lasdun, Sigrid Nunez

Dance Staff:

Renee Banson, Myra Bazell, Yasmin Goodman, Corinne Karon, Grace Mi-He Lee, Rebecca

Malcolm, Linda Mintzer, Jeannine Osayande, Suzanne Slenn

Dance

Dance is not only an art and an area of creative impulse and action; it is also a significant and enduring human behavior that can serve as a core of inquiry within the humanities. The dance program has, accordingly, designed a curriculum that provides varied courses in technique, composition, theory, and performance for students at all levels of skill, interest, and commitment. A full range of technique courses in modern, ballet, jazz, and African dance is offered regularly. More specialized movement forms, such as Classical Indian and Flamenco, are offered on a rotating basis. The core academic curriculum includes advanced technique courses, performance ensembles, three levels of composition, independent work, courses in dance research and in Western dance history as well as courses that present a perspective extending beyond this theatrical or social tradition. Students can minor in dance or submit an application to major through the independent major program.

COURSES

140 Approaches to Dance: Themes and Perspectives HU

L. Caruso-Haviland

An introduction to the significance and the potential of the creative, critical, and conceptual processes of dance as performance art, ritual, and a humanity. In considering dance as a vital area of academic inquiry, the fields of dance history, criticism, philosophy, and ethnology are reviewed. Lectures, discussion, film, video, and guest lectures are included.

142 Dance Composition I HU

D. Brick

Analysis and practice of the basic elements of dance making, with reference to both traditional and post-modern choreographic approaches. This course presents an introduction to compositional theory as well as experience in generating dance material and in structuring movement forms beginning with simple solo phrases and progressing to more complex organizational units.

240 Dance History I: Roots of Western Theater Dance HU

L. Caruso-Haviland

The study of the history of pre-20th century dance with particular emphasis on the development of dance as a theater art form within the broader context of Western art and culture. *Not offered in 2002-03.*

241 Dance History II: A History of Contemporary Western Theater Dance

Staff

The study of the development of contemporary forms of dance with emphasis on theater forms within the broader context of Western art and culture. Both history courses include lecture, discussion, and audio-visual materials. *Not offered 2002-03.*

242 Dance Composition II

M. Cantor

A continuation of Dance Composition I with emphasis on the construction of finished choreography for solo dances and the development of group composition. Related production problems are considered.

249 Dance, Race and Gender

Y. Wong

An introduction to recent developments in cultural studies of dance, focusing on 20th-century Western concert dance and popular dance practices in the United States and how dance as an embodied practice is a useful medium for analyzing ideologies of gender, class, race, ethnicity, sexuality, and national identity. Students will survey the critical approaches in dance as informed by feminist theory, poststructural and postcolonial theory, and ethnography, and they will also interrogate the relationship between writing and choreography and discuss the ways in which dancers, choreographers, and scholars grapple with the task of translating dance from the performed to the written. The goal is to gain an understanding of theoretical tools useful for conceptualizing and writing about dance in a variety of social and historical contexts. *Not offered in 2002-03.*

250 Performing the Political Body

Y. Wong

Performing the Political Body is a combination lecture/studio course that explores how artists, activists, and intellectuals perform cultural interventions in the public sphere according to particular expectations of social and political responsibilities. From this foundation students will investigate the body as an active agent of social change and political action. Each class meeting will focus on both theory and practice to gain an embodied understanding of how artists/writers/activists—such as Augusto Boal, Rhodessa Jones, and others—engage with the-
atrical traditions and techniques in order to mobilize theories of performance into enactments of political intervention. In addition to writing weekly papers in response to assigned readings, students will engage in a series of performance and public art projects.

342 Advanced Choreography

M. Cantor, L. Caruso-Haviland

Independent study in choreography under the guidance of the instructor. Students are expected to produce one major choreographic work and are responsible for all production considerations.

343, 344 Advanced Dance Technique

Staff

For description see Dance Technique.

345 **Dance Ensemble**

Staff

For description see Dance Performance.

390 **Senior Thesis/Project**

403 **Supervised Work**

L. Caruso-Haviland, M. Cantor

Research in a particular topic of dance under the guidance of an instructor, resulting in a significant final paper or project.

Dance Technique

Three levels of ballet and modern dance are offered each semester. African dance and jazz are offered each year. Courses in techniques developed from other cultural forms or from non-Western perspectives, such as hip-hop, classical Indian dance, or Flamenco, are offered on a rotating basis as are conditioning techniques such as Pilates. All technique courses are offered for physical education credit but students may choose to register in advanced-level courses for academic credit.

Dance Performance

The dance ensembles (modern, ballet, and jazz) offer students the opportunity to perform in original works choreographed by faculty or guest choreographers or reconstructions of classic or contemporary works. This course, which is open to intermediate and advanced-level dancers by audition or permission of instructor, may be taken for academic credit or for physical education credit. Students who elect to participate in the Dance Outreach Project, a dance performance/education program which tours Philadelphia and suburban schools and community groups, can receive physical education credit.

Theater

The curricular portion of the Haverford and Bryn Mawr Colleges' theater program focuses upon the point of contact between creative and analytic work. Courses combine theory (reading and discussion of dramatic literature, history, and criticism) and practical work (creative exercises, scene study, and performance) to provide viable theater training within a liberal arts context. Requirements for the minor in theater studies are six units of course work, three required (150, 251, and 252) and three elective. Students must consult with the theater faculty to ensure that the necessary areas in the field are covered. Students may petition to major in theater through the independent major program.

COURSES

150 **Introduction to Theater** HU

H. Iwasaki

An exploration of a wide range of dramatic works and history of theater through research, analysis and discussion to develop understanding and foundations for a theatrical production.

250 **20th-Century Theories of Acting** HU

M. Lord

An introduction to 20th-century theories of acting emphasizing the intellectual, aesthetic, and sociopolitical factors surrounding the emergence of each director's approach to the study of human behavior on stage. Various theoretical approaches to the task of developing a role are applied on workshop and scene study. *Not offered in 2002-03.*

ARTS PROGRAM AT BRYN MAWR COLLEGE

251 Fundamentals of Acting HU

M. Lord

An introduction to the fundamental elements of acting (scene analysis, characterization, improvisation, vocal and gestural presentation, and ensemble work) through the study of scenes from significant 20th-century dramatic literature.

252 Fundamentals of Technical Theater Production HU

H. Iwasaki

A practical, hands-on workshop in the creative process of turning a concept into a tangible, workable end through the physical execution of a design. Exploring new and traditional methods of achieving a coherent synthesis of all areas of technical production.

253 Performance Ensemble HU

Staff

An intensive workshop in the methodologies and aesthetics of theater performance, open to students with significant experience in performance. In collaboration with the director of theater, students will explore a range of performance techniques and styles in the context of rehearsing a performance project. Admission to the class is by audition or consent of the instructor. The class is offered for a half unit of credit and students taking it for credit need to demonstrate their ability by first taking the course for no credit or by taking another academic class in performance.

254 Fundamentals of Theater Design HU

H. Iwasaki

An introduction to the creative process of visual design for theater; exploring dramatic context and influence of cultural, social, and ideological forces on theater and examining practical applications of various technical elements such as scenery, costume, and lighting while emphasizing their aesthetic integration.

255 Fundamentals of Costume Design HU

H. Iwasaki

Hands-on practical workshop on costume design for performing arts; analysis of text, characters, movement, situations; historical and stylistic research; cultivation of initial concept through materialization and plotting to execution of design. *Not offered in 2002-03.*

262 Beginning Playwriting (Also called Creative Writing 262) HU

J. Dobner

An introduction to the theater by study of the one-act play and its production. Written work consists of two one-act plays and a notebook of critical comments. *Not offered 2002-03.*

270 Ecologies of Theater

M. Lord

Students in this course will investigate the notion of theatrical landscape and its relation to plays and to the worlds to which those landscapes refer. Through readings in contemporary drama and performance and through the construction and evaluation of performances, the class will explore the relationship between human beings and the environments they imagine and will study the ways in which those relationships impact how we think about our relationship to the world in which we live. The course will culminate in a series of public performances. *Not offered 2002-03.*

351 Acting II: Solo Performance

H. Power

Building on the methods learned in Fundamentals of Acting with an emphasis on strategies of preparing short solo performances. In addition to intensive exercises in naturalistic and performance techniques, the course provides opportunities for exploration principles of design, directing, dramaturgy, and playwriting as they pertain to specific projects conceived by members of the class. *Prerequisite:* Permission of the instructor.

354 Shakespeare on the Stage HU

M. Lord

An exploration of Shakespeare's texts from the point of view of the performer. A historical survey of the various approaches to producing Shakespeare from Elizabethan to contemporary times, with intensive scenework culminating in on-campus performances.

355 Gender and Theater HU

M. Lord

A seminar and performance workshop on questions of gender as they appear in dramatic literature and theatrical production. Topics for discussion, reading, and scenework include the works of Ibsen and Strindberg, Genet, Gertrude Stein, Lacan, Artaud, Joe Orton, women in the avant-garde, and recent work in performance art. Theorists and practitioners to be studied include Judith Malina, Gertrude Stein, Brecht, Artaud, Derrida, and Irigaray. *Not offered 2002-03.*

356 Endgames: The Theater of Samuel Beckett HU

M. Lord

An exploration of Beckett's theater work to be conducted through both reading and practical exercises on performance technique. Points of special interest will include the monologue form of the early novels and its translation into theater, Beckett's influences (particularly silent film) and collaborations, and the relationship between the texts of the major dramatic works and the development of both modern and post-modern performance techniques. *Not offered 2002-03.*

359 Directing for the Stage HU

M. Lord

A semiotic approach to the basic concepts and methods of stage direction. Topics explored through readings, discussion, and creative exercises include directorial concept, script analysis and research, stage composition and movement, and casting and actor coaching. Students rehearse and present three major scenes.

362 Advanced Playwriting (Also called Creative Writing 362)

J. Dobner

Not offered 2002-03.

403 Supervised Work

Staff

Performance

Numerous opportunities exist to act, direct, design, and to work in technical theater. In addition to the Theater Program's mainstage productions, many student theater groups exist that are committed to musical theater, improvisation, community outreach, Shakespeare, film and video work, etc. All theater program productions are open and casting is routinely blind with respect to race and gender.

ARTS PROGRAM AT BRYN MAWR COLLEGE

Creative Writing

Courses in creative writing within the arts program are designed both for those students who wish to develop their skills and appreciation of creative writing in a variety of genres (poetry, fiction, creative nonfiction, memoir, playwriting, screenwriting) and for students intending to pursue studies in creative writing at the graduate level. English majors may elect a three-course concentration in creative writing as part of the English major program. Any English major may include one creative writing course in the major plan. Non-English majors may pursue a minor as described below. While there is no existing major in creative writing, exceptionally well-qualified students have completed majors in creative writing through the independent major program.

Requirements for the minor in creative writing are six units of course work, generally including three required courses (159 plus any two of 260, 261, 264, 265, 266) and three elective courses, including at least one course at the 300 level (361, 371, 373). Students should consult with the creative writing program director to ensure that they are completing the appropriate range of courses.

COURSES

159 Introduction to Creative Writing

K. Kirchwey

This course is designed for students who wish to experiment with several kinds of creative writing: short fiction (with glances at creative nonfiction), poetry and drama. Priority will be given to interested freshmen; any additional spaces will be made available to upperclassmen with little or no prior experience in creative writing. Students will write or revise work every week; roughly four weeks each will be devoted to short fiction, drama, and poetry. There will be individual conferences for students with the instructor to discuss their progress and interests. Half of each week's class time will be spent discussing student work, and half will be spent discussing syllabus readings.

260 Writing Short Fiction: I HU

R. Simon

This course is designed to provide students with an introduction to fiction writing by focusing on the technical skills necessary to the production of first and subsequent drafts, and on self-awareness necessary to all stages of the writing process. The primary goals are for students to explore the material and styles that most interest them, and to push their fiction to a new level of craft, so that over the semester their writing becomes clearer, more absorbing, and more sophisticated. Writing requirements will include the following: every week, students will write in class, working from exercises presented by the professor. Every third week, students will turn in a short story of 6 to 12 pages (or longer with permission).

261 Writing Poetry I HU

K. Kirchwey

This course will provide a semester-long survey of the formal resources available to students wishing to write poems in English, beginning with syllabic verse, accentual verse, and accentual-syllabic (metered) verse, as well as free verse. Students will gain experience writing in a variety of verse forms (including cinquains, Anglo-Saxon accentual verse, and sonnets), and throughout the emphasis will be on helping the student locate herself/himself as part of an ongoing tradition of poets writing on particular subjects in particular voices and forms. The objective of the course will be to provide students with the skills to find a form and a voice with which to express themselves.

262 Playwriting I (Also called Theater 262) HU

J. Dobner, Not offered in 2002-03.

263 Writing Memoir HU

K. Kirchwey

The purpose of this course will be to provide students with practical experience in writing about the events and places and people of their own lives in the form of memoir. Initial class discussions will attempt to distinguish memoir from related literary genres such as confession and autobiography. The purpose of writing assignments and in-class discussion of syllabus readings will be to explore, both the range of memoirs available for use as models (representative excerpts by writers including Elizabeth Bishop, Louise Bogan, Jaques Casanova, Benvenuto Cellini, Annie Dillard, Frederick Douglass, Edward Gibbon, James Merrill, Tim O'Brian, Ned Rorem, and others will be considered) and such elements (often associated with fiction) as narrative voice and perspective, tone, plot, characterization, and the use of symbolic and figurative language. *Not offered 2002-03.*

264 Feature Journalism HU

E. Lotozo

Unlike straight news stories, which tell, on a tight deadline, the who, what, when, and where of unfolding events, feature stories are just that: *stories*. Feature writers generally have more time, greater length, and more stylistic freedom to tell stories about people, places, events, trends, and issues. This course will consider the many forms features can take and the reporting basics necessary to add depth and context to stories. The work of established writers will be used to examine beginnings, middles, endings, transitions, structure, and voice in an effort to discover what makes for truly lively and effective feature writing. Several prominent journalists will also visit this class to speak about the work world and what they have learned in it.

265 Creative Nonfiction

R. Simon

This course will explore the literary impulse in nonfiction in forms such as literary journalism, personal cultural criticism, and the narrative essay. Creative nonfiction features the writer's experience and his or her unique voice in relating and reflecting upon experience; students in the course will be active participants in defining identity, chronicling personal discovery, interrogating their own opinions, and seeking connections to a larger community. An important goal of the course is for students to learn to read as writers, to allow their analytical work to feed and inform their creative work.

266 Screenwriting HU

N. Doyne

This course, which is a combination discussion/workshop course, is an introduction to dramatic writing for film. Basic issues in the art of storytelling will be analyzed and explored: theme, dramatic structure, image, and sound. The course will have two basic areas of concentration: it will be an exploration and analysis of the art and impulse of storytelling, and it will provide a safe but rigorous setting in which to discuss student work. What is a story? What makes it work? What makes a character compelling, and conflict dramatic? How does a story engage our emotions? How does it reflect our lives and our world? The lectures will explore the basic characteristics and mechanics of storytelling. Through written exercises, close analyses of various texts, and the screening of films, we will come to better understand the tools and dictates of film writing.

ARTS PROGRAM AT BRYN MAWR COLLEGE

360 Writing Short Fiction II

Staff

For students whose previous work has demonstrated an ability and passion for fiction writing, and who are ready to undertake the discipline of reworking their best material. Through first drafts and multiple revisions, private conferences, and class discussion of classic and contemporary literature, students form standards, sharpen their voices and vision, and surpass earlier expectations of limits. One goal is for students to understand the writing process in detail. Another goal is the production of a publishable short story. *Not offered in 2002-03.*

361 Writing Poetry: II HU

K. Kirchwey

This course is intended for students of poetry as a continuation of the fall semester course ART W 261 (Poetry I). This course will continue the survey of the forms of English and American poetry and will include exercises in writing several of the following: sestinas, villanelles, ballads, dramatic monologues, and ekphrastic poems (about works of art). Several published book-length collections of poems will be discussed for their strategies and architecture; in addition, each student will be responsible for at least one work of literary translation, rendering into English a poem from a foreign language with which s/he is familiar.

Prerequisite: Successful completion of ART W 261 or work demonstrating equivalent mastery of the basic forms of poetry in English.

362 Playwriting II HU

J. Dobner

For students with a special interest and some background in creating or interpreting texts for the stage, this course focuses on the development of a single project (a 30+ page one-act play) from conception to production-ready script. Students should have written proposals (1-2 pages) for at least two possible projects prepared prior to the first class meeting. The workshop process begins with a thorough examination of the student's accepted proposal to determine its potential as a dramatic story. Once this framework is in place, writing of a series of drafts will commence, aided by project-specific exercises aimed at isolating and strengthening the play's dramatic elements: character, dialogue, setting, and spectacle. *Prerequisite:* Either: 1) successful completion of ART 262 (Playwriting I); 2) suitable theatrical experience in either directing, acting, or playwriting; or 3) submission of a work sample including two short plays or an acceptable equivalent. *Not offered in 2002-03.*

364 Approaches to the Novel HU

TBA

An exploration of the novel form from the point of view of craft. Students must have work in progress or a reasonably clear idea of the novel they want to write, although both may be altered in class or in conference. In some cases, students recast and rewrite constantly; in others, students move straight ahead through the work with virtual independence. Each student is expected to produce a substantial portion of a novel and to show strong evidence of a deepening understanding of craft. *Prerequisite:* ART W 360, or proof of strong interest and ability. A writing sample should be submitted by the end of Semester I by students who have not previously studied with the professor. *Not offered in 2002-03.*

367 Advanced Fiction/Nonfiction

This advanced workshop will allow students to further develop the skills required for writing both fiction and creative nonfiction, and will explore the dividing line between the two genres. The course will be taught in sequential three-week "modules" by four distinguished

teachers who are also writers known for their work both in fiction and in nonfiction. *Prerequisite:* Successful completion of either ART W 260 (Short Fiction), ART W 263 (Memoir), ART W 265 (Creative Nonfiction), or work demonstrating the equivalent mastery of fiction or nonfiction prose. *Not offered in 2002-03.*

371 Fiction Master Class

P. Cameron, J. Hagedorn, J. Lasdun, and S. Nunez

This course will be taught in sequential three-week “modules” by four distinguished visiting instructors who are also nationally recognized authors of fiction. The intent is to afford students who have completed intermediate studies of fiction-writing the opportunity to further explore the voices and techniques available to them through exposure to the work and teaching of four different contemporary writers. Each visiting writer-instructor will devise a mini-syllabus of published readings for his/her three-week “module,” and class time will be divided between discussion of syllabus reading and discussion of students’ own work. All students will have work critiqued by all four visiting writer-instructors. *Prerequisite:* A 200-level fiction course or written work demonstrating equivalent mastery of the basic forms and techniques of fiction.

373 Experimental Writing HU

C. Hill

This course will introduce advanced writing students to new forms in fiction writing. Students will examine the challenges to convention that have taken place and are taking place in 20th-century and 21st-century fiction. These will include the open-ended character, experiments in time and narration, and new combinations of traditional literary and film genres: fairy tales, myth, and film noir. Students will be encouraged to use some of these techniques and forms in creating their own works. Fiction writers and theorists to be read include: Italo Calvino, Mary Shelley, Mary Wollstonecraft, Don DeLillo, Angela Carter, Susanna Moore, Jim Crace, Jeanette Winterson, William Gass, Martin Amis, Michel Foucault, and Jürgen Habermas.

Prerequisite: A 200-level fiction course or written work demonstrating equivalent mastery of the basic forms and techniques of fiction.

403 Supervised Work

K. Kirchwey

The objective of a major in astronomy is to study the phenomena of the extraterrestrial Universe and to understand them in terms of the fundamental principles of physics. The department offers three courses, Astronomy 101a, Astronomy 112a, and Astronomy 114b, which can be taken with no prerequisites or prior experience in astronomy. The department also offers a half-credit course, Astronomy/Physics 152i, intended for first-year students who are considering a physical science major and wish the opportunity to study some of the most recent developments in astrophysics. Prospective majors usually study physics (Physics 105a and 106b) before enrolling in Astronomy 205a in the fall semester of their sophomore year, when they concurrently enroll in Physics 213a. Astronomy majors may then take up to four 300-level courses and may enroll in a research course (Astronomy 404a,b). Students planning on graduate study in astronomy are advised to study physics at an advanced level; in fact, many astronomy majors choose to double major in physics and astronomy. The department also offers a minor in astronomy.

John Farnum Professor of Astronomy **Stephen P. Boughn**

Bettye and Howard Marshall Professor of Natural Sciences **R. Bruce Partridge**

MAJOR REQUIREMENTS

Requirements in the major subject are Astronomy 205a; Astronomy 206b; four 300-level astronomy courses, one of which may be replaced by an upper-level physics course; Astronomy 404, which may be replaced by approved independent research either at Haverford or elsewhere; and written comprehensive examinations. *Prerequisites:* Physics 105a (or 101a); Physics 106b (or 102b); Physics 213a; Physics 214b; Astronomy 205a; and Astronomy 206b. Two 200-level mathematics courses are also required. Bryn Mawr equivalents may be substituted for the non-astronomy courses. Astronomy/Physics 152i is recommended but not required.

MINOR REQUIREMENTS

Recommended: Astronomy/Physics 152i. Required: Physics 105a (or 101a); Physics 106b (or 102b); Astronomy 205a; Astronomy 206b; one 300-level astronomy course.

REQUIREMENTS FOR HONORS

All astronomy majors are regarded as candidates for Honors. The award of Honors will be made on the basis of superior work in the departmental courses, in certain related courses, and in the comprehensive examinations with consideration for independent research.

COURSES

101a **Astronomical Ideas** NA

R. B. Partridge

Fundamental concepts and observations of modern astronomy, such as the motions and surface properties of the planets, the birth and death of stars, and the properties and evolution of the Universe. Not intended for students majoring in the physical sciences. *No prerequisites.*

112a **Survey of the Cosmos** NA, Q

R. B. Partridge

Properties and evolution of the Universe and of large systems within it. The qualitative aspects of general relativity including black holes and of mathematical models for the geometry of the Universe are studied along with the history of the Universe from its early exponen-

tial expansion to the formation of galaxies. The role of observations in refining modern scientific understanding of the structure and evolution of the Universe is stressed. The approach is quantitative, but any mathematics beyond straightforward algebra is taught as the class proceeds. No prerequisites but Astronomy 101 is useful. *Offered in 2003-04.*

114b Planetary Astronomy NA

R. B. Partridge

A survey of the overall structure of the Solar System, the laws governing the motions of the planets and the evolution of the Solar System. Next, we study general processes affecting the surface properties of planets. This takes us to a detailed treatment of the properties of several planets. We end by studying the (surprising) properties of planets found in other stellar systems. *Offered in 2004-05 and alternate years.*

152i Freshman Seminar in Astrophysics NA (Also called Physics 152i)

S. Boughn

This half-credit course is intended for prospective physical science majors with an interest in recent developments in astrophysics. Topics include black holes, quasars, neutron stars, supernovae, dark matter, the Big Bang, and Einstein's relativity theories. *Prerequisites:* Physics 101a or 105a and concurrent enrollment in Physics 102b or 106b (or Bryn Mawr equivalents).

205a Introduction to Astrophysics I NA

S. Boughn

General introduction to astronomy including: the structure and evolution of stars; the structure and formation of the Milky Way; the interstellar medium; and observational projects using the Strawbridge Observatory telescopes. *Prerequisites:* Physics 105a-106b and Math 114b or the equivalent.

206b Introduction to Astrophysics II NA

R. B. Partridge

Introduction to the study of the properties of galaxies and their nuclei; cosmology; the Hot Big Bang model; the properties and evolution of the solar system; planetary surfaces and atmospheres; and exo planets. *Prerequisites:* Astronomy 205a and Math 114b or the equivalent or permission of the instructor.

313c Observational Optical Astronomy NA

S. Boughn

One credit, full-year course. Five observing projects which involve using a CCD camera on a 16-inch Schmidt-Cassegrain telescope. Projects include spectroscopy; variable star photometry; H-alpha imaging; imaging and photometry of galaxies and star clusters; instruction in the use of image processing software and CCD camera operation. Students work in groups of two with minimal faculty supervision. Formal reports are required. *Prerequisite:* Astronomy 205a.

320b Cosmology and Extragalactic Astronomy NA

R. B. Partridge

The study of the origin, evolution and large-scale structure of the Universe (Big Bang Theory). Review of the relevant observational evidence. A study of remote galaxies, radio sources, quasars, and intergalactic space. *Prerequisite:* Astronomy 206b. *Offered in 2003-04 and alternate years.*

321a **Stellar Structure and Evolution** NA

S. Boughn

The structure of stellar interiors and atmospheres and the theory of star formation and stellar evolution, including compact stellar remnants. *Prerequisites:* Astronomy 205a and Physics 214b. *Offered in 2002-03 and alternate years.*

322b **Non-Optical Astronomy** NA

R. B. Partridge

Introduction to the basic techniques of radio astronomy, to the various emission mechanisms at radio wavelengths, and to radio studies of astronomical phenomena. Some discussion of other non-optical branches of astronomy, especially X-ray astronomy, but also including neutrino, cosmic-ray, gravitational wave, infrared, and ultraviolet astronomy. *Prerequisites:* Astronomy 205a and 206b, or consent of instructor. *Offered in 2002-03 and alternate years.*

404a,b **Research in Astrophysics** NA

S. Boughn, R. B. Partridge

Intended for those students who choose to complete an independent research project in astrophysics under the supervision of a faculty member. *Prerequisite:* Consent of instructor.

480a,b **Independent Study** NA

Staff

Intended for students who want to pursue some topic of study that is not currently offered in the curriculum. In order to enroll, a student must have a faculty sponsor. *Prerequisite:* Astronomy 206b.

ATHLETIC DEPARTMENT

The athletic program is an integral part of the educational environment Haverford College provides for its students. Athletics at Haverford include a variety of intercollegiate, instructional, intramural and recreational opportunities, aiming to offer each student a chance to participate in challenging sports experiences matching interest and ability. All Haverford students must complete a six-quarter athletic requirement during their first two years of college.

The athletic requirement includes a Wellness course required of all first-year students, which introduces them to health-related services at Haverford and avenues to maintain good health and fitness here. This course familiarizes students with available resources in such areas as nutrition, exercise, stress management, relaxation techniques and preventing alcohol and drug abuse.

Gregory Kannerstein, *Chairperson, Director of Athletics and Associate Dean of the College*
Penelope C. Hinckley, *Associate Director of Athletics, Senior Woman Administrator*

Full-time staff:

Joseph A. Amorim (*soccer*)

David Beccaria (*baseball*)

Leanne Cole (*multicultural recruiting intern*)

Kevin Courtney (*Assistant Athletic Trainer*)

John Douglas (*Sports Information Director*)

Thomas Donnelly (*cross-country, track*)

Dan Evans (*Athletic Trainer*)

Ann Koger (*tennis*)

Michael Mucci (*basketball*)

James Osborne (*basketball*)

Francis Rizzo (*cross-country, track*)

Wendy Smith (*soccer*)

To be announced (field hockey, lacrosse)

Part-time head coaches:

John Kelly (*softball*)

Kamran Rashid Khan (*cricket*)

David Littell (*fencing*)

Sean Sloane (*tennis, squash*)

To be announced (volleyball)

INTERCOLLEGIATE ATHLETICS

Intercollegiate athletics at Haverford are designed for students committed to disciplined and competitive sports. The College expects to be competitive in its schedule of events within the Centennial Conference and with other comparable institutions. The athletic program includes 21 varsity teams: men's varsities in baseball, basketball, cricket, cross-country, fencing, lacrosse, soccer, squash, tennis, and track; women's varsities in basketball, cross-country, fencing, field hockey, lacrosse, soccer, softball, squash, tennis, track, and volleyball. Junior varsities are organized for sports when interest and appropriate competition is present.

INTRAMURALS

Intramurals at Haverford offer organized recreational activities from which students may derive rewards and satisfactions of competitive team play, sportsmanship and community spirit. Coeducational intramural leagues are regularly conducted in soccer, basketball, volleyball, softball and other sports of broad appeal.

INSTRUCTIONAL COURSES

Varied activities are taught in small sections to maximize individual attention within a framework of sound instruction, enjoyment, exercise, practice in basic skills and some exposure to competition, group endeavor, and shared responsibility. Instructional classes in any one year may include aerobics, athletic training/first aid/CPR, badminton, bowling, coaching, dance, fencing, golf, martial arts and self-defense, officiating, running techniques, sports skills, squash, tennis, weight training, and yoga. Courses at Bryn Mawr College may be counted for credit toward Haverford's requirement and include archery, dance (jazz, ballet, social, modern, improvisational and ethnic), life saving/water safety, and swimming.

MEETING THE REQUIREMENT

All students will be assigned a Wellness course during a particular quarter of their first year. To meet the remaining five-credit requirement, students may:

- take any combination of five instructional courses.
- earn up to four credits by participating in intramurals.
- earn up to four credits for playing one JV or varsity sport or five credits for playing two different JV or varsity sports.

Students are not allowed to return for their junior year without having met the athletic requirement.

Students with physical restrictions on exercise should discuss their situation with both the Director of Medical Services and the Director of Athletics. In almost all cases, a program of participation not involving exercise or certain types of exercise can be arranged to allow a student to meet the requirement.

REGISTRATION/CREDIT

Students register for athletic participation during their first two years in the same periods designated for academic registration. Schedules for courses, intramural and intercollegiate activities will be available at those times. It is expected that students will schedule activities for athletic credit immediately after they have completed their academic registration. Credit toward the athletic requirement is granted on the basis of attendance and participation in activities; skill proficiency is not considered. If a student stops participating in one activity during a particular quarter, he or she should arrange to transfer immediately into another one to earn the credit for that quarter. Most intercollegiate sports cover two quarters as does the athletic training/first aid course. Intramural leagues may span one or two quarters depending on the season. Instructional courses are generally of one quarter's duration.

BIOCHEMISTRY AND BIOPHYSICS

Much of today's scientific effort is directed toward an understanding of biological processes from the physical and chemical points of view. Curricular initiatives at Haverford, begun as a result of a grant from the Howard Hughes Medical Institute, led to the development of biologically oriented courses of study in the chemistry and physics departments. The concentration in biochemistry and biophysics recognizes current and undoubtedly enduring trends in interdisciplinary science by establishing in the curriculum a formal program of classroom and laboratory training at the interface between the physical and biological sciences. To be a member of the concentration a student must major in one of the three sponsoring departments: biology, chemistry, or physics. On the student's transcript, the concentration may be recorded as one in biochemistry, biophysics, or biochemistry/biophysics, depending on the individual program of study.

Professor Julio C. de Paula, concentration advisor, chemistry

Associate Professor Robert C. Scarrow, concentration advisor, chemistry (on leave 2002-03)

Associate Professor Karin Åkerfeldt, concentration advisor, chemistry

Associate Professor Suzanne Amador Kane, concentration advisor, physics

Associate Professor Jennifer Punt, concentration advisor, biology

Assistant Professor Robert Fairman, concentration advisor, biology and concentration coordinator

REQUIREMENTS

To earn an Area of Concentration, a student must complete an interdisciplinary course of study beyond the requirements of a single natural science department. We describe below only the four more popular programs of study within the concentration. Students interested in other options, such as a concentration in both biochemistry and biophysics, should consult with the faculty representatives listed above to design a course of study encompassing the required courses and any proposed substitutions.

Note that all concentrators must also complete a major in either biology, chemistry, or physics. This will require course work in the student's major department in addition to what is outlined below.

Core curriculum (required of all majors):

Biology 200a-200b (cell biology), and either 300a (laboratory in biochemistry: proteins and nucleic acids, cross-listed as Chemistry 300a) or 300b (laboratory in microscopy and immunology). Also, two half-semester courses: Biology 303 (structure and function of macromolecules) and one of Biology 301 (genetics), 304 (biochemistry: metabolic basis of disease), or 306 (inter- and intra-cellular communication).

Chemistry 100-101 (general chemistry) and 220a (organic chemistry I).

Mathematics 114 (calculus II), 120 (accelerated calculus) or 121 (calculus III).

Physics 101-102 or 105-106 (introductory physics).

If these courses are not taken at Haverford or Bryn Mawr, the substitute course(s) must be approved for college credit by the relevant departments.

Beyond this foundation, students must take the following advanced interdisciplinary coursework:

Biology Majors' Requirements for the Biochemistry Area of Concentration:

1. Chemistry 301a or 302b (laboratory in chemical structure and reactivity).
2. Chemistry 304 (physical chemistry I).

3. Two half-semester advanced courses from the following list: Chemistry 351d (bioinorganic chemistry), 352e (topics in biophysical chemistry) and 357g or h (topics in bioorganic chemistry), Physics 320b (introduction to biophysics: soft matter and biomaterials; a one-semester course).

4. Two credits of research on a topic of biochemical interest in any of the three participating departments. The research must be approved by the biology department and the concentration.

Courses meeting concentration requirements may be used for the biology major in lieu of one semester of either Biology 300a or 300b and one of the required 350-level advanced biology courses.

Biology Majors' Requirements for the Biophysics Area of Concentration:

1. Mathematics 121 (calculus) or 216 (advanced calculus); and 204 (differential equations) or 215 (linear algebra).

2. Physics 213 (waves and optics), 214 (quantum mechanics), and Physics 211f (laboratory in electronics and waves).

3. Chemistry 304 (physical chemistry I) or Physics 303 (statistical physics).

4. One semester of advanced physics laboratory, such as Physics 316 (electronic instrumentation and computers).

5. Physics 320b (introduction to biophysics: soft matter and biomaterials) or 230b (biophysical applications in medicine: medical imaging).

6. Two semesters of research on a topic of biochemical interest in any of the three participating departments. The research must be approved by the biology department and the concentration.

Courses meeting concentration requirements may be used for the biology major in lieu of one semester of either Biology 300a or 300b and one of the required 350-level advanced biology courses.

Chemistry Majors' Requirements for the Biochemistry Area of Concentration:

1. Two half-semester courses from the following: Chemistry 351d (bioinorganic chemistry), 352e (topics in biophysical chemistry) and 357g or h (topics in bioorganic chemistry), or one full semester of advanced coursework in the student's research area approved by the research advisor and the concentration committee. Biology and physics courses taken for this specific requirement cannot be used to satisfy the advanced course requirements of the chemistry major.

2. Two semesters of research on a topic of biochemical interest in any of the three participating departments. The research must be approved by the chemistry department and the concentration.

Courses meeting biochemistry concentration requirements may be used for the chemistry major in lieu of one semester of 320 (inorganic chemistry) and either Chemistry 301a or 302b.

Physics Majors' Requirements for the Biophysics Area of Concentration:

1. Physics 320b (introduction to biophysics: soft matter and biomaterials) or 230b (biophysical applications in medicine: medical imaging).

2. Two semesters of research on a topic of biophysical interest in any of the three participating departments. The research must be approved by the physics department and the concentration.

Physics majors may petition their department to use two of their 300-level courses in other natural science departments in lieu of two of the six required upper-level physics courses required for the physics major.

Advanced Courses in Biochemistry and Biophysics Include:

BIOLOGY

351 Molecular Motors and Biological Nano-Machines

353 Apoptosis: A Matter of Life and Death

355 Signal Transduction in Cell Biology (*Not offered in 2002-03.*)

357 Protein Design

359 Molecular Oncology

CHEMISTRY

304 Physical Chemistry I: The Physical Basis of Chemistry and Biology

351 Bioinorganic Chemistry

352 Topics in Biophysical Chemistry (*Not offered in 2002-03.*)

357 Topics in Bioorganic Chemistry

PHYSICS

230b Biophysical Applications in Medicine: Medical Imaging (*Not offered in 2002-03.*)

320b Introduction to Biophysics: Soft Matter and Biomaterials

BIOLOGY — MOLECULAR, CELLULAR, AND DEVELOPMENTAL

A revolutionary expansion is occurring in our ability to understand the structure and function of living organisms at the cellular and molecular levels. The traditional lines that used to demarcate the areas of genetics, biochemistry, microbiology, and cell physiology have dissolved, particularly in the research laboratory. This change has necessitated a new approach to the teaching of biology that emphasizes the common molecular basis of these disciplines. The following course descriptions reflect Haverford's approach to molecular biology. The courses are built in a series of stages:

1. Courses without prerequisites are offered at the 100-level for exploration by students interested in learning about biology. These are appropriate for students from all backgrounds and disciplines and are separate from the major track.

2. The major curriculum begins with a course in cellular and molecular biology (Bio 200a and 200b) for which a year's chemistry taken at Haverford (Chemistry 100a and 101b or Chemistry 220a and 221b) or at Bryn Mawr is a prerequisite. It is strongly recommended that students enroll in organic chemistry concurrently with Biology 200a.

3. Two junior laboratory courses (300a and 300b) and nine half-semester 300-level lecture courses, of which majors must enroll in four, representing a "core" of advanced courses which complete the common experience offered to students majoring in biology at Haverford.

4. A series of 350-level advanced seminar courses in which scientific reviews and articles drawn from the primary literature are examined and discussed in detail. These courses are designed to give the students an experience of the contemporary developments in a particular area of cell, molecular, or developmental biology and are intended to develop critical faculties as well as creative talents.

5. A series of 400-level senior research tutorials. These tutorials may be taken for single or double credit per semester in the senior year. They involve performing original research and reading and reporting on the current literature under the supervision of a faculty member. Topics of Senior Research Tutorials are chosen to lie within the areas of principal interest and expertise of the instructors.

6. Senior Departmental Studies (499) is a seminar course for seniors, involving participation in the department's external seminar program and presentations of research projects by all senior majors in the department.

An alternative route to a major centered in the Biology Department is offered to students interested in interdisciplinary studies within the science division. This is encompassed within the Area of Concentration in biochemistry or biophysics. In this interdisciplinary program, a student may major in biology and takes a prescribed number of courses in chemistry and physics to fulfill the requirements of the concentration.

Students may substitute some Bryn Mawr biology courses for some Haverford requirements with prior departmental approval. In general, students who take Bryn Mawr Biology 101 and 102 as freshmen are strongly advised to take Biology 200a and 200b as sophomores, and Bryn Mawr Biology 101 and 102 **cannot** be substituted for Biology 200a and 200b.

Qualified chemistry or physics majors, or qualified students from Bryn Mawr

College, may be admitted to Biology 300 and to the senior research tutorials with the consent of the instructor.

Students wishing to combine the biology major with another major may do so in accordance with college guidelines for double majors. Such students must complete independently the full requirements of the biology major. At the present time, the Biology Department does not offer a minor.

Professor Irving Finger, Emeritus

Professor Christopher Goff, Emeritus

Professor Slavica Smit Matacic, Emeritus

Professor Melvin Santer, Emeritus

Elizabeth Ufford Green Professor of Natural Sciences Judith A. Owen

Professor Philip Meneely

Associate Professor Karl Johnson, Chairperson

Associate Professor Jennifer Punt

Assistant Professor Robert Fairman

Assistant Professor Iruka Okeke

Visiting Assistant Professor Robert Loudon

Lab Instructor Katherine Heston

MAJOR REQUIREMENTS IN BIOLOGY

- a. At least two semester courses in chemistry, including one semester of organic chemistry. A second semester of organic chemistry is very strongly recommended. One semester of physical chemistry also is recommended for all biology majors, particularly for those intending to pursue graduate work in biology.
- b. Biology 200a,b (Biology 100 is not required for the major). Biology 200 is taken in the sophomore year. In order to qualify for Biology 200, a student must have completed Chem 100/101 (or equivalent). It is highly recommended that students take organic chemistry either prior to or concurrently with Biology 200. Students must complete one semester of organic chemistry before beginning Biology 300.
- c. Biology 300a, 300b, and four 300-level courses (selected from 301, 302, 303, 304, 305, 306, 307, 308, 309, 310). Unless special permission is granted by the department chairperson, one of these four should be Biology 301. Occasionally, an upper-level course from Bryn Mawr or Swarthmore is accepted as a substitute for one or two of the 300-level half-semester lecture courses, but only with the express permission of the Haverford biology department.
- d. Two half-semester courses at the 350 level.
- e. Two 400-level Senior Research Tutorial credits, generally taken over both semesters of the senior year, and submission of a notebook and a thesis describing the progress and results of the project.
- f. Biology 499j.

An alternative curriculum major centered in the biology department is offered to students interested in interdisciplinary studies within the science division. This is encompassed within the Area of Concentration in biochemistry or biophysics. In this interdisciplinary program, a student may major in biology and take a prescribed selection of courses in chemistry or physics to fulfill the requirements of the biology major.

Biology majors wishing to follow the biochemistry concentration take the following courses: Biology 200a, 200b, one semester of Bio 300, four Biology 30x courses, one of which must be Biology 303 and another must be selected from among 301, 304, and 306, and two 350-level courses, one of which may be substituted by Chem 351, Chem 352, or Physics 320,

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two credits of senior research, and Bio 499. In addition, they must take additional chemistry, mathematics and physics courses as outlined in the description of the Area of Concentration.

As preparation for graduate studies in biology, the biology department strongly recommends Physics 105 and 106 and Chemistry 221 and 304.

COURSES WITH NO CHEMISTRY PREREQUISITES

100 **What is Life?** NA

This course is designed for students with little or no prior college science. It will introduce them to the fundamental concepts of biology through a discussion of the question, "What is life?" An introduction to evolution and genetics will be followed by sufficient chemistry for the students to gain an appreciation of some of the fundamental questions posed by molecular biologists. The course will then develop the question, "What is Life," by exploring the defining features of living systems such as the capacity for self-replication, the capacity for self-organization, and the capacity for self-definition and self-defense. Students will participate in lectures for three hours per week. One additional afternoon per week will be used either for lab experiments or for discussion of issues pertinent to the interface of biology and society, such as the generation and proliferation of antibiotic-resistant bacteria, the impact of biotechnology on disease diagnosis and therapy, biotechnology in forensics, the human genome project, etc. *Not offered in 2002-03.*

106 **An Historical Introduction of Molecular Biology** NA 1/2 (Also called General Programs 106)

J. Owen

Examination of some of the major discoveries in molecular biology from the point of view of a nonscientist. Sufficient biochemistry is studied to prepare students to read contemporary accounts of two or three important advances in molecular and cell biology. Some time is devoted to a discussion of how a new finding is incorporated into the mainstream of biological sciences. One half semester. *Not offered in 2002-03.*

214a **Historical Introduction to Microbiology** NA (also called General Programs 214a)

M. Santer and U. Santer

For course description, see General Programs 214a.

217b **Biological Psychology** NA (Also called Psychology 217b)

W. Sternberg

For course description, see Psychology 217b.

221a **The Primate Origins of Society** SO (Also called Psychology 221a and Sociology 221a)

S. Perloe

For course description, see Psychology 221a.

247 **Human Genetics, Ethics and Public Policy** NA

Staff

Principles of human genetics, with an emphasis on the ethical, legal, and social implications of current advances in genetic and reproductive technologies. This course will focus on discrimination on the basis of genetic makeup, by examining past abuses of genetic arguments (e.g. Eugenics) and the potential for future misuses of genetic information. Topics include: history of Eugenics movements in the U.S. and Germany, genetic engineering, population and prenatal screening, genetic determinism, gene therapy. This course is open to students from any major, with no prerequisites. One semester, alternate years. *Enrollment is limited to 50.* (Satisfies the social justice requirement.) *Not offered in 2002-03.*

252a **Women, Medicine, and Biology** NA, SJ (Also called General Programs 252a)

M. K. Edwards

For course description, see General Programs 252a.

A CORE PROGRAM OF COURSES IN MOLECULAR, CELL, AND DEVELOPMENTAL BIOLOGY WITH PREREQUISITES IN CHEMISTRY

200a,b **Cell Structure and Function** NA

R. Fairman, K. Heston, I. Okeke, J. Punt and Staff

Three hours of lecture and one laboratory period per week. A one year course in cellular and molecular biology. Biology 200a considers the cell as a unit of biological activity. There is an introduction to the major macromolecules of the cell which includes a discussion of their synthesis and breakdown and a section on the gene as a unit of biological information and the flow and transmission of genetic information. The laboratory introduces the student to cell biology/histology, molecular biology, biochemistry, and genetics. *Prerequisites:* Chemistry 100a, 101b or equivalent. It is strongly recommended that students enroll in organic chemistry at Haverford (220a) or Bryn Mawr (211) concurrently with Biology 200a. Students who do not take chemistry in their first year but who do take Biology 100 should seek the advice of the department chairperson before enrolling in Biology 200.

300a **Laboratory in Biochemistry: Proteins and Nucleic Acids** NA

R. Fairman, K. Johnson, R. Loudon, and J. Owen

Two laboratory periods and one lecture period per week. Topic I. Proteins. A variety of methods applied to the study of protein molecules such as batch fractionation, polyacrylamide gel electrophoresis, enzyme kinetics, circular dichroism, and fluorescence spectroscopies will be used for the study of the structure and function of proteins. Topic II. Nucleic Acids. Recombinant DNA techniques, such as cloning, Northern and Southern analysis, sequencing, PCR, and mutagenesis will be used. *Prerequisites:* Biology 200, and organic chemistry (Chem 220a or the equivalent), or consent of the instructor. *Enrollment limited to 40.* If more than 40 students request enrollment, preference will be given to biology majors and students enrolled in the Area of Concentration in biochemistry or biophysics.

300b **Laboratory in Microscopy and Microbiology** NA

K. Johnson, R. Loudon and I. Okeke

Two laboratory periods and one lecture period per week. Topic I. Microscopy. An introduction to the optical techniques used to study cells, tissues, and organs. Emphasis is placed upon the independent use of light and electron microscopes. Immunofluorescent techniques of protein localization are also covered. Topic II. Microbiology: Students will employ in vitro models to study bacterial attachment to eukaryotic cell and inanimate surfaces. Insertional mutants deficient in colonization phenotypes will be created and characterized. *Prerequisite:* Biology 200 or consent of the instructors. *Enrollment limited to 20* each section. Two sections offered per week. If more than 40 students request enrollment, preference will be given to biology majors.

301d **Advanced Genetic Analysis** NA 1/2

Staff

The molecular mechanisms governing the transmission, mutation, and expression of genes. Particular emphasis is placed on the use of experimental genetic methods to analyze other areas of biology. *Prerequisite:* Biology 200 or its equivalent.

302e **Cell Architecture** NA 1/2

K. Johnson

An examination of cellular structure and function. Topics include the cytoplasmic matrix and

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the endomembrane system, with particular emphasis upon the dynamic qualities of living cells. *Prerequisite:* Biology 200 or its equivalent.

303h Structure and Function of Macromolecules NA 1/2

R. Fairman

A study of the structure and function of proteins, including enzymes, assembly systems, and proteins involved in interactions with nucleic acids and membranes. *Prerequisites:* Biology 200 and Chem 221 or equivalent to be taken previously or concurrently.

304 Biochemistry: The Molecular Basis of Disease and Adaptation NA 1/2

J. Punt

This course will introduce students to advanced metabolic biochemistry from a disease perspective. Students will gain an understanding of pathways involved in synthesis and degradation of carbohydrates, lipids, proteins, and nucleic acids while discussing diseases and evolutionary adaptations that directly pertain to the pathway(s) in question. Diabetes, hypercholesterolemia, Alzheimer's, phenylketonuria, aging, and cancer are all examples of 'disorders' that have been recent topics of this course. *Prerequisites:* Biology 200 and Chem 221 or equivalent to be taken previously or concurrently. *Not offered in 2002-03.*

305 Regulation NA 1/2

The molecular mechanism underlying a variety of regulatory processes and cellular responses. Examples are drawn from prokaryotic (including bacteriophage) and eukaryotic systems. Topics include transcriptional control; antisense regulation; cell cycle control; plant-microbe interactions; Ras signaling pathway. *Prerequisite:* Biology 200 or its equivalent. *Not offered in 2002-03.*

306g Inter- and Intra-Cellular Communication NA 1/2

J. Punt

A study of the mechanisms by which individual cells in a multicellular organism communicate via the exchange of molecular signals. The course will focus on the release of "molecular messengers," their interactions with specific receptor-bearing target cells, and the subsequent occurrence within these target cells of appropriate responses such as increased metabolic activity and/or cell division. Considerable attention is paid to the biochemistry of plasma and internal cell membranes and pathways are discussed from a disease perspective. *Prerequisite:* Biology 200 or its equivalent.

307 The Cell in Development NA 1/2

P. Meneely

The development of selected model organisms, both invertebrate and vertebrate, is used to examine the principles of fertilization, cleavage, gastrulation, morphogenesis, and pattern formation. Mechanisms by which genetic information is stored, segregated, and activated during cell determination and differentiation are explored. *Prerequisites:* Biology 200 and 301 or consent of instructor. *Not offered in 2002-03.*

308h Immunology NA 1/2

J. Owen

This course will provide an introduction to the rapidly expanding discipline of immunology. Students will learn about the molecular and cellular basis of the immune response through the study of the genetics and biochemistry of antigen receptors, the biochemistry of immune cell activation, the cell physiology of the immune system, immune memory, immune tolerance induction, and immune-mediated cell death. *Prerequisite:* Biology 200 or consent of instructor.

309e **Molecular Neurobiology** NA

Staff

This course will focus on molecular approaches to study nervous system development, function, and pathology. Topics including the generation of neurons and glia, electrical signaling, learning and memory, and Alzheimer's disease will be discussed using examples from a variety of model systems. *Prerequisite:* Biology 200 or consent of instructor.

310g **Molecular Microbiology**

I. Okeke

A study of prokaryotic biology with emphasis on gene organization and expression, which will incorporate selected readings from the primary literature. Topics include the genetics of bacteria and bacteriophage, gene regulation, horizontal gene transfer, intercellular signaling, and protein secretion. *Prerequisites:* Biology 200 and Chem 221 or equivalent taken previously or concurrently.

ADVANCED HALF-SEMESTER COURSES IN MOLECULAR, CELLULAR, AND DEVELOPMENTAL BIOLOGY OF WHICH THREE OR FOUR ARE OFFERED IN ANY ONE YEAR

350g **Pattern Formation in the Nervous System** NA

Staff

A fundamental process in the development of the vertebrate nervous system is the partitioning of nervous system into distinct domains of cellular differentiation, for example the brain vs. the spinal cord. This seminar course will explore, through a series of student research article presentations, the molecular processes by which pattern is established in the nervous system and the morphological consequences of improper patterning. Human birth defects and pathologies such as spina bifida and brain tumors will be used as case studies to discuss the role of crucial patterning genes and signaling molecules. *Prerequisite:* Biology 309 or consent of instructor.

351h **Molecular Motors and Biological Nano-Machines** NA

K. Johnson

The world of the cell contains a rich array of molecular machinery that carries out life's dynamic processes. Interdisciplinary studies of these mechanisms employing a variety of biological, chemical, and physical approaches are revealing a wealth of detail spanning from visible phenomenon to the scale of atoms and molecules. Extensive reading of the primary literature will be used as a basis for student-led discussions. Topics will be selected from a list including bacteriophage assembly, cellular clocks, mechanoenzyme engines, biosynthetic machinery, and the assembly and regulation of cytoskeletal arrays. These model systems provide novel insights into how work is accomplished (and regulated) in a nano-scale environment and serve as model systems for the development of microtechnologies for science and medicine. *Prerequisite:* Biology 302 or consent of instructor.

352e **Cellular Immunology** NA 1/2

J. Owen

Topics include description and classification of the cells and tissues of the immune system; cell collaboration in the immune response; transplantation antigens and their role in graft rejection and recognition of virally infected cells; immune tolerance; lymphokines. There will be student presentations of articles in the original immunological literature, followed by critical discussion. *Prerequisite:* Biology 300b, Biology 308 or consent of instructor.

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353e Apoptosis: A Matter of Life and Death NA 1/2

J. Punt

Cell death is as important to an organism as cell differentiation and proliferation. In order to shape organs, limbs, and digits, form neural pathways, build a useful repertoire of specificities in the immune system, and start and stop inflammatory reactions, an organism needs to be able to regulate cell death via a highly regulated process we call apoptosis. A lack of regulation between apoptosis and proliferation underlies many pathologies, including cancer, AIDS, developmental, immunological, and neurodegenerative disease. In this course we will explore current advances in our understanding of the molecular basis for apoptosis, its regulation, its relationship to cell differentiation and proliferation, and its role in disease processes. The material will be presented in seminar format where primary literature will be evaluated and students will take the lead in the discussion and debate of current controversies. *Prerequisites:* Biology 200 and one semester of 300-level biology or consent of instructor.

355 Signal Transduction and Cell Biology NA

Staff

Seminar course that covers major areas of current interest in the field of cell signaling biochemistry and biology. Topics include: 1) cell surface receptor structure and function, 2) heterotrimeric and oncogenesis: covers present-day thinking on dysregulation of signaling pathways and how this leads to the development of various types of cancers. *Prerequisites:* Biology 300 and Biology 306 or consent of instructor. *Not offered in 2002-03.*

356 Protein Localization and Transport NA 1/2

A seminar course involving student presentations of journal articles. Topics to be discussed include protein export in bacteria, protein modification, and trafficking through the secretory pathway in a variety of eukaryotic systems, mitochondrial and chloroplast protein targeting, and specific issues in localization, such as regulated secretion and the role of the cytoskeleton in protein transport. *Prerequisites:* Biology 200 and Biology 300 or consent of instructor. *Not offered in 2002-03.*

357d Protein Design NA

R. Fairman

This course will take a quantitative approach to the study of protein folding and protein structure using the primary research literature. We will particularly focus on these issues as they relate to function. Topics will include protein: DNA interactions, protein: protein interactions, and chaperones and their role in protein folding. *Prerequisite:* Biology 303 or Biology 300a, or consent of the instructor.

358g Developmental Genetics: Sex Chromosomes and Sex Determination NA 1/2

Staff

This course will examine the structure of sex chromosomes, and how differences in sex chromosome constitution give rise to the familiar morphological differences between males and females. The emphasis will be on the genetic and molecular basis of sex determination, using the primary research literature. Model organisms will include invertebrates such as *Caenorhabditis elegans* and *Drosophila melanogaster* and vertebrates such as placental and non-placental mammals and reptiles. *Prerequisite:* Biology 301 or consent of instructor.

359d Molecular Oncology

T. Tritton

This seminar will be a discussion of current concepts and literature on the molecular and cellular basis of cancer. To the physician, cancer is a broad spectrum of dozens of different dis-

eases. On the molecular level, by contrast, the outlines of a unifying genetic explanation for neoplasia are becoming clear. The seminar will explore the basis for this genetic paradigm of cancer and what it portends for future management of the disease. Topics will include: the mechanism of neoplastic transformation; the role of proto-oncogenes in normal and cancer cells; the tumor suppressor genes; the molecular and genetic pathogenesis of cancer; molecular genetics in diagnosis and treatment of cancer. *Prerequisite:* Biol. 300a or b or consent of the instructor. *Enrollment limited to 15 students.*

SENIOR RESEARCH, LIBRARY RESEARCH, INDEPENDENT STUDY AND SENIOR DEPARTMENTAL STUDIES

402 Senior Research Tutorial in Genetics and Meiosis NA

Staff

The principles and mechanisms by which the chromosome number is reduced and segregated during the production of gametes are studied in the nematode *Caenorhabditis elegans*.

Genetic, molecular, and microscopic methods are used to isolate and examine mutant strains which fail to execute meiosis properly. Laboratory work is supplemented by readings from the current literature on meiosis and *C. elegans*. *Prerequisite:* Consent of instructor.

403 Senior Research Tutorial in Protein Folding and Design NA

R. Fairman

10 hours per credit per week. The laboratory focuses on protein folding and design, with a particular emphasis on the use of proteins in nanoscience. Students will have the opportunity to apply chemical and genetic approaches to the synthesis of proteins for folding and design studies. Such proteins are characterized in the laboratory using biophysical methods (such as circular dichroism spectroscopy, analytical ultracentrifugation, and atomic force microscopy). Functional and structural approaches can also be applied as necessary to answer specific questions relating to protein science. Laboratory work is supplemented with readings in the original literature which are discussed at weekly lab meetings. *Prerequisite:* Consent of the instructor.

404 Senior Research Tutorial in Molecular Microbiology NA

I. Okeke

10 hours per credit per week. Studies in bacterial genetics and pathogenesis. Molecular methods will be used to identify and characterize features of diarrhea-causing *Escherichia coli* that are absent in commensal strains. Laboratory work is supplemented by readings from current literature. *Prerequisite:* Consent of the instructor.

405 Senior Research Tutorial in Signal Transduction NA

R. Loudon

10 hours per credit per week. Studies on particular protein:protein interactions and their role in intracellular signaling pathways in both normal and transformed mammalian cells.

Laboratory work is supplemented by readings from current literature. *Prerequisite:* Consent of the instructor.

406 Senior Research Tutorial in Cellular Immunology NA

J. Owen

10 hours per credit per week. Faculty-guided student research is supplemented by weekly lab meetings at which students present papers from the original literature. The end phase of an immune response is characterized by cell fate decisions in which actively engaged lymphocytes either undergo apoptosis or differentiate into memory cells. Students in this laboratory study and manipulate the expression of pro- and anti-apoptotic molecules in order to understand this process as it affects both B and T cells. *Prerequisite:* Consent of the instructor.

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407 Senior Research Tutorial on Cell Motility and the Cytoskeleton NA

K. Johnson

10 hours per credit per week. Studies on the structure and function of microtubules and other cytoskeletal components. Techniques employed include the generation of mutants and their characterization by genetic analysis; the manipulation of DNA, RNA, and protein, including studies of transformation and expression; and the production of antibodies and their use in immunofluorescence and immunoelectron microscopy. Laboratory work is supplemented by readings from the current literature. *Prerequisite:* Consent of instructor.

408 Senior Research Tutorial on Life and Death Decisions of Developing Lymphocytes NA

J. Punt

10 hours per credit per week. The fate of a developing T cell depends on the interactions it experiences through its T cell receptor as it traffics through the thymus. Interestingly, identical interactions can have markedly different consequences depending on their developmental stage. Immature T cells (thymocytes) respond to strong T cell receptor signals by dying, while their direct descendents, mature T cells, respond to the very same stimulation by proliferating. We are working to determine the molecular reasons behind this difference in responsiveness. By identifying and comparing the intracellular signals experienced by immature and mature T cells we are working to solve this developmental mystery. *Prerequisite:* Consent of the instructor.

409 Senior Research Tutorial in Molecular Neurobiology NA

Staff

10 hours per credit per week. The developing nervous system of vertebrate embryos rapidly becomes patterned into distinct domains or neural cell differentiation. In order to identify what genes are responsible for the establishment of this pattern, a variety of molecular screening techniques are employed. The expression pattern of these genes is then determined by in situ hybridization and their function analyzed in vivo and in vitro, using Microinjection and biochemical assays. Laboratory work is supplemented by readings from the current literature. *Prerequisite:* Consent of instructor.

410 Senior Research Tutorial at Off-Campus Research Labs NA

Staff

10 hours per credit per week. Research in an area of cell, molecular, or development biology is conducted under the supervision of a member of a nearby research laboratory who has volunteered time and space for a Haverford student. All students enrolled in Biology 408 must have a designated on-campus, as well as an off-campus supervisor. *Prerequisite:* Biology 300 and consent of both the department and the off-campus supervisor.

480a,b Independent Study NA

Staff

Independent work carried out under the supervision of a faculty member. *Prerequisite:* Consent of the instructor.

499j Senior Department Studies NA 1/2

J. Owen and Staff

Participation in the department's Philip's Visitors Program; attendance at seminars by visiting speakers; senior seminar meetings, consisting of presentation and discussion of research plans and research results by students and faculty; and students' presentations of papers on contemporary developments in experimental biology, providing an opportunity for discussion of library research tutorials.

COURSES OFFERED AT BRYN MAWR COLLEGE

- 101 **Introduction to Biology I: Molecules to Cells**
- 102 **Introduction to Biology II: Organisms to Populations**
- 103 **Biology: Basic Concepts**
- 201 **Genetics**
- 202 **Neurobiology and Behavior**
- 204 **Histology**
- 209 **Environmental Toxicology**
- 210 **Biology and Public Policy**
- 220 **Ecology**
- 236 **Evolution**
- 271 **Developmental Biology**
- 303 **Animal Physiology**
- 304 **Molecular and Cellular Neurobiology**
- 308 **Field Ecology**
- 309 **Biological Oceanography**
- 322 **Neurochemistry**
- 336 **Evolutionary Biology: Advanced Topics**
- 340 **Cell Biology**
- 341, 343 **Introduction to Biochemistry**
- 364 **Developmental Neurobiology**
- 367 **Computational Models of Biological Organization**
- 372 **Molecular Biology**
- 389 **Senior Seminar in Morphology**
- 390 **Senior Seminar in Ecology**
- 391 **Senior Seminar in Biochemistry**
- 392 **Senior Seminar in Physiology**
- 393 **Senior Seminar in Genetics**
- 394 **Senior Seminar in Developmental Biology**
- 396 **Topics in Neural and Behavioral Science**
- 397 **Senior Seminar in Environmental Studies**
- 401 **Supervised Research in Neural and Behavioral Sciences**
- 403 **Supervised Laboratory Research in Biology**

The program in chemistry is designed to meet the needs of students who are pursuing chemistry either for a variety of pre-professional reasons or to increase their knowledge of the natural sciences. There is a growing need for educators, lawyers, entrepreneurs, and policy makers to have an understanding of chemistry—the largest industry in the United States. Chemistry is also a global enterprise and students are likely to be involved in international partnerships upon graduation, either as research scientists, medical professionals, or as entrepreneurs. Therefore, Haverford has a chemistry major program that provides preparation for careers in science, medicine, law, business, and K-12 education.

The major program recognizes that chemistry as a discipline occupies the broad area between physics and biology with strong ties to both disciplines; some of the most exciting areas in science today are found in the interdisciplinary fields of chemical physics and chemical biology. The chemistry major allows the student flexibility in designing a program that can be directed toward such interdisciplinary areas or to one of the traditional areas of organic, physical, or inorganic chemistry. In addition, the chemistry department is one of the sponsor departments of the concentration in biochemistry and biophysics.

Students have three possible entry points into the program; the particular option depends on the level of preparation of the individual student. This is determined by the combination of results from a placement examination given during Customs Week, secondary school records, scores from standardized and advanced placement tests, and individual consultation. All three starting points can result in the completion of a full chemistry major program. No previous chemistry experience is required for the first year general chemistry sequence (Chemistry 100a and 101b), followed in sophomore year by organic chemistry (Chemistry 220a and 221b). Students with adequate preparation may omit 100a and are directed to enter the chemistry sequence starting with an advanced general chemistry course (105b) in the second semester, continuing with 220a, 221b in the sophomore year. These first-year students then have an extra course slot available in their first semester that might be used for a mathematics or physics course. The third option available to a few students is to take organic chemistry (220a, 221b) in the first year, continuing with junior-level chemistry in the sophomore year.

Most students as seniors choose to participate in research for advanced course credit. This research tutorial experience nurtures talents and abilities that may not have been developed in prior formal class work. It can help the student define choices for careers after graduation. Summer research experience is particularly encouraged. This provides a background of focused experience that can greatly enrich the senior research tutorial experience. In recent years eight to ten majors *per* summer have received stipends to participate in research in the chemistry department.

Chemistry majors wishing to study abroad during the junior year should confer with the faculty advisor and should plan to take at least one chemistry course per semester at the foreign institution. The chemistry department has currently approved chemistry major credit for selected courses at Oxford University (England), University College London (England), University of Melbourne

(Australia), University of Saint Andrews (Scotland), and University of Aberdeen (Scotland). Chemistry majors have also satisfied major requirements using courses from domestic programs such as the Semester in Environmental Science at the Marine Biological Laboratory in Woods Hole, Mass.

Professor Julio C. de Paula

Professor Robert C. Scarrow, on leave 2002-03

Associate Professor Karin Åkerfeldt

Associate Professor Frances Rose Blase

Associate Professor Terry L. Newirth, Chairperson

Assistant Professor Charles E. Miller

Visiting Assistant Professor Michael J. Kukla

Visiting Assistant Professor Brian W. Pfennig

Adjunct Professor Claude E. Wintner

John Farnum Professor of Chemistry Colin F. MacKay, Emeritus

MAJOR REQUIREMENTS

Each student confers with the major advisor to plan a program that takes into account specific interests and career aims. The major requirements have been designed to meet the educational needs of students interested in careers in medicine, K-12 education, business, and law. An American Chemical Society (ACS) certified major requires one additional course and is recommended for students interested in pursuing graduate study in science and engineering, or who wish to directly enter the chemical work force after graduation.

Chemistry Major. The required courses are: Chemistry 100a (or placement in Chemistry 105b), either 101b or 105b (or placement in Chemistry 220a), 220a, 221b, 301a, 302b, 304a, 320b, 391j, and two semesters of advanced chemistry course work (305-369), one of which may be satisfied through a research tutorial course (36x); one semester of mathematics courses numbered 114 to 121 or placement in a higher level mathematics course; and either introductory physics (Physics 101a/102b or 105a/106b) or Biology 200a/200b.

Chemistry Major with Biochemistry Concentration. Biochemistry concentrators may make the following substitutions for chemistry major requirements: either Chemistry 301a or 302b (but not both) may be replaced by a semester of Biology 300, and Chemistry 320b may be replaced by Biology 303g and one other Biology half-course selected from 301, 304, and 306. Additional requirements apply to biochemistry concentrators; see Biochemistry and Biophysics section of this catalog.

ACS-Certified Chemistry Major. In order to receive ACS-certification, students must satisfy all major requirements (with or without a biochemistry concentration) and must complete Chemistry 305b as an additional (third) semester of advanced course work. The following requirements also apply for ACS-certification and may be met with the same courses used to meet major requirements: Physics 101a/102b or 105a/106b; Chemistry 320b or 351d; and, beginning with students in the class of 2005, at least one semester of biochemistry. This last requirement may be satisfied by Bio 200b, by Bryn Mawr Chemistry 242a, or by two of Chemistry 351d, 352e, 357g or 357h.

Chemistry Minor. The required courses are: Chemistry 100a (or placement in Chemistry 105b), 101b (or 105b), 220a, 221b, 304a, and one semester of advanced chemistry chosen from courses numbered between 301 and 369. Students who begin by placement in Chemistry

220a must take an additional (fifth) chemistry course with an analytical or physical chemistry laboratory component (such as Chemistry 301 or 302, or Bryn Mawr Chemistry 231 or 242). At least three of the courses taken for the chemistry minor must be taken at Haverford College. The senior seminar (Chemistry 391j) is not required, but attendance at Philips Seminars in Chemistry is strongly recommended.

REQUIREMENTS FOR HONORS

All students who participate in senior research will be considered for departmental honors. Successful honors candidates will be expected to do superior work in major courses and to complete a research problem at a level superior both in quality and quantity of effort to that expected in normal course work.

COURSES

100a **General Chemistry I: Principles and Applications of Chemistry** NA/QU

T. Newirth, B. Pfennig

Properties of atoms and molecules, stoichiometry, acid-base equilibria, thermochemistry, and kinetics as the foundation for future work in chemistry. One of the sections is designed for students with limited or no exposure to high school chemistry courses; it is limited to 20 students and consists of five lectures and one laboratory period. The remaining section does not have enrollment limits and consists of three lectures, one optional recitation, and one laboratory period. Placement of students into sections will be done by the chemistry department based on a placement exam and a questionnaire given prior to the beginning of the fall semester.

101b **General Chemistry II: Atoms and Molecules in Isolation and Interaction** NA/QU

T. Newirth, B. Pfennig (laboratory)

Three lectures, one optional recitation, and one laboratory period. Survey of principles and applications of thermodynamics, reaction kinetics, atomic and molecular structure and bonding, and chemical equilibria to provide a basis for an appreciation of chemical reactivity, including foundations of nuclear chemistry. *Prerequisite:* Grade of 2.0 in Chemistry 100a or placement by department.

105b **Advanced General Chemistry: The Chemical Basis of the Biosphere** NA/QU

C. Miller

Three lectures and one laboratory period. A treatment in some depth of the concepts that shape our understanding of the chemical reaction: energetics, dynamics, and structure. The lectures and laboratory activities will emphasize applications of chemistry to biology, environmental science, and materials science. *Prerequisite:* Placement by department; Mathematics 113 or higher placement.

145b **Light and the Colors of Life** (Also called Writing Program 145b) [WS-D] NA

J. de Paula

An interdisciplinary examination of light and color in art, science, and technology. We will understand the scientist's assertion that, without light from the Sun, our planet would be a cold and sterile rock incapable of sustaining life on a grand scale. We will also examine the chemistry of pigments used in art and medicine. This writing intensive seminar will feature class discussions of the texts and regular small group tutorials focusing on writing. *This course fulfills the freshman writing requirement.*

151b **Case Studies in Chemistry** (Also called General Programs 151b) NA

Three lectures. A general audience course that explores a topic in chemistry in some depth.

Topics are announced in the course guide. Previous topics have been the atmospheric chemistry, chemistry of food, the chemistry of energy sources and sinks, medicinal chemistry, and the problem of misinterpretation in chemistry. Not open to students with prior college chemistry. *Enrollment is limited to 75 students. Not offered in 2002-03.*

153a Atmospheric Chemistry: Implications for the Future (Also called General Programs 153a) NA

C. Miller

This course will focus on providing concerned citizens with the scientific foundations necessary to participate effectively in the ongoing national and international policy debates over air quality. Topics will include: the Antarctic ozone hole, acid rain, greenhouse gases, and global climate change. Critical reading and discussion of the Montreal Protocol, the Kyoto Accord, and similar documents will be a major component of the course. *Enrollment is limited to 50 students.*

220a Organic Chemistry I: Introduction to Organic Chemistry NA

F. Blase

Three lectures, one optional recitation, and one laboratory period. The basic structural, mechanistic, and synthetic concepts of organic chemistry, and the properties of the common organic functional groups, are surveyed. *Prerequisite:* Grade of 2.0 in Chemistry 101b or 105b, or placement by the department.

221b Organic Chemistry II: Topics in Organic Chemistry NA

K. Åkerfeldt

Three lectures, one optional recitation, and one laboratory period. Topics in stereochemistry, reaction mechanisms, biochemistry and natural-products chemistry, building on the fundamentals developed in Chemistry 220a. *Prerequisite:* Grade of 2.0 in Chemistry 220a.

300a Biochemistry of Proteins and Nucleic Acids (Also called Biology 300a) NA

R. Fairman, K. Johnson, and J. Owen

Two laboratory periods and one lecture period. Topic I. *Proteins.* A variety of methods applied to the study of protein molecules such as batch fractionation, polyacrylamide gel electrophoresis, enzyme kinetics, circular dichroism, and fluorescence spectroscopies will be used for the study of the structure and function of proteins. Topic II. *Nucleic Acids.* Recombinant DNA techniques, such as cloning, Northern and Southern analysis, sequencing, PCR, and mutagenesis will be used. *Prerequisite:* Biology 200 or consent of the instructors. *Enrollment limited to 40.* If more than 40 students request enrollment, preference will be given to biology majors and students enrolled in the area of concentration in biochemistry and biophysics.

301a, 302b Laboratory in Chemical Structure and Reactivity NA

K. Åkerfeldt, C. Miller, F. Blase, and J. de Paula

Two lectures and two laboratory periods. An introduction to the methods of research in chemistry. Inorganic, organic, physical chemistry, and biochemical concepts are integrated in a broad laboratory study of structure and its relationship to chemical reactivity. Physical methods are used in studies of organic, inorganic, and biochemical reactions. Chemical synthesis and the modern methods of instrumental analytical chemistry are particularly stressed. Instruments such as lasers, the 300 MHz NMR spectrometer, and the gas chromatograph-mass spectrometer are used by students, with faculty supervision. *Prerequisites:* for 301a: Chemistry 221b; for 302b: Chemistry 221b and 304a.

304a Physical Chemistry I: The Physical Basis of Chemistry and Biology NA*J. de Paula*

Three lectures. Classical and quantum mechanical descriptions of chemical and biological processes. Topics to include: fundamental quantum mechanical systems, molecular structure, intra- and intermolecular dynamics, thermochemistry, chemical and biochemical kinetics.

Prerequisites: Chemistry 101b, 105b or 220a; one semester of mathematics courses numbered Math 114 to 121.

305b Physical Chemistry II: Chemical and Biochemical Dynamics NA*C. Miller*

Three lectures. The quantum theory of atoms and molecules as applied to problems in molecular structure, computational chemistry, statistical mechanics, chemical reaction dynamics, and biopolymer folding. Emphasis on computer-based solutions to complex chemical problems. *Prerequisites:* Chemistry 304a.

320b Inorganic Chemistry NA*B. Pfennig*

Three lectures. Molecular and electronic structure of transition metal and main group compounds; survey of inorganic reaction mechanisms. *Prerequisite:* Chemistry 304a.

342a Molecular Spectroscopy NA

Three lectures. Introduction to modern experimental and theoretical molecular spectroscopy. Emphasis on the relationships between spectroscopic constants and molecular properties. Includes spectral analysis with state-of-the-art computational packages. *Prerequisite:* Chemistry 305b or consent of instructor. *Not offered in 2002-03.*

351g Bioinorganic Chemistry NA 1/2*B. Pfennig*

Three lectures. This course will explore the inorganic chemistry behind the requirement of biological cells for metals such as zinc, iron, copper, manganese, and molybdenum. The course will focus on principles of coordination chemistry; metal-binding abilities of various functional groups within proteins and nucleic acids; metal-based reactivity involved in reaction mechanisms of specific metalloenzymes; and medically relevant topics such as bioaccumulation and storage of metal ions, the toxicity of heavy metals, and use of metal-containing drugs in treating disease. *Prerequisites:* Chemistry 221b and 304a.

352g Topics in Biophysical Chemistry NA 1/2

Three lectures. Survey of spectroscopic methods of probing the structure and function of biopolymers, accompanied by interpretive reading of the literature on topics of current interest, such as bioenergetics, vision, and laser-based medicine. *Prerequisites:* Chemistry 351d; Biology 200a,b or consent of instructor. *Not offered in 2002-03.*

355h Topics in Advanced Organic Chemistry NA 1/2*F. Blase*

Three lectures. Variable content, depending on the interests of students and faculty. Topics are selected in consultation with students electing the course. Previous topics have been modern synthetic methods, asymmetric synthesis, natural product chemistry, biosynthesis, chemistry of coenzymes, combinatorial approaches to synthesis, free radical chemistry, organic photochemistry, organometallic chemistry. Topics selected differ from those selected for 357g,h in the previous year. *Prerequisite:* Chemistry 221b.

357d,e Topics in Bioorganic Chemistry NA 1/2, NA 1/2

T. Newirth, K. Åkerfeldt

Three lectures. The specific content of the course varies, depending on faculty and student interests. The course will focus on organic chemistry as applied to biological systems and related topics. *Prerequisite:* Chemistry 221b.

391j Departmental Seminar NA 1/2

K. Åkerfeldt, F. Blase

One meeting per week throughout the year. Presentation and discussion of current research topics in the various areas of chemistry by staff, students, and visitors.

RESEARCH TUTORIALS

Students with solid preparation in the department's course work and a strong desire to do independent laboratory work may register for a research tutorial in an area of active faculty research. In these tutorials the student attempts to define and solve a research problem under the close supervision of a faculty member.

361 Research Tutorial in Physical Chemistry NA

C. Miller

Directed research in high-resolution molecular spectroscopy, gas-phase reaction dynamics, and photochemistry. *Prerequisite:* Consent of instructor.

363 Research Tutorial in Organic Chemistry NA

K. Åkerfeldt, F. Blase, T. Newirth

Directed research in bioorganic chemistry, synthetic organic chemistry, and physical-organic chemistry. Topics include de novo synthesis of proteins, total synthesis of biologically significant molecules, new methods of enantioselective synthesis, the study of organic reaction mechanisms, and studies in conformational analysis and molecular modeling. *Prerequisite:* Consent of instructor.

365 Research Tutorial in Bioinorganic Chemistry NA

B. Pfennig

Topics include spectroscopic and kinetic studies of metalloproteins and inorganic coordination compounds. *Prerequisite:* Consent of instructor.

367 Research Tutorial in Biophysical Chemistry NA

J. de Paula

Topics include photosynthetic energy transfer, supramolecular chemistry, photochemistry of metalloporphyrins, and photodynamic therapy of tumors. *Prerequisite:* Consent of instructor.

SELECTED COURSES OFFERED AT BRYN MAWR COLLEGE

The following courses may be used to satisfy the advanced course requirement of the chemistry major.

242 Biological Chemistry

311, 312 Advanced Organic Chemistry

321, 322 Advanced Physical Chemistry

332 Advanced Inorganic Chemistry

345 Advanced Biological Chemistry

The Chinese Language Program offers a full undergraduate curriculum of courses in Mandarin Chinese. Students who will combine language study with focused work on East Asian society and culture may wish to consider the major or concentration in East Asian Studies. Information about study abroad programs can be found under the East Asian Studies heading in this catalog.

Assistant Professor Shizhe Huang, Director

At Swarthmore College:

Associate Professor Haili Kong

At Bryn Mawr College:

Lecturer Xiaoling Yin

Lecturer Tz'u Chiang

COURSES

001, 002 **Intensive Elementary Chinese** HU

X. Yin

An intensive introductory course in modern spoken and written Chinese. The development of oral-aural skills is integrated through grammar explanations and drill sessions designed to reinforce new material through active practice. Five hours a week of lecture and oral practice; also individual conversation. This is a year-long course; both semesters are required for credit.

003, 004 **Intermediate Chinese** HU

S. Huang

Language skills in speaking, listening, reading and writing are further developed through carefully designed practices. Oral proficiency is enhanced by dramatization of situational topics, and written skills by regular composition writing. Both reading and writing are in Chinese characters only. Classes three hours, lab two hours a week. This is a year-long course; both semesters are required for credit. *Prerequisite:* Chinese 001, 002 or equivalent.

005-006 **Chinese for Advanced Learners**

Staff

Language skills in reading and writing are further developed. This course is suited for students who have good oral proficiency. Classes three hours a week. This is a year-long course; both semesters are required for credit. *Prerequisite:* placement test.

201, 202 **Advanced Chinese: Readings in the Modern Chinese Short Story and Theater** HU

Staff

A focus on overall language skills through reading and discussion of modern short stories, as well as on students' facility in written and oral expression through readings in modern drama and screenplays. Readings include representative works from the May Fourth Period (1919-27) to the present. Audio and videotapes of drama and films are used as study aids. *Prerequisite:* Intermediate (second-year) Chinese or permission of instructor.

203, 204 **Beginning Classical Chinese** HU

Prerequisites: Elementary and Intermediate Chinese or Japanese, or permission of instructor. *Not offered in 2002-03.*

301, 302 **Readings in the Humanities** HU

X. Yin

Development of language ability in the areas of modern Chinese literature, history and/or philosophy. Speaking and reading skills are equally emphasized through a consideration of the intellectual, historical, and social significance of representative works. *Prerequisite:* Chinese 202 or permission of instructor.

CLASSICS

The Classics department (in cooperation with the Bryn Mawr department of Greek, Latin, and Ancient History) offers instruction at all levels in Greek and Latin language and literature. In addition, courses in Classical Studies provide opportunities to study ancient history, literature, and culture in English translation. Since the study of Greek and Roman civilization includes work in a number of different disciplines, courses of interest to the student of Classics may also be found in a variety of departments at Haverford and Bryn Mawr (archaeology, comparative literature, history, philosophy, and religion). The major programs in Classics reflect the diversity of the field: students may major in Classical Languages (Greek and Latin), Greek or Latin (with a related modern field), or Classical Culture and Society. Majors are encouraged to study abroad in either Athens or Rome during a semester of their junior year.

Professor Daniel J. Gillis

Audrey A. and John L. Dusseau Memorial Professor in the Humanities and Professor of Classics Joseph A. Russo, chairperson

William R. Kenan, Jr. Professor of Comparative Literature and Classics

Deborah H. Roberts, on leave 2002-03

Visiting Associate Professor Elizabeth Block, fall semester

Visiting Assistant Professor Julie Nishimura-Jensen

MAJOR REQUIREMENTS

Classical Languages: Eight semester courses beyond the elementary level divided between Greek and Latin, of which at least two in each language must be at the 200 level or above, and Senior Seminar (398a/399b). Equivalent courses may be taken at Bryn Mawr College.

Greek or Latin: Six semester courses beyond the elementary level in one ancient language, of which at least four must be at the 200 level or above; Senior Seminar (398a/399b); a minimum of three semester courses beyond the introductory level in a related field (another language, archaeology, comparative literature, English, history, religion, philosophy). Equivalent courses may be taken at Bryn Mawr College.

Classical Culture and Society: Two courses in either Latin or Greek beyond the elementary level; two courses in Greek and/or Roman history; three courses, at least two of which must be at the 200 level or above, in one of the following concentrations: archaeology and art history, history and society, literature and the classical tradition, philosophy and religion; two electives dealing with antiquity; and Senior Seminar (Classics 398-399). This is a bi-college (Haverford/Bryn Mawr) major.

MINOR REQUIREMENTS

Greek or Latin: Six semester courses in the language, of which at least two must be at the 200 level or above; the number of required courses may be reduced for those who are already beyond the elementary level when they begin the minor.

REQUIREMENTS FOR HONORS

Superior performance in course work and in Senior Departmental Studies will constitute Departmental Honors.

COURSES IN GREEK LANGUAGE AND LITERATURE

001 Elementary Greek HU

J. Russo

Introduction to the grammar of ancient Greek, with excerpts from the New Testament and readings from Plato and other ancient Greek writers.

101a Introduction to Greek Literature: Plato HU

J. Russo

Plato's dialogues *Crito* and *Ion*.

101b Introduction to Greek Poetry: Homer HU

Taught in 2002-03 as Bryn Mawr Greek 104.

251a Advanced Greek: Plato and Thucydides HU

Taught in 2002-03 as Bryn Mawr Greek 201.

251b Advanced Greek: Tragedy HU

Taught in 2002-03 as Bryn Mawr Greek 202.

COURSES IN LATIN LANGUAGE AND LITERATURE

002 Elementary Latin HU

D. Gillis

Introduction to the elements of Latin grammar, with readings in prose and poetry.

102a Introduction to Latin Literature: Catullus and Cicero HU

J. Nishimura-Jensen

102b Introduction to Latin Literature: Vergil HU

D. Gillis

252a Advanced Latin: Roman Letters HU

D. Gillis

Readings in Cicero, Pliny, and the epistolary tradition.

252b Advanced Latin HU

J. Nishimura-Jensen

Silver Latin readings in satire: Petronius and Juvenal.

398/399b Senior Seminar HU

The first term of this course is a bi-college team-taught seminar devoted to readings in and discussion of selected topics in the various sub-fields of Classical Studies (e.g. literature, religion, philosophy, law, social history); the second term involves the writing and oral presentation of the senior thesis. *398 offered at Bryn Mawr in 2002-02 and alternate years.*

480 Independent Study

Staff

Project course in Greek and Latin authors not covered in formal offerings.

COURSES IN CLASSICAL STUDIES NOT REQUIRING GREEK OR LATIN

119a Athenian Culture and Society in the 5th Century HU

D. Gillis

Study of the Athenian achievement in literature, politics and philosophy from the Persian wars to the trial and death of Socrates, based largely on primary sources; discussion of religion and politics in the context of the polis, and of the Athenian use of myth in the form of tragedy. Special attention will be given to the nature of divine and human justice, and the dynamics of power among genders and social classes. *Offered in 2003-04.*

120b The Roman Emperors: Ancient Texts and Modern Perspectives HU

D. Gillis

Study of the earliest Roman Princes who presided over a long period of moral decay and high literary achievement, as reflected in biased ancient sources. Modern revisionist interpretations will be analyzed in order to help establish accurate appraisals of imperial careers and impact. *Offered in 2002-03 and alternate years.*

207b Greek Tragedy and the Tragic Genre HU (Also called Comparative Literature 207b)

D. Roberts

Selected tragedies of Aeschylus, Sophocles, Euripides, with close attention to individual plays and to the nature, range, and development of the genre in 5th century Athens. Consideration of certain influential approaches to tragedy (Aristotle's *Poetics*, Nietzsche's *Birth of Tragedy*) and of later examples of the genre (plays by Racine, Shakespeare, O'Neill, Brecht). *Not offered in 2002-03.*

208a Mythology HU (Also called Comparative Literature 208b)

J. Russo

Archetypal figures and situations of Greek mythology, with comparative readings in Norse and ancient Near Eastern mythologies. Comparison and evaluation of structuralist, psychoanalytic, and Jungian interpretations. *Enrollment limited to 30, no first-year students. Not offered in 2002-03.*

210b The Epic

D. Roberts

This course explores the development, definition, and influence of the epic genre from classical times to the present. Readings include the ancient epic fragments of *Gilgamesh*; Homer, *Iliad* and *Odyssey*; Vergil, *Aeneid*; Milton, *Paradise Lost*; Derek Walcott, *Omeros*. *Not offered in 2002-03.*

211b The World of Oral Literature HU (Also called Comparative Literature 211)

J. Russo

The study of folktale, ballad, and epic as oral narrative genres drawn from past and present cultures. Emphasis will be on oral style and performance, the tension between tradition and innovation, and the distinctive features of each genre. Readings will include folktales from various cultures, English-language ballads, African-American "toasts," and Homer's *Iliad* and *Odyssey*. *Not offered in 2002-03.*

212a The Classical Tradition in Western Literature HU (Also called Comparative Literature 212b)

E. Block

An exploration of the uses of Greek and Latin literature in later writers, with attention to particularly influential ancient authors (Homer, Vergil, Ovid, and others), to a range of modern authors, and to the varieties of literary influence and intertextuality. *Offered in 2002-03 and alternate years.*

213b Tragedy and the Tragic: Suffering, Representation, and Response HU (Also called Comparative Literature 213b)

D. Roberts

This course is concerned with tragedy as a kind of drama, with the idea of the tragic as explored and manifested in a variety of cultural contexts and forms, and with critiques of tragedy. The first third of the course focuses on tragedy and the tragic in ancient Greece, the

genre's place of origin; we turn subsequently to plays, narratives, essays and films from other times and places. *Offered in 2003-04 and alternate years.*

217a Male and Female in Ancient Greece HU

J. Russo

Investigation of the status, roles, and images of women in archaic, classical, and post-classical Greek culture, and the Greek conceptualization of male/female difference. Special attention to central literary texts of each period. *Offered 2002-03 and alternate years.*

290a History of Literary Theory: Plato to Shelley HU (Also called English 290a and Comparative Literature 290a)

D. Roberts

An historical survey of literary theory in the West, from the Greeks to early 19th-century Europe, with attention to key critical terms and concepts. Not open to first-year students. *Offered in 2003-04 and alternate years.*

COMPARATIVE LITERATURE

The study of comparative literature situates literature in an international perspective, examines connections between literary history, literary criticism, critical theory, and poetics, and works towards an understanding of the sociocultural functions of literature. Interpretive methods from other disciplines that interrogate cultural discourses also play a role in the comparative study of literature; among these are philosophy, history, religion, classical and area studies, Africana studies, gender studies, cultural studies, music, and the history of art.

Comparative literature students are required to have a reading knowledge of at least one foreign language adequate to the advanced study of literature in that language. Some comparative literature courses may require reading knowledge of a foreign language as a prerequisite for admission. Students considering graduate work in comparative literature should also study a second foreign language.

Advisory Committee

At Haverford College:

William E. Kenan, Jr. Professor of Comparative Literature and Classics **Deborah Roberts** (Classics and Comparative Literature), on leave 2002-03

Barbara Riley Levin. Professor of Spanish and Comparative Literature **Israel Burshatin**, Chairperson (Spanish and Comparative Literature)

Associate Professor **Roberto Castillo Sandoval** (Spanish)

Associate Professor **Ulrich Schönherr** (German)

Assistant Professor **David Sedley** (French), on leave 2002-03

Emily Judson Baugh and John Marshall Gest Professor in Comparative Religion **Michael Sells** (Religion)

Assistant Professor **Maud McInerney** (English), on leave semester II

At Bryn Mawr College:

Mary E. Garrett Alumnae Professor of English and Comparative Literature **Carol L. Bernstein**, Chairperson (English and Comparative Literature)

Professor **Nancy Dersofi** (Italian and Comparative Literature)

Fairbanks Professor in the Humanities **Azade Seyhan** (German and Comparative Literature)

Associate Professor **Elizabeth C. Allen** (Russian and Comparative Literature)

Associate Professor **María Cristina Quintero** (Spanish)

Assistant Professor **Francis Higginson** (French)

Teaching Faculty

At Haverford College:

Professor **Kimberly Benston** (English and Africana Studies)

Ruth Marshall Magill Professor of Music **Curt Cacioppo** (Music)

Professor **C. Stephen Finley** (English)

Professor **Richard Freedman** (Music)

Professor **Ashok Gangadean** (Philosophy)

Professor **Daniel Gillis** (Classics)

John Whitehead Professor of French Emeritus **Marcel Gutwirth** (French)

John Whitehead Professor of Philosophy **Aryeh Kosman** (Philosophy)

Audrey A. and John L. Dusseau Memorial Professor in the Humanities **Joseph Russo** (Classics)

John R. Coleman Professor of Social Sciences **Paul Smith** (History and East Asian Studies)

Professor **Kathleen Wright** (Philosophy)

Associate Professor **Koffi Anyinéfa** (French and Africana Studies)

Associate Professor **Ramón García-Castro** (Spanish)
Associate Professor **Laurie Kain Hart** (Anthropology)
Associate Professor **Rajeswari Mohan** (English)
Associate Professor **James Ransom** (English)
Visiting Associate Professor **Elizabeth Block**
Assistant Professor **Graciela Michelotti** (Spanish)
Assistant Professor **Zolani Noonan-Ngwane** (Anthropology)
Assistant Professor **Debora Sherman** (English)

At Bryn Mawr College:

Professor **Grace Morgan Armstrong** (French)
Professor **Peter Briggs** (English)
Professor **E. Jane Hedley** (English)
Professor **Joseph E. Kramer** (English)
Professor **Michael Krausz** (Philosophy)
Professor **Steven Z. Levine** (History of Art)
Professor **Nicholas Patruno** (Italian)
Professor **Enrique Sacerio-Garí** (Spanish)
Associate Professor **Linda-Susan Beard** (English and Africana Studies)
Associate Professor **Michael Tratner** (English)
Senior Lecturer **Mark Lord** (Arts Program)
Lecturer **Jonathan Robert Kahana** (English)
Lecturer **Juana María Rodríguez** (English)

MAJOR REQUIREMENTS

Comparative Literature 200: Introduction to Comparative Literature, normally taken by the spring of the sophomore year; six advanced literature courses in the original languages (normally at the 200 level or above), balanced between two literature departments (of which English may be one): at least two of these (one in each literature) must be at the 300 level or above, or its equivalent as approved in advance by the advisor; one course in critical theory; two electives in comparative literature; Comparative Literature 398: Theories and Methods in Comparative Literature; and 399: Senior Seminar in Comparative Literature. Courses in comparative literature may be drawn from a variety of departments. A listing of current courses will appear each year in the Bi-College Course Guide. Students interested in pursuing a comparative literature major should discuss their preparation and program of courses with the comparative literature chairperson early in their first or second year at the college.

MINOR REQUIREMENTS

Comparative Literature 200 and 398, plus four advanced literature courses in the original languages (normally at the 200 level or above) divided between two literature departments, of which English may be one. At least one course of these four must be at the 300 level. Students who minor are encouraged to choose their national literature courses from those with a comparative component.

REQUIREMENTS FOR HONORS

Students who, in the judgment of the Advisory Committee in Comparative Literature, have done distinguished work in their comparative literature courses and in the Senior Seminar will be considered for Departmental Honors.

COURSES

200b **Introduction to Comparative Literature HU**
Offered at Bryn Mawr in 2002-03.

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- 203b **Writing the Jewish Trajectories in Latin America** (Also called Spanish 203b)
G. Michelotti
Not offered in 2002-03.
- 205a **Studies in the Spanish American Novel** (Also called Spanish 205a)
R. Garcia-Castro
Not offered in 2002-03.
- 205b **Legends of Arthur** (Also called English 205b)
M. McInerney
Not offered in 2002-03.
- 207b **Fictions of Spanish American History** (Also called Spanish 207b)
R. Castillo Sandoval
Not offered in 2002-03.
- 208a **Museum Anthropology** (Also called Anthropology 208a)
M. Gillette
- 208b **Mythology** HU (Also called Classics 208b)
J. Russo
Not offered in 2002-03.
- 210b **Spanish and Spanish American Film Studies** (Also called Spanish 210b)
G. Michelotti
- 212a **The Classical Tradition in Western Literature** HU (Also called Classics 212a)
E. Block
- 213b **Tragedy and The Tragic: Suffering, Representation, and Response** (Also called Classics 213b)
D. Roberts
Not offered in 2002-03.
- 214a **Writing the Nation: 19th Century Literature in Latin America** (Also called Spanish 214a)
R. Castillo Sandoval
Not offered in 2002-03.
- 216a **Fiction of the Holocaust** HU (Also called General Programs 216b)
D. Gillis
(Satisfies the social justice requirement.) *Not offered in 2002-03.*
- 218a **The Western Dramatic Tradition** HU (Also called English 218a)
K. Benston
- 220b **The English Epic** (Also called English 220b)
M. McInerney
- 228b **The Logos and the Tao** (Also called Philosophy and East Asian Studies 228b)
K. Wright
Not offered in 2002-03.
- 235a **Spanish American Theater** (Also called Spanish 235)
G. Michelotti
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COMPARATIVE LITERATURE

241a The Anthropology of the Mediterranean Area HU (Also called Anthropology 241a)

L. Hart

Not offered in 2002-03.

247a Anthropology and Literature: Ethnography of Black African Writing 1888-1988

(Also called Anthropology 247a)

Z. Noonan-Ngwane

Not offered in 2002-03.

250a Words and Music: Tones, Words, and Images (Also called Music 250a) HU

C. Cacioppo

Not offered in 2002-03.

250b Words and Music: The Renaissance Text and its Musical Readers (Also called Music 250b) HU

R. Freedman

Not offered in 2002-03.

251a Music, Film, and Narrative (Also called Music 251a)

R. Freedman

250 01 Introduction à la littérature et au cinéma francophones (Also called French 250 01)

K. Anyinéfa

250b Quixotic Narratives HU (Also called Spanish 250b)

I. Burshatin

251b Comparative Mystical Literature HU (Also called Religion 251a)

M. Sells

262a Islamic Literature and Civilization HU (Also called Religion 262a)

M. Sells

Not offered in 2002-03.

263a The Middle Eastern Lyric HU (Also called Religion 263a)

M. Sells

Not offered in 2002-03.

277b Postcolonial Women Writers HU (Also called English 277b)

R. Mohan

Not offered in 2002-03.

289a Children's Literature HU

D. Roberts

Not offered in 2002-03.

290a History of Literary Theory: Plato to Shelley HU (Also called English and Classics 290a)

D. Roberts

Not offered in 2002-03.

295b Interpretation and the Other: Meaning, Understanding and Alterity (Also called Humanities 295b, English 295b, Philosophy 295b, Religion 295b)

D. Dawson, S. Finley

301a Sex and Gender in the Middle Ages HU (Also called English 301a)

M. McInerney

Not offered in 2003-04.

301a Topics in Philosophy of Literature (Also called Philosophy 301a)

A. Kosman

Not offered in 2002-03.

303b Seminar in Religion, Literature, and Representation (Also called Religion 303b)

M. Sells

310b The Family Novels of the Past Forty Years of Spanish America (Also called Spanish 310b)

R. García-Castro

Not offered in 2002-03.

312 01 Advanced Topics: Making Fun: l'art du ridicule du XVIe au XVIIe siècles (Also called French 312 01)

D. Sedley

Not offered in 2002-03.

312 01 Advanced Topics: Littérature Antillaise HU (Also called French 312 02)

K. Anyinéfa

315a Novísima Literatura Hispanoamerica (Also called Spanish 315a)

R. García-Castro

Not offered in 2003-04.

317a Novels of The Spanish American "Boom" (Also called Spanish 317a)

R. García-Castro

320 01 Literature and The New Media: From the Gutenberg Galaxy to Cyberspace (Also called German 320 01)

U. Schönherr

320a Spanish-American Colonial Writings (Also called Spanish 320a)

R. Castillo Sandoval

Not offered in 2003-04.

334b Gender Dissidence in Hispanic Writing (Also called Spanish 334b)

I. Burshatin

Not offered 2002-03.

350a Social and Cultural Theory: Writing, Self, and Society (Also called Anthropology 350a)

Z. Noonan-Ngwane

COMPARATIVE LITERATURE

352a Evita and Her Sisters (Also called Spanish 352a)

G. Michelotti

Not offered in 2002-03.

353b Topics in the Philosophy of Language HU (Also called Philosophy 353b)

A. Gangadean

Not offered in 2002-03.

381a Textual Politics: Marxism, Feminism, and Deconstruction (Also called English 381a)

R. Mohan

Not offered in 2002-03.

382b On the Sublime (Also called English 382b)

D. Sherman

Not offered in 2002-03.

385a Topics in British Literature: Apocalyptic Literature (Also called English 385a)

M. McInerney

387b The Postmodern: Theory and Fiction HU (Also called English 387b)

J. Ransom

389b Problems in Poetics: The Interpretation of Lyric HU (Also called English 389b)

K. Benston

Not offered in 2002-03.

398a Theories and Methods in Comparative Literature HU

Advanced work in the history and problems of comparative literature. *Offered at Bryn Mawr in 2002-03.*

399b Senior Seminar HU

R. Castillo Sandoval

Oral and written presentations of work in progress, culminating in a senior thesis and a comprehensive oral examination.

COURSES OFFERED AT BRYN MAWR COLLEGE IN 2002-03:

200 Introduction to Comparative Literature

209 Philosophical Approaches to Criticism (Also called German 209)

210 Women and Opera (Also called Italian 210)

211 Primo Levi, the Holocaust, and its Aftermath (Also called Italian 211, Hebrew 211)

216 Interpreting Myths (Also called Classical Studies 210)

222 Aesthetics/Nature/Experience of Art (Also called Philosophy 222)

229 Movies and Mass Politics (Also called English 229)

230 The Poetics of Desire in the Lyric Poetry of Renaissance Italy and Spain (Also called Italian 231 and Spanish 230)

234 Postcolonial Literature in English (Also called English 234)

245 Women's Narratives of Migrancy and Exile (Also called German 245, Anthropology 245, and Growth and Structure of Cities 245)

279 Modern African Fiction (Also called English 279)

283 The Urban Novel (Also called English 283)

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- 298 **Cultural Politics of Memory** (Also called English 298)
 - 306 **Film Theory** (Also called English 306 and History of Art 306)
 - 316 **Film Theory** (Also called English 316)
 - 318 **The Matter of Troy** (Also called English 318)
 - 325 **Crimes & Criminalité** (Also called French 325)
 - 333 **Queer Theory/Queer Literature** (Also called English 333)
 - 343 **Translating America** (Also called English 343)
 - 352 **Romanticism and Interpretation** (Also called English 352)
 - 398 **Theories & Methods in Comparative Literature**

Computer science studies methods of solving problems and processes which manipulate and transform information. It is the science of algorithms: their theory, analysis, design, and implementation. As such, it is an interdisciplinary field whose roots are in mathematics and engineering, and with applications to most other academic disciplines. Computer science is a bi-college program, supported jointly by faculty at both Haverford and Bryn Mawr. Haverford offers computer science as an area of concentration, anchored in the mathematics and physics departments. (See page 37 for a general discussion of areas of concentration.)

Haverford's concentration emphasizes foundations and basic principles of information science, rather than engineering or data-processing applications. The College believes this approach to be most consistent with the principles of scientific education in the liberal arts. The aim is to provide students with a base of skills which transcend short-term fashions and fluctuations in computer hardware and software. Some of these skills are mathematical, while others come from the rapidly growing and maturing field of computer science itself.

The program introduces students to both the theoretical and practical aspects of computer science through a core sequence of four courses (a minimum of two are required for the concentration), designed to be taken in the sophomore and junior years: Principles of Computer Organization (240), Principles of Programming Languages (245), Analysis of Algorithms (340), and Theory of Computation (345). These are preceded by the introductory sequence (205, 206) and by a course in Discrete Mathematics (231). Additional electives and advanced topics courses build on material developed in the core courses.

Present requirements for the concentration may be combined in various ways with existing mathematics and physics major requirements. Interested students should consult with the faculty members listed below to develop an appropriate course schedule. To petition for an independent major requires high marks in CS 205/206 and 231, and independent minors are also possible. (Consult program coordinator for further details.)

J. McLain King Professor of Mathematics **Curtis Greene**
William H. & Johanna A. Harris Professor of Computational Science **Lyle D. Roelofs**
Associate Professor **Steven Lindell**, program coordinator
Associate Professor **David G. Wonnacott**
Assistant Professor & Lab Coordinator **John Dougherty**

At Bryn Mawr College:
Associate Professor **Deepak Kumar**
Assistant Professor **Rebecca Mercuri**
Assistant Professor **Douglas Blank**

THE COMPUTER SCIENCE CONCENTRATION FOR MATHEMATICS MAJORS

1. Computer Science 205/206
 2. Either Computer Science 240 or 245
 3. Either Computer Science 340 or 345
 4. One additional computer science course numbered 300 or higher
 5. One additional computer science course numbered 200 or higher, or a related course in mathematics or physics (such as Math 203, 210, 218, 231, 235, 236, 237, 250, or Physics 316, 322).
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THE COMPUTER SCIENCE CONCENTRATION FOR PHYSICS MAJORS

1. Computer Science 205/206
2. Both Physics 316 and 322
3. Two additional courses numbered 200 or higher chosen from the Haverford or Bryn Mawr computer science programs.

STUDENTS INTERESTED IN PETITIONING FOR AN INDEPENDENT MAJOR IN COMPUTER SCIENCE SHOULD CONTACT THE PROGRAM COORDINATOR

COURSES

100 **The World of Computing** NA/QU

J. Dougherty & Staff

An introductory survey of fundamental ideas in computer science, with a special emphasis on student participation in a more informal class setting. Algorithms, problem-solving strategies, hardware, software, limits of computation, and interface design are a few of the many topics to be explored. The required laboratory/discussion sections will reinforce concepts in lecture with the help of an interactive computing environment. No previous experience with computers or computing will be assumed, and programming will not be emphasized. Students with a strong (high school) background in mathematics or programming should take Computer Science 105a. Students who complete this course will be prepared for Computer Science 105 if they choose to continue. No prerequisites. *Limited enrollment.*

130a **Foundations of Rigorous Thinking** NA (Also called General Programs 130a)

S. Lindell

Develops rigorous thinking skills through the linguistic foundations of mathematics: logic and sets. Emphasis on using symbology to represent abstract objects and the application of formal reasoning to situations in computer science. Designed to serve as a transition course for non-science students who might wish to do advanced work in computer or cognitive science. No prerequisites.

205a/206b **Introduction to Computer Science** NA

J. Dougherty, D. Wonnacott

A rigorous year-long introduction to the fundamental concepts of computer science intended for students interested in doing more advanced work in technical and scientific fields. Includes the fundamental data structures of computer science and their algorithms. Examples and exercises will stress mathematical aspects of the discipline, with a strong emphasis on programming and analytical problem-solving skills. Students without a strong (high-school) mathematics background or programming experience should take Computer Science 110 at Bryn Mawr College or Computer Science 100 instead. Students who have completed a first-semester introductory course in computer science (such as CS 110 at Bryn Mawr, but not CS 100 at Haverford) or who have AP credit in computer science may, with the permission of the instructor, enroll in the second semester of this sequence (which is also taught as a separate course each year at Bryn Mawr College).

210 **Linear Optimization and Game Theory** NA (Also called Economics 210 and Mathematics 210)

L. Butler

Covers in-depth the mathematics of optimization problems with a finite number of variables subject to constraints. Applications of linear programming to the theory of matrix games and network flows are covered, as well as an introduction to nonlinear programming. Emphasis is on the structure of optimal solutions, algorithms to find them, and the underlying theory that explains both. This course is designed for students interested in computer science, economics,

or mathematics. *Prerequisite:* Math 121a or b and consent of instructor, or Math 215a. Please consult the course schedule for next offering.

212a Computer Graphics

J. Dougherty, D. Wonnacott

This course will cover the fundamental principles of computer graphics: data structures for representing objects to be viewed, and algorithms for the generating images from these representations. This course presupposes experience with the geometric interpretation of matrix algebra, which may be obtained in Math 215 or other courses. *Prerequisites:* Computer Science 206, and Mathematics 215 (may be taken concurrently) or permission of instructor. Please consult the course schedule for next offering.

222b Introduction to Scientific Computing (Also called Mathematics 222b)

R. Manning

A survey of major algorithms in modern scientific computing (including root-finding, optimization, Monte Carlo, discretization of differential equations, and search algorithms) and their application across the natural and social sciences.

231a Discrete Mathematics NA (Also called Mathematics 231)

Offered in the fall at Bryn Mawr

An introduction to several topics in discrete mathematics with strong applications in computer science as well as pure mathematics. Topics include set theory, functions and relations, propositional logic, proof techniques, recursion, counting techniques, difference equations, graphs and trees, introduction to discrete probability.

235a Information and Coding Theory (Also called Mathematics 235)

S. Lindell

This course covers the mathematical theory of the transmission (sending or storing) of information. Included will be encoding and decoding techniques, both for the purposes of data compression and for the detection and correction of errors. *Prerequisite:* Math 215 (may be taken concurrently). Please consult the course schedule for next offering.

240a Principles of Computer Organization NA

Staff

A lecture/laboratory course studying the hierarchical design of modern digital computers; instruction sets; assembly language programming. Lectures will cover the theoretical aspects of machine architecture. In the laboratory, designs discussed in lecture will be constructed in software. *Prerequisite:* Computer Science 206, or consent of the instructor. Math/Computer Science 231 is strongly recommended.

245a Principles of Programming Languages NA

D. Wonnacott

A lecture/laboratory course studying the design and implementation of modern programming languages. Lexical and syntactic analysis; scoping mechanisms; run-time environments; implementation of structured, functional, object-oriented, and concurrent programming languages. The lecture will cover the theory behind syntax and semantics. In the lab, students will have an opportunity to analyze the behavior of procedural, applicative, and declarative languages. *Prerequisite:* Computer Science 206, or consent of instructor. Math/Computer Science 231 is strongly recommended. *Offered in the fall semester of odd-numbered years.*

340b Analysis of Algorithms NA (Also called Mathematics 340)

S. Lindell

Qualitative and quantitative analysis of algorithms and their corresponding data structures from a precise mathematical point of view. Performance bounds, asymptotic and probabilistic analysis, worst case and average case behavior. Correctness and complexity. Particular classes of algorithms such as sorting and searching will be studied in detail. *Prerequisites:* Math/Computer Science 231, Computer Science 206, and some additional mathematics at the 200 level, or consent of instructor. *Offered in the spring semester of odd-numbered years.*

345b Theory of Computation NA (Also called Mathematics 345)

S. Lindell

Introduction to the mathematical foundations of computer science: finite state automata, formal languages and grammar, Turing machines, computability, unsolvability, and computational complexity. *Prerequisites:* Math/Computer Science 231, Computer Science 206, and some additional mathematics at the 200 level, or consent of instructor. *Offered in the spring semester of even-numbered years.*

350b Compiler Design NA

D. Wonnacott

A practical introduction to modern compiler and interpreter design with a substantial laboratory component using compiler-writing tools. *Prerequisite:* Computer Science 245. *Offered in the spring semester of even-numbered years.*

355b Operating Systems NA

D. Wonnacott

A practical introduction to modern operating systems, with a substantial laboratory component. *Prerequisite:* Computer Science 240.

392 Advanced Topics in Computer Systems

J. Dougherty

393 Advanced Topics in Computer Systems

D. Wonnacott

394 Advanced Topics in Discrete Mathematics and Computer Science NA (Also called Mathematics 394)

S. Lindell

399i Senior Seminar NA (Also called Mathematics 399)

Staff

Seminar for seniors writing theses, dealing with the oral and written exposition of advanced material.

RELATED COURSES IN MATHEMATICS

203 **Applied Statistics**

210 **Linear Optimization and Game Theory**

215 **Linear Algebra**

218 **Probability and Statistics**

250 **Combinatorial Analysis**

COMPUTER SCIENCE

RELATED COURSES IN PHYSICS

316 **Electronic Instrumentation and Computers**

322 **Solid State Physics**

COURSES OFFERED AT BRYN MAWR COLLEGE

Computer Science 110 **Introduction to Computing**

Computer Science 246 **Programming Paradigms**

Computer Science 330 **Algorithms: Design & Practice**

Computer Science 371 **Cognitive Science**

Computer Science 372 **Artificial Intelligence**

Computer Science 376 **Androids: Design & Practice**

Computer Science 380 **Recent Advances in Computer Science**

EAST ASIAN STUDIES

The East Asian studies program is a bi-college program that links rigorous language training to the text-based study of Chinese and Japanese culture. Since its establishment in the mid-1980s, the program has grown steadily and now offers a major designed for those who wish to study the languages and cultures of China and Japan, providing a full array of language instruction from elementary through advanced levels, and comprehensive cultural courses taught in English or in Chinese at the advanced level. Korean, Vietnamese, and other East Asian language courses are available at the University of Pennsylvania. Faculty members are appointed to the program at Bryn Mawr and Haverford; in addition, affiliated faculty in other departments and programs regularly contribute core courses to the curriculum. Chinese offerings are also regularly enriched by a course provided by a faculty member from Swarthmore.

Students majoring in East Asian studies are expected to focus their studies in one culture, usually that of the language they study. Majors work closely with their advisers to construct a coherent course of study, which includes the senior conference and writing a thesis. By graduation, majors will have completed at least three years of study of an East Asian language. Further language study is encouraged, especially for students entering academic graduate programs.

John R. Coleman Professor of Social Sciences **Paul J. Smith**, *Co-chair*

Assistant Professor **Hank Glassman**

Assistant Professor **Shizhe Huang**, *Concentration Coordinator*

Senior Lecturer **Yoko Koike**

Visiting Instructor **Yukino Tanaka**

At Bryn Mawr College:

Associate Provost **Suzanne Spain**, *Co-chair*

Lecturer **Youngmin Kim**

Lecturer **Xiaoling Yin**

Lecturer **Tz'u Chiang**

At Swarthmore College:

Associate Professor **Haili Kong**

Affiliated Faculty:

Including, but not limited to, faculty members from the Bryn Mawr College and/or Haverford College Departments of Anthropology, Growth and Structure of Cities, History, History of Art, Music, Philosophy, Psychology, and Religion.

MAJOR REQUIREMENTS

Requirements for the major are:

1. Completion of the third-year level of (Mandarin) Chinese or Japanese as taught in the bi-college program, or the equivalent proficiency as certified by the program. Students who entered college with native-level fluency in one East Asian language will be required to begin the study of another.
2. Two non-language introductory courses, Chinese Civilization (East Asian Studies 131) and Japanese Civilization (East Asian Studies 132). This requirement should be fulfilled by the end of the sophomore year, and preferably during the first year.

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3. Four non-language courses chosen with the help of a faculty advisor to create a coherent course of study. Most of this coursework should be in the region (usually China or Japan) corresponding to the language of focus. Special arrangements may be possible for a focus on Korea. At least one of the four courses must be at the 300 level, and another must be either comparative or on a region other than the region of focus.
 4. A full-year senior conference. In the fall the senior conference addresses theoretical and methodological issues pertaining to the study of East Asia and introduces students to research methods. The spring is devoted to writing the senior thesis, which is due a week before the end of classes.
 5. A comprehensive oral examination—the culmination of the work in the major—will be given in the spring of the senior year. Each major will meet with a committee of at least two East Asian studies faculty to discuss topics and books to be selected in advance. At the discretion of the East Asian studies program, an oral defense of the thesis may be substituted for this requirement.
 6. Beginning with the class of 2006, majors will be required to take Sophomore Seminar (East Asian Studies 200) in the spring of their sophomore year, which will introduce them to the methodologies and practices of the discipline.
 7. Students who enter college without a background in Chinese or Japanese will have to complete the first two years of language study as a prerequisite for the third-year level that is required by the major. Such students are strongly urged to begin their language training in the first year of college.

Placement Tests

Placement tests for first-time students at all levels are conducted in the first week of the fall semester. Beginning in the fall of 2002, to qualify for third-year courses (both Chinese and Japanese), students need to have a 3.0 average in second-year language study or take a placement test in the beginning of the third-year course. In the event that students do not score 3.0 or above at the end of the second-year language study, they must consult with the director of the respective language program and work out a summer study plan that may include, but is not limited to, taking summer courses or studying on their own under supervision.

Honors

Honors in East Asian studies will be awarded by the program faculty on the basis of superior performance in three areas: coursework in major-related courses (including language classes), the senior thesis and the oral defense. A 3.5 average in major-related coursework is considered the minimum necessary for consideration for honors.

CONCENTRATION REQUIREMENTS

A concentration in East Asian studies is also offered in conjunction with other majors, in order to give recognition to a student's studies in an East Asian language and culture. Concentrators are expected to include a significant East Asian component in their senior work for their major.

The concentration in East Asian studies may be declared in conjunction with most majors at Bryn Mawr. Students interested in becoming concentrators should consult with their major adviser and the chair of East Asian studies.

The requirements for the concentration are:

1. Completion of the second-year level of language study in either (Mandarin) Chinese or Japanese as taught in the program, or equivalent proficiency in another East Asian language such as Korean.

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2. One introductory survey course on East Asia, usually Chinese Civilization (East Asian Studies 131) or Japanese Civilization (East Asian Studies 132).
 3. Four additional courses related to the area of focus, of which no fewer than two and no more than three will also form part of the student's major.
 4. A senior thesis.

It is expected that departmental senior theses will address issues concerning the concentrator's area of focus in East Asia. Where this is impossible, a concentrator may write a separate paper or expand on work done for East Asian courses. Concentrators will be permitted to enroll in the senior conference for East Asian studies majors with the permission of the chair at their campus. Because the successful operation of the concentration depends on close cooperation between the associated departments on two campuses, students are urged to declare their intent to concentrate in East Asian studies by the end of the first semester of their junior year.

MINOR REQUIREMENTS

A new minor in East Asian studies has been approved. Students should take at least six courses under either of the two plans:

Plan A: two semesters of language study at the intermediate level or above and four culture courses (e.g., anthropology, architecture, art, city planning, history, literature, religion)

Plan B: four semesters of language study at the intermediate level or above and two culture courses (e.g., anthropology, architecture, art, city planning, history, literature, religion)

Study Abroad

To maximize language proficiency, majors are advised to consider study abroad in their junior year for either a semester or a full year, depending on the number of East Asian studies courses they have completed prior to their junior year. Both Bryn Mawr and Haverford have working arrangements with an array of study abroad centers.

Formal approval is required by the study abroad adviser prior to the student's travel. Without this approval, credit for courses taken abroad may not be accepted by the program.

If studying abroad is not practical, students may consider attending certain intensive summer schools approved by the program. These plans must be worked out in concert with the program's study abroad adviser and the student's dean.

East Asian Languages

The East Asian studies program welcomes students who wish to combine their interests in East Asian languages with the study of an East Asian culture. These students are urged to consult the coordinator of East Asian studies on either campus, who will advise them on creating individual plans of study in appropriate departments.

COURSES

131 Chinese Civilization

Y. Kim

A broad chronological survey of Chinese culture and society from the Bronze Age to the present, with special reference to such topics as belief, family, language, the arts, and sociopolitical organization. Readings include primary sources in English translation and secondary studies.

132 Japanese Civilization

H. Glassman

A broad chronological survey of Japanese culture and society from the earliest times to the present, with special reference to such topics as belief, family, language, the arts, and sociopolitical organization. Readings include primary sources in English translation and secondary studies.

200 Sophomore Seminar, Methods and Approaches in East Asian Studies

P. Smith

This course introduces current and prospective majors to the scope and methods of East Asian studies. It employs readings on East Asian history and culture as a platform for exercises in critical analysis, bibliography, cartography, and the formulation of research topics and approaches. It culminates in a substantial research essay. A prerequisite for East Asian studies majors, the course should be taken in the second semester of the sophomore year; in some circumstances it may be taken in the second semester of the junior year. The course is also open to minors and concentrators in East Asian studies as an elective.

201 Introduction to Buddhism

H. Glassman

Focusing on the East Asian Buddhist tradition, the course examines Buddhist philosophy, doctrine and practice as textual traditions and as lived religion.

210 Topics in Chinese Culture

Y. Kim

Exploration of the theory and practice of Chinese cultural history, from the 13th to the 20th centuries.

228 The Logos and the Tao

Wright

This course challenges the postmodern construction of "China" as the (feminine) poetic "Other" to the (masculine) metaphysical "West" by analyzing postmodern concepts of word, image and writing in relation to Chinese poetry, painting, and calligraphy. *Not offered in 2002-03.*

229 Comparative Urbanism (Also called Anthropology 229 and Growth and Structure of Cities 229)

G. McDonogh

A comparison of urbanization and commercialization in China and Western Europe in the early modern period.

231 East Asian Calligraphy: Theory and Practice

A comprehensive overview of the origins, evolution and artistic significance of East Asian calligraphy. A comprehensive approach will be used in analyzing brush techniques, writing styles and the construction of characters. Interactive workshops in calligraphy, special guest lectures, and trips to museums for East Asian calligraphy and painting exhibitions will be incorporated into the course. *Not offered in 2002-03.*

233 Taoism: The Religion and the Philosophy (Also called History 233 and Philosophy 233)

An exploration of a corpus of major Taoist philosophical texts (including Lao Tzu's *Tao te ching* and the *Chuang tzu*) as they relate to (or seem at odds with) the development of Taoist religion, the only religion native to China. *Not offered in 2002-03.*

242a Chinese Language in Culture and Society HU (Also called General Programs 242)

S. Huang

An examination of the use and function of the Chinese language in culture and society, both within mainland China and in the Chinese diaspora. Topics include: language standardization, language planning, language and dialects, language and ethnicity, language and politics, and linguistic construction of self and community.

244 Anthropology of China (Also called Anthropology 244)

M. Gillette

Social institutions, cultural idioms, and forms of representation in and of Chinese society over the past 150 years. Through investigations of ethnographic monographs, missionary records, memoirs, and realist fiction, we develop skills in social analysis and cultural critique, and enrich our understanding of contemporary Chinese society.

256 Zen Thought, Zen Culture, Zen History

H. Glassman

Introduction to the intellectual and cultural history of the style of Buddhism known as Zen in Japanese. The development and expression of this religious movement in China, Korea, Japan, and Vietnam will be examined.

260 Mid-Imperial China

P. Smith

Surveys the fundamental transformation of Chinese society between the ninth and 16th centuries, with particular stress on the rise of a literocentric elite; Neo-Confucianism's impact on social and gender relations; fraught relations between China and the steppe; and China's role in the premodern global economy.

282 Structure of Chinese

S. Huang

This course is designed to acquaint students with both the syntactic and semantic structures of Mandarin Chinese and the theoretical implications they pose to the study of natural language. Students will have an opportunity to further their understanding of linguistic theories and to develop skills in systematically analyzing a non-Indo-European language. *Prerequisite:* General Programs 262 or consent of the instructor. *Not offered in 2002-03.*

310 Religion and Gender in Premodern Japanese Literature

H. Glassman

Examination of the intersection of religion and gender in Japanese literature from the eighth through the 16th centuries; from Japanese creation myths to Lady Murasaki's courtly *Tale of Genji* and the homoerotic Buddhist literature of the late medieval period. The course assumes no prior academic experience in gender studies, literature, religion or Japanese culture. All sources are in English translation. *Not offered in 2002-03.*

325 Topics in Chinese History and Culture

Y. Kim

398 Senior Conference

H. Glassman, Y. Kim

Critical analysis of the theoretical and methodological implications of Orientalism for the study of East Asia, followed by oral and written presentations of a senior project. Required of all majors; open to concentrators and others by permission.

399 Senior Conference

H. Glassman, Y. Kim

Thesis.

The study of economics provides a basis for understanding and evaluating economic behavior and relations at all levels of society. Microeconomics focuses on the behavior of individuals and firms and how they interact in markets for goods, services, labor, and assets. Macroeconomics focuses on the behavior of aggregate economic variables, such as GNP, the inflation rate, the unemployment rate, the interest rate, and the budget deficit, and how they relate at the economy-wide level. Other areas of economics focus on specific aspects of micro- and macroeconomics as they are applied to diverse situations and economies around the world.

Most of modern economics is structured around a common set of theoretical ideas and analytic methods that unify the field. These tools aid in understanding both how the economic world works and how it can be affected by public policies and world events. The introductory courses, Economics 100, Economics 101, and Economics 102, introduce and develop these ideas and methods at an elementary level while also presenting information about markets, economies, and governmental policy that is important to a liberal education. These courses provide an overview of economics and a strong foundation for more advanced course work in economics.

The intermediate (200 level) courses offer material on many different economic topics. These courses require Economics 100, and/or Economics 101, and/or Economics 102 as prerequisites, and are designed to be useful to non-majors as well as minors and majors. Finally, the advanced (300 level) courses involve a much more technically sophisticated approach to analyzing many of the same economic topics. These normally require some combination of Economics 203, 300, 302 and 304 as prerequisites and are designed primarily for economics minors and majors and those who expect to make use of economics in their professional careers. In most of the advanced courses, a substantial paper is an important part of the requirements. Economics 396 is the Senior Research Seminar, resulting in a senior thesis. It involves an independent research project conducted on a topic selected and carried out by the student under the guidance of a member of the economics faculty.

Most courses offered by the Bryn Mawr economics department may be counted toward the Haverford economics minor and major (with the exception of courses at the 100 level). Similarly most Haverford economics courses may be counted toward the Bryn Mawr economics major. The two economics departments plan their course schedules jointly so that the maximum variety of economics courses can be offered across the two campuses.

Modern economics continues to expand in its usage of mathematically sophisticated models and statistical techniques. Economics majors are required to take at least two semesters of college level calculus. In addition, students who are planning to apply to graduate programs in public policy or business are encouraged to take mathematics through at least Mathematics 121 (Multivariable Calculus) plus one computer science course. Those who are planning to apply to Ph.D. programs in economics are strongly advised to take mathematics through at least Mathematics 215 (Linear Algebra) and Mathematics 317 (Analysis I). Economics majors also have the option of pursuing an area of concentration in mathematical

economics which is described under its own heading in this catalog.

About one-fourth of the students who enter the top Ph.D. programs in economics each year major in mathematics and take five or six undergraduate courses in economics as their second field. For those who are considering this option, please consult with the coordinator of the area of concentration in mathematical economics.

Professor Vernon J. Dixon

Professor Vladimir Kontorovich

Associate Professor Linda Bell

Associate Professor Richard Ball, Chairperson

Associate Professor Anne E. Preston, on leave 2002-03

Assistant Professor Saleha Jilani, on leave semester I

Visiting Professor Simon Hakim

MAJOR REQUIREMENTS

Economics 101*; 102*; 203; 300; 302; 304; and 396; three other semester courses above the 100 level, one of which must be at the 300 level; two semesters of college-level calculus or equivalent. *Economics 100 and 101 or Economics 100 and 102 may be substituted for the introductory sequence of Economics 101 and 102 with the approval of the chair.

Prospective majors in Economics are advised to take the introductory sequence by the end of the first semester of their sophomore year. Economics 105 at Bryn Mawr does not count toward the Haverford economics major. Prospective majors are also advised to complete Economics 203 before the end of the sophomore year.

MINOR REQUIREMENTS

Requirements for a minor in economics are: Economics 101; 102; 203; 300 or 302; two other Economics courses at the 200 and/or 300 levels. After successful completion of Economics 101, 102 and 203, prospective minors must have their three additional courses approved before enrolling in them. The chair of the department serves as the minor advisor.

REQUIREMENTS FOR HONORS

An economics major whose grade point average in economics courses at the beginning of the second semester of the senior year is 3.6 or higher is invited to become a candidate for the degree with Honors in economics. Honors or High Honors are awarded on the basis of a student's performance in (a) all his or her economics courses, including those taken in the second semester of senior year and (b) an oral examination by department faculty focused on the student's senior thesis.

COURSES

100 The Economics of Public Policy

L. Bell

This course will provide in-depth analysis of current key public-policy issues using elementary economic principles that will be taught in the class. Topics will change yearly depending on public policy. Fall 1998 topics included Welfare Reform and Poverty, Policies to Promote International Global Competitiveness, Minimum Wages, and Health Care Reform. Reading and in-class lectures and discussion will be supplemented by visits from key policy makers.

101 Introduction to Microeconomics SO

Staff

Techniques of analysis pertaining to the individual industry, the firm, and the consumer.

Primary emphasis is given to the determination of prices for goods and factors of production;

the distribution of income; the functioning of markets under competition and monopoly; efficiency, equity and market failure; comparative advantage and international trade.

102 Introduction to Macroeconomics SO

Staff

Analysis of aggregate economic activity. Topics include consumption, investment, and public spending; money and credit; theories of inflation and unemployment; the role of government in influencing total expenditures and regulating financial institutions; the international role of the United States.

203 Statistical Methods in Economics SO, Q

R. Ball

Frequency distributions, probability and sampling theory, simple correlation and multiple regression, and an introduction to econometric terminology and reasoning. Three class hours and two lab hours. *Prerequisites:* Economics 101, or 102, or 105, or 100 with chair approval, and conditional on a grade of 3.0 or higher.

205b Corporate Finance SO

V. Dixon

Theories and practices of corporate finance with a focus on investing and financing decisions of business firms. Topics include financial instruments and markets, valuation and risk measures, financial analysis and planning, cost of capital, capital budgeting, and financial management. *Prerequisites:* Economics 101, or 102, or 105, or 100 with chair approval, and conditional on a grade of 3.0 or higher.

209b Law and Economics SO

V. Kontorovich

Why do rational people follow fixed rules (laws) instead of doing what is best for them in a specific situation? Can there be order without law? Should the government compensate people when it issues environmental and wildlife protection regulations which reduce the value of their property? The lady who burned herself with a cup of McDonald's coffee won several million dollars in compensation. Does that make sense? These and many other questions are addressed as we look at property law, contracts, and torts. *Prerequisites:* Economics 101 and 102 or Economics 105 and one other economics course. Economics 100 can be applied with approval of chair, and conditional on a grade of 3.0 or higher.

210b Linear Optimization and Game Theory NA, Q (Also called Mathematics 210b)

L. Butler

Covers in depth the mathematics of optimization problems with a finite number of variables subject to constraints. Applications of linear programming to the theory of matrix games and network flows are covered, as well as an introduction to nonlinear programming. Emphasis is on the structure of optimal solutions, algorithms to find them, and the underlying theory that explains both. This course is designed for students interested in computer science, economics, or mathematics. *Prerequisites:* Mathematics 121a or b and consent of instructor, or Mathematics 215a.

211a The Soviet System and Its Demise SO (Also called Political Science 211a)

V. Kontorovich

The Soviet system was inspired by some of the loftiest ideals of humanity. The entire society was redesigned so as to pursue common goals, rather than conflicting private objectives. The economy was run for people, not profits. The Soviet system is no more, but the ideas on

which it was founded will probably always be with us. What does the largest social and economic experiment in history teach us? The course is 1/3 political science and 2/3 economics. *Prerequisites:* Two one-semester courses in economics, political science, or history.

215a Urban Economics SO

V. Dixon

Micro- and macroeconomic theory applied to urban economic behavior. Topics include housing and land use; transportation; urban labor markets; urbanization; and demand for and financing of urban services. *Prerequisites:* Economics 101 or 105 or consent of instructor. Economics 100 can be applied with approval of the chair, and conditional on a grade of 3.0 or higher.

222a Economic Analysis of Contemporary Policy Issues

A. Preston

This course is designed to illustrate the role of economic analysis in real world policy-making situations. After reviewing and expanding relevant theoretical concepts learned in Introductory Microeconomics, we will analyze case studies of actual circumstances faced by policy analysts. The case studies will cover the following topics: U.S. industrial policy and its effects on firm competitiveness and consumer welfare, antitrust policy and regulation of natural monopolies, market attempts by the government to control sulphur dioxide emissions and acid rain, government attempts to impose consumer safety standards, and policy initiatives aimed at fighting poverty. *Prerequisites:* Economics 101 or Economics 100 with approval of the chair and conditional on a grade of 3.0 or higher. *Not offered in 2002-03.*

224b Women in the Labor Market

A. Preston

This course examines the experiences of American women in the labor market over the last 50 years. After an examination of the historical trends of female labor force participation, the course will investigate such important issues facing women in the labor market as: investments in education; participation decisions and the relation between participation and family responsibilities; occupational location; salary growth and salary determinants. Supporting material on institutional factors such as equal employment opportunity legislation and on theoretical concepts in areas such as labor supply, human capital investment, and discrimination will be presented to help understand the empirical labor market outcomes. Comparisons of labor market races will be made throughout the course with the hope of increasing our understanding of why differences arise and whether policy initiatives might be helpful in reducing these differences. *Not offered in 2002-03.*

225b Developing Economies SO

R. Ball

Analysis of the structural transformation of developing economies; causes and roles of saving, investment, education, and health care; technological change and trade in the development process; strategies and methods of economic planning; income distribution issues. *Prerequisites:* Economics 101 and 102 or Economics 105 and one other economics course.

230a Privatization of State & Local Governments

S. Hakim

This course deals with a phenomenon which is of current interest in the U.S., Western Europe, South America, and the nations which were created from the former Soviet Union. The field of public finance has grown over the period of increased government intervention in the marketplace. Privatization is a new trend which was initiated by Prime Minister Margaret

Thatcher of Great Britain in the early 1980s and has spread internationally in the 1990s and is expected to intensify in coming years. Services which were traditionally within the domain of governments are transferred to private entities. *Prerequisites:* Economics 101, 102 and 203. Economics 100 can be applied with permission of chair, and conditional on a grade of 3.0 or higher.

230-249 Topics in Economics SO

Staff

Courses in the 230-249 series analyze contemporary problems. These courses are offered, as demand and staffing permit, in the following areas: Marx and Radical Political Economy (231), Economics and Sociology of Urban Black America (232), Environmental Economics (234), Economic Development of Pacific Asia (238), Corporate Finance and Capital Markets (242), Speculative Markets (245), and others. *Note:* Students should ask instructor about prerequisites.

247a Financial Accounting SO

V. Dixon

Theory and practices of financial accounting for business firms. Topics include measuring and reporting results of business activities; preparation of financial statements for external users; evaluation of operations and financial status of firms with particular reference to problems of valuation and periodic income measurement. *No prerequisites.*

300 Intermediate Microeconomic Analysis SO

V. Kontorovich

Microeconomic theory has developed around the analysis of Adam Smith's "invisible hand" conjecture. To test this conjecture, we model the behavior of economic actors (consumers and firms) and their interaction in different markets (for goods, capital, and labor). These models allow us to investigate the conditions under which these markets work well, less well, or not at all. In the process, basic tools and concepts used in other areas of economics are developed. Many of the topics covered in Introductory Microeconomics (Econ 101) are studied more rigorously and in greater depth. New topics, such as behavior under risk, insurance, and imperfect information, are introduced. *Prerequisites:* Economics 101, 102, and two semesters of college-level calculus (or equivalent); or Economics 105 and one other economics course and two semesters of college-level calculus (or equivalent). Economics 100 can be applied with approval of the chair, and conditional on a grade of 3.0 or higher.

302 Intermediate Macroeconomic Analysis SO

A. Preston

Analysis of the behavior of aggregate economic variables such as GDP, inflation, unemployment, interest rates, and the budget and trade deficits. Structured around the development of a New Keynesian/Neoclassical general equilibrium model which relates the markets for goods, money, and labor. Specific topics include: determinants of the business cycle, effects of fiscal and monetary policies, supply shocks, inflationary expectations. *Prerequisites:* Economics 101, 102 and two semesters of college-level calculus (or equivalent); or Economics 105 and one other economics course, and two semesters of college-level calculus (or equivalent). Economics 100 can be applied with approval of the chair, and conditional on a grade of 3.0 or higher.

304 Introduction to Econometrics SO

A. Preston, L. Bell

Development of econometric theory introduced in Economics 203. Includes topics such as

ordinary least squares estimation, weighted least squares estimation, estimation of models with nonlinear forms, instrumental variables, and maximum likelihood estimation. Emphasis will be on application of econometric techniques to real economic and social policy issues such as the optimality of speed limit control, AIDS awareness and behavior modification, labor market discrimination, and worker productivity. Students will be expected to use data sets to evaluate policy issues and will be required to make a final presentation of findings in class. *Prerequisite:* Economics 203.

311a Theory of Non-Cooperative Games SO

R. Ball

Provides a rigorous development of the theory of non-cooperative games, with applications to economic, political, social, and legal problems. Topics will include normal form games and the concept of Nash equilibrium, extensive form games, repeated games and reputation effects, games of incomplete information, Bayesian equilibrium and refinement concepts, and market signaling. *Prerequisites:* Economics 203, 300 and two semesters of college-level calculus (or equivalent).

332a Topics in Managerial Economics

S. Hakim

Prerequisite: Economics 300 and 302 (or equivalent) or consent of the instructor.

330-349 Advanced Topics SO

Staff

Courses in the 330-349 series apply intermediate economic theory to the analysis of contemporary problems. These courses are offered as demand and staffing permit in the following areas: Economics of Unemployment (335), Advanced Topics in Finance (345), Advanced Seminar in Macroeconomics (347) and others. *Prerequisites:* Economics 203, 300 and 302.

348a Global Economy: Theory and Policy SO

S. Jilani

This advanced theory and policy course will examine recent theoretical developments in the area of international trade, in particular as they apply to key current international economic policy concerns. The topics analyzed will include international factor movements, foreign direct investment, the role of multinationals and trade in developing economies, regional integration, and preferential trade agreements. *Prerequisites:* Economics 300 and 302 (or equivalent) or consent of instructor.

370b Advanced Theory Seminar SO

Staff

Application of mathematics to economics including advanced topics in optimization and static and dynamic analysis of systems of simultaneous equations. Second half of semester is devoted to one specific topic to be announced. *Prerequisites:* Economics 203, 300 and 302. *Not offered 2002-03.*

396b Research Seminar SO

Staff

An independent research project conducted on a topic selected by the student in consultation with a department advisor. *Prerequisites:* Economics 300, 302 and 304; or consent of the instructor. *Only seniors may enroll in Economics 396.*

480 Independent Study

COURSES OFFERED ONLY AT BRYN MAWR COLLEGE:

- 105 **Principles of Economics**
- 206 **International Economics**
- 207 **Money and Banking**
- 213 **Taming the Modern Corporation**
- 214 **Public Finance**
- 216 **International Finance**
- 221 **United States Economic Development**
- 222 **History of Economic Thought**
- 224 **Economic History and Growth, 1750-1970**
- 306 **Advanced International Economic Policy**
- 313 **Industrial Organization and Public Policy**
- 314 **Economics of Poverty and Discrimination**
- 316 **Transition of the European Economy**
- 326 **Open-Economy Macroeconomics**

EDUCATION AND EDUCATIONAL STUDIES

Education is an interdisciplinary area of study, drawing on the fields of anthropology, philosophy, sociology, linguistics, psychology, history, economics, and public policy. Education courses invite recognition and analysis of the dialectic between theory and practice and of the connections between what we learn, why we learn, how we learn, and how all learning fits into larger philosophical, psychological, historical, and socioeconomic patterns.

The Bryn Mawr/Haverford education program offers three options to students interested in education: students may (1) complete a sequence of courses leading to certification to teach at the secondary (grades 7-12) level in Pennsylvania, (2) pursue a minor in educational studies, or (3) take courses which are open to all interested students. The certification sequence and the minor are explained below.

Students seeking certification or wishing to complete the minor should meet with the program administrator as early as possible for advice on scheduling, preferably by the sophomore year. Once enrolled in either program, students must meet with the program administrator at pre-registration time each semester. A concentration in education is also offered at Haverford. Interested students should contact Ann Brown, concentration coordinator.

Assistant Professor of Education Alison Cook-Sather, Director

Program Administrator/HC Advisor and Concentration Coordinator Ann Brown

Field Placement Coordinator and BMC Advisor Robyn Newkumet

Lecturer in Education Alice Lesnick

Lecturer in Education Jody Cohen

Lecturer in Education Rob Maitra

REQUIREMENTS

(1) For Certification

The Bryn Mawr/Haverford education program is accredited by the state of Pennsylvania to prepare candidates for junior and senior high school certification (grades 7-12) in 12 fields: biology, chemistry, Chinese, English, French, German, Latin, mathematics, physics, Russian, and Spanish. Pursuit of certification in Chinese, German, Latin, and Russian is subject to availability of student-teaching placements, and students interested in these areas must meet with the education program administrator.

Certification in the field of social studies is being revised by the PA Department of Education. Please consult with the education advisor for updated requirements. Students becoming certified in a foreign language have K-12 certification. Certain interdisciplinary majors and double majors (e.g., Romance languages, comparative literature, East Asian studies) may also be eligible for certification provided they meet the Pennsylvania standards in one of the subject areas listed above.

To qualify for a teaching certificate, students must complete an academic major (listed above), college general education requirements, and the courses listed below:

1. Education 200 (Critical Issues in Education).
2. Psychology 203 (Educational Psychology).
3. Psychology 206 (Developmental Psychology), or Psychology 214 (Psychology of Adolescence), or General Programs 249b (Continuity and Change: The Contexts of Development).
4. Education 301 (Curriculum and Pedagogy Seminar).
5. Education 302 (Practice Teaching Seminar) and Education 303 (Practice Teaching).

These courses are taken concurrently and earn triple credit.

6. One additional course from the following:

a) Education 210 (On the Margins: Language, Power, and Advocacy in Education).

b) Education 250b (Literacies and Education).

c) Sociology 258 (Sociology of Education).

d) Sociology/Education/Cities 266 (Schools in American Cities).

e) Psychology 206 (Developmental Psychology), or Psychology 214 (Psychology of Adolescence), or General Programs 249b (Continuity and Change: The Contexts of Development).

f) A subject-specific pedagogy course (e.g., at the University of Pennsylvania, one of the 400-level Association in Teaching courses at Haverford, or an Independent Study which involves work as a teaching assistant in the subject area).

g) Swarthmore College or University of Pennsylvania education electives.

h) Education-related course at Haverford or Bryn Mawr (see advisor for list).

Furthermore, in order to comply with the Pennsylvania certification regulations, there are courses within the academic major that are required for those becoming certified. Again, students should consult with the program administrator regarding course selection and sequencing.

Students preparing for certification must take two courses (six credits) in English and two courses (six credits) in math prior to being admitted to the certification program and must attain a grade point average of 2.6 or higher in courses in their major field during the two previous years. They must attain a GPA of 2.7 or higher in Education 200 (Critical Issues in Education) and Education 301 (Curriculum and Pedagogy Seminar) in order to practice teach. They must have received a positive evaluation from their cooperating teacher in Critical Issues in Education and be recommended by the director of the education program and the chair of their major department. (Students should check with the program administrator regarding admission to the certification program as requirements change periodically.)

Critical Issues in Education should be taken by the end of the sophomore year if at all possible. The Curriculum and Pedagogy Seminar will be offered during the fall semester for seniors and must precede Practice Teaching.

Practice Teaching is undertaken for 12 weeks in a local school during the spring semester of the senior year. Note: Practice Teaching is a commitment to be at a school for five full school days each week for those 12 weeks.

(2) For the Minor in Educational Studies

The bi-college minor in educational studies is designed for students with education-related interests, such as plans for graduate study in education, pursuit of elementary certification after graduation, or careers that require educational expertise. A variety of management and training positions, research, administration, and policy, as well as professions in social work, health, and law, involve using skills as an educator and knowledge about education. Because students interested in these or other education-related professions major in different subject areas and have different aspirations, they are encouraged to design a minor appropriate both to their major area of study and to their anticipated futures.

All minors in educational studies must consult with the program administrator to design a coherent course of study that satisfies the requirements below:

1. Education 200 Critical Issues in Education (BMC & HC).

2. Education 310a Defining Educational Practice (HC).

3. Education 311b Field Work Seminar (HC).

4. One of the following psychology courses: Educational Psychology 203 (BMC), Developmental Psychology 206 (BMC), Psychology of Adolescence 214a (HC), or Continuity and Change: The Contexts of Development GNPR 249b (HC).

5. One of the following education electives: Education 210 *On the Margins: Language, Power, and Advocacy in Education* (BMC), Education 250b *Literacies and Education* (HC), Education/Sociology 266 *Schools in American Cities* (BMC).

6. One additional elective from the psychology or education courses listed above, or from the following departmental offerings:

Anthropology 209b (*Anthropology of Education: State of the Debate*, HC), Anthropology/Growth and Structure of Cities/East Asian Studies 229 (*Comparative Urbanism*), Chemistry 361 (*Research Tutorial in Physical Chemistry*, HC), Chemistry 363 (*Research Tutorial in Organic Chemistry*, HC), Comparative Literature 289a (*Children's Literature*, HC), Economics 314 (*Economics of Poverty and Discrimination*), English 285a (*Disabilities: Literature, Education, and Law*, HC), Growth and Structure of Cities 185 (*Urban Culture and Society*), Mathematics 460f, i (*Teaching Assistantship in Mathematics*, HC), Mathematics 480f, i (*Independent Study*, HC), Physics 380 (*Supervised Work in Teaching Physics*, HC), Physics 459b (*Teaching Laboratory Physics*, HC), Physics 460a (*Association in Teaching Basic Physics*, HC), Sociology 235b (*Class, Race, and Education*, HC), Sociology 258 (*Sociology of Education*).

Students must obtain permission to select another course as an elective.

The Portfolio

To synthesize their work in the minor or the certification program, students produce a portfolio. The portfolio — which draws on the work students produce in their courses as well as in their other activities (volunteering, summer programs, community work, etc.) — does not earn course credit; rather, it serves as an ongoing forum through which students synthesize their studies. It is developed over the course of the student's college career and completed in the Field Work Seminar (minor) or the Practice Teaching Seminar (certification). The portfolio consists of a series of artifacts, each accompanied by a one-half to one page analysis of the significance of the piece of work.

COURSES

200 Critical Issues in Education SO

A. Cook-Sather, A. Lesnick, and J. Cohen

A critical exploration of historical perspectives on education in the United States, philosophical conceptions of education, structures of schools and schooling, theories of learning, students' experiences, teacher's experiences, issues of race, social equity, culture, gender, labeling, tracking, and education as liberation. Two hours a week of field work are required. All sections of the course are *limited to 25 students* with priority given first to those pursuing certification or a minor in educational studies and then to seniors planning to teach. All sections of the course are writing intensive.

210 On the Margins: Language, Power and Advocacy in Education SO

J. Cohen or R. Maitra

What type of subjectivities do schools attempt to construct in students, and what happens when students reject and challenge them? Through a consideration of numerous works of education theory, cultural studies, philosophy, literature, queer theory, and film, we will explore the marginalization of adolescents caused by the hegemonic and limiting influences of education and society, while also exploring ways in which youth challenge or assimilate to the hegemony through participation in youth cultures and encounters with various pedagogical practices. There are many different channels through which adolescents are marginalized and empowered, and thus we will examine these different constructs, possibly in opposition to or in alliance with the modern or postmodern self.

EDUCATION AND EDUCATIONAL STUDIES

249b Continuity and Change: The Contexts of Development (Cross listed as General Programs 249b)

Staff

This course provides a framework for understanding typical patterns and themes of development from the preschool through the adolescent years. Lectures, class discussions, and assignments will explore the complex levels of context in which children and adolescents develop, including family, school, and culture.

250b Literacies and Education SO

A. Cook-Sather, A. Lesnick, or J. Cohen

A critical exploration of what counts as literacy, who decides, and what the implications are for teaching and learning. Students explore theoretical and historical perspectives on literacy, individual experiences and constructions of literacy, literacy in different communities, and literacies which work within and against the structures of schooling. *Enrollment limited to 25* (writing intensive). Priority given to students pursuing certification or a minor in educational studies. (Satisfies social justice requirement.)

266 Schools in American Cities (Cross listed as Sociology 266 and Growth and Structure of Cities 266)

J. Cohen

This course examines issues, challenges, and possibilities of urban education in contemporary America. We use as critical lenses issues of race, class, and culture; urban learners, teachers, and school systems; and restructuring and reform. While we look at urban education nationally over several decades, we use Philadelphia as a focal "case" which students investigate through documents and school placements. *Enrollment is limited to 25* with priority given to students pursuing certification or the minor in educational studies, and to majors in sociology and the growth and structure of cities.

301 Curriculum and Pedagogy SO

A. Cook-Sather

A consideration of theoretical and applied issues related to effective curriculum design, pedagogical approaches, and related issues of teaching and learning. *Enrollment limited to 15.* Priority goes to seniors in the certification program who are planning to take Practice Teaching and seniors interested in careers in education. Field work is required.

302 Practice Teaching Seminar SO

A. Cook-Sather

Drawing on the participants' diverse student teaching placements, this seminar invites exploration and analysis of ideas, perspectives and approaches to teaching at the middle and secondary levels. Taken concurrently with Practice Teaching. *Open only to student teachers.*

303 Practice Teaching SO

A. Cook-Sather

Supervised teaching in secondary schools (12 weeks). Two units of credit are given for this course. *Open only to students preparing for state certification.*

310 Defining Educational Practice SO

A. Lesnick

An interdisciplinary inquiry into the work of constructing professional identities and roles in education-related contexts. Two to four hours of field work required per week. *Enrollment*

limited to 20. Priority goes to students completing the minor or a concentration in educational studies.

311b Field Work Seminar SO

A. Lesnick

Drawing on the diverse contexts in which participants complete their field work (from special education to English as a second language classrooms to research organizations and social service agencies, kindergarten to high school), this seminar invites exploration and analysis of ideas, perspectives, and different ways of understanding what each person experiences and observes at his/her site. Four to six hours of field work required per week. *Enrollment limited to 20. Open only to students completing the minor or a concentration in educational studies.*

Nota Bene: Title II of the Higher Education Act (HEA) requires that the entire teacher preparation report including the institution's pass rate as well as the state's pass rate, be available to the public upon request. Requests for the full report may be sent to Ann Brown, program administrator/advisor, Bryn Mawr/Haverford Education Program, or call 610-896-1491.

For the Area of Concentration in Educational Studies:

To complete the concentration, students take four courses through the education program: Education 200, Psychology 203, Education 310, and Education 311, which includes a field placement for approximately four to six hours per week.

In addition to the courses within the education program, students take two courses in their major field of study. A unit of Independent Study within the major may be used to fulfill this requirement. Established AOC's in educational studies are offered in conjunction with the sociology, psychology, mathematics, physics, and chemistry departments. Students in other departments should consult with the education program administrator and their major advisor about the possibility of an AOC in their department.

Chemistry

In the chemistry department a student is enrolled in two semesters of research in physical or organic chemistry (Chemistry 361 or 363), with primary emphasis on laboratory development for secondary school curricula. Importance is placed not only on the development of specific new experiments, but also on the process by which an instructor approaches the development of experiments, their testing, issues of safety, and finally the problem of keeping experiments current and of continuing interest not only to the students who perform them, but also to the instructors who direct them on a continuing basis. In addition, the student is a teaching assistant for the full year of general chemistry (Chemistry 100-101).

Mathematics

Students take the following courses:

- (1) Math 460 (teaching assistantship) in two different semesters, one half-credit each.
- (2) Math 480 (independent study), two half-credits, a project that combines senior research on a topic in mathematics with development of related courseware, teaching materials, and/or classroom modules. Details of the project must be approved jointly by the department chair as well as the chair of the AOC.

Physics

Students take the following courses:

- (1) Physics 459b Teaching Laboratory Physics (typically in the second semester of the junior year); and
- (2) Physics 460a Association in Teaching Basic Physics (typically in the first semester of the senior year).

EDUCATION AND EDUCATIONAL STUDIES

All senior physics majors prepare and present to the department a talk and paper based on independent work. Education concentrators have the option of choosing a topic related to physics pedagogy for their research.

Psychology

Students take one or both of the following courses:

- (1) Psychology 206 (Developmental Psychology).
- (2) Psychology 214 (Psychology of Adolescence).

If students take only one, then they may take either:

- (3) Psychology 238 (Psychology of Language)
- OR
- (4) Psychology 220 (Individuals in Groups and Society).

Sociology

Students take:

- (1) Sociology 235 (Class, Race, and Education)
and one of the following:
 - (2) Sociology 258 (Sociology of Education)
- or
- (3) Sociology 266 (Schools in American Cities).

ENGLISH

The English department offers courses in the literary traditions of the English-speaking world. The department aims to develop in its students the ability to respond to texts thoughtfully and critically, and to articulate those responses in clear and fluent English. This discipline prepares interested students for postgraduate work in English and other subjects; for advanced work in professional and business schools; and for service in government and social work.

English majors should have a reading knowledge of at least one foreign language. Students who plan to do post-graduate work should know that most graduate schools require a reading knowledge of both French and German, and in some cases, of Latin.

Courses in English taken at Bryn Mawr College may be counted toward the Haverford English major. Students with interest and ability in creative writing may receive major credit for one semester of course work in such writing. Students who submit a portfolio of work, no later than the end of first term of their junior year, may be admitted to the creative writing "concentration," which consists of three courses in creative writing, one of which may be the Senior Essay written for English 399b.

Up-to-date information about the English department's activities and courses, including extended course descriptions and syllabi, is readily available, via the department's home page on the Haverford College Web site: <http://www.haverford.edu/engl/home.html>

William R. Kenan Jr., Professor of English **Kimberly Benston**

Professor **C. Stephen Finley**

Associate Professor **Rajeswari Mohan**, on leave semester I, Chairperson semester II

Associate Professor **James C. Ransom**, Chairperson semester I

Associate Professor **Christina Zwarg**

Assistant Professor **Laura McGrane**

Assistant Professor **Debora Sherman**

Assistant Professor **Gustavus Stadler**

Assistant Professor **Theresa Tensuan**

Visiting Assistant Professor **Susan Benston**

Visiting Assistant Professor **Christopher Devenney**

Visiting Assistant Professor **Maud McInerney**, on leave semester II

Visiting Instructor **Daisy Fried**, semester I

MAJOR REQUIREMENTS

English 299; English 399b; and seven additional courses in British, American, and Anglophone literature. The program must include at least two courses in literature written before 1800, at least two courses in British/Anglophone literature and at least two in American literature. Two courses must be taken at the 300 level. The department will give major credit for a semester course in a foreign literature in the original language or for Comparative Literature 200. Admission to the major requires completion of two courses at the 200 level by the end of the sophomore year; one of these must be an "introductory emphasis" course (a list of such courses will be issued each semester). English 150 may be presented in place of one 200-level course. Final evaluation of the major program will center on written work and oral examinations conducted in the context of the work for English 399b. No more than four major credits will be awarded for work done beyond the tri-college community, whether abroad or in the U.S.

REQUIREMENTS FOR HONORS

Honors in English are awarded on the basis of performance in course work within the tri-college departments, the Senior Essay, and the oral examination conducted at the end of the senior year. High Honors are reserved for distinguished achievement in all three of these areas.

CREATIVE WRITING COURSES

291 Poetry Writing: A Practical Workshop HU

D. Fried

A poetry workshop with discussion centering on student writing. Readings are drawn from contemporary American and British poets, from their criticism as well as their poetry.

Enrollment limited to 15.

292B Writing Poetry HU

Staff

Enrollment limited to 15.

293A Fiction Writing: From Traditional to Experimental HU

S. Benston

This course invites students to read and write across a spectrum, starting with recognizably conventional short stories and heading into so-called “experimental” territory. We’ll look at how traditional modes of story-telling have been both honored and disrupted by 20th-century writers. *Enrollment limited to 15.*

294B Fiction Writing: States of Mind HU

S. Benston

This course invites students to explore how human *subjectivity* is evoked in fiction. We’ll read numerous short stories, as well as provocative essays on neuropsychology by such authors as William James and Oliver Sacks. Students will experiment with strategies for depicting *mindscape* in two short-short pieces and two longer stories. *Enrollment limited to 15.*

LITERATURE COURSES

150L Introduction to Literary Analysis [WS-D] (Also listed as WRPR 150a,b)

C. Devenney, S. Finley, L. McGrane, M. McInerney, J. Ransom, T. Tensuan, C. Zwarg

Intended like other sections of the Writing Program to advance students’ critical reading and analytical writing skills, this course is geared specifically towards introducing students to the discipline that studies the literary traditions of the English language. One of its aims is to explore the broad range of thematic interests inherent in these traditions, sharing as they do common roots in the history of our language and its influences. The powers and limits of language; ideas of “character” and “community,” and the relation between person and place; heroic endeavor and the mystery of evil; loss and renovation—these are among the themes to be tracked through various strategies of literary representation and interpretation in a variety of genres (epic, narrative, and poetry) and modes (realism, allegory, and romance), and across a range of historical periods. Our goal is to develop the vocabulary, skills, and knowledge necessary to understand not only how we decide what literary texts “mean,” but also how literary texts generate and contemplate “meaning.” Introduces and carries credit toward the English major.

201 Chaucer HU

M. McInerney

First semester devoted to a close reading of the *Canterbury Tales*; second semester studies the early lyrics and dream poetry and *Troilus and Criseyde*. Semesters may be taken separately.

Not offered in 2002-03.

203 Medieval Visions: Text and Image HU

M. McInerney

The course approaches the Middle Ages from the perspective of cultural studies, examining the relationship between literary texts and material culture. The course will consider many different kinds of texts, signs and artifacts, seeking to understand the visions they convey. *Not offered in 2002-03.*

205 The Legend of Arthur: Tragedy, Romance, and National Identity HU

M. McInerney

A reading of both early and recent versions of the *Arthurian Legend*, exploring its complex tradition. Consideration of conflicts between personal and private morality, of representations of women, and of constructions of identity and gender. *Not offered in 2002-03.*

210 Reading Poetry HU

J. Ransom

Introduction to the most common types of poetry in English: narrative, dramatic, lyric. The working approach is that of close reading, often word by word, in order to investigate the poetic uses of rhythm and pattern; of sound and music; of appeals to the senses; of allusion to history, art, other literature; of connotation and denotation; and of metaphor.

212 The Bible and Literature HU

S. Finley

A study of the Bible and its diverse genres, including legendary history, law, chronicle, psalm, love-song and dirge, prophecy, gospel, epistle, and eschatology. This study is accompanied by an extremely various collection of literary material, drawn from traditional and contemporary sources, and from several languages (including Hebrew), in order to illustrate the continued life of Biblical narrative and poetry. *Not offered in 2002-03.*

218 The Western Dramatic Tradition HU (Also called Comparative Literature 218)

K. Benston

Introduction to the tradition of Western drama through close study of major representative plays.

220 The English Epic HU

M. McInerney

An exploration of the long narrative poems that shape the epic tradition in British literature. Readings in classical epic, *Beowulf*, the *Tain*, medieval epic, Chaucer and Spenser. *Not offered in 2002-03.*

222 Spiritual Autobiography HU

S. Finley

Survey of the genre of life-writing in the Western tradition, beginning with Augustine. English confessional histories, including Fox's *Journal*, and Bunyan's *Grace Abounding*, central Romantic and Victorian works, modern/contemporary autobiographies of women/feminism. *Not offered in 2002-03.*

225 Shakespeare: The Tragic and Beyond HU

K. Benston

An "introductory emphasis" study of the major tragedies and related histories, comedies, and romances, with special reference to the evolution of dramatic form, poetic style, characterization, and ideology as they are shaped by Shakespeare's persistent experimentation with dramas of extravagant will, desire, tyranny, scepticism, and death. Particular attention will be

paid to key scenes in an effort to assess both Shakespeare's response to contemporary literary and cultural concerns and the internal reformation of his own craft. *Not offered in 2002-03.*

241 Eighteenth-Century English Literature: Inventing the Novel HU

L. McGrane

The course explores a variety of British 18th-century prose narratives that shaped the emerging novel as both a dominant literary genre and popular form of entertainment. Particular emphasis on changing cultural conceptions of subjectivity, authority and narrative voice in discussions of generic categories.

243 Eighteenth-Century Literature: Trans-Atlantic Exchanges: Conversion & Revolution in Britain & Early America HU

L. McGrane

The course examines religious, domestic and political literature that defined a Trans-Atlantic model of print culture in 18th-century Britain and America. Emphasis on journal/newspaper reviews and comparative notions of literary, sexual, national, and racial identities.

250 Irish Literature: Writing the North ('68 to the Present) HU

C. Devenney

This course will focus upon the rich and complex body of writing that has emerged amidst the political and sectarian conflict that has afflicted Northern Ireland since the mid-1960s. We will survey this writing with a particular focus upon the relations between narrative and cultural memory, the psychology of violence, trauma, and the ethical role of artistic and literary response.

252 Romantic Poetry and Criticism HU

S. Finley

A reading of Blake, Wordsworth, Shelley, and Keats, with attention to early/late works and to the interfiliation of theory and poetry. *Not offered in 2002-03.*

253 English Poetry from Tennyson to Eliot HU

S. Finley

A study of poetry by Tennyson, Christina Rossetti, Dickinson, Hopkins, Hardy, Owen, and Eliot, from *In Memoriam* (1850) to *Little Gidding* (1942). The course strives to subvert the convenient opposition of Victorian/modern, focusing upon the poet's role in mediating/exposing the social order, the relation between poetry, catastrophe, and traumatic memory, and the structuring modalities of lyric and elegy.

254 Victorian Literature HU

S. Finley, D. Sherman

Readings in 19th-century literature through diverse critical and theoretical foci which describe an ethos and an aesthetic particular to the Victorian period. Such concerns might reflect an interest in the urban novel as "modern" experience, in Victorian notions of gender and sexuality, in the material shaping of a "political unconscious" in the literature, in the idea of culture as it was practiced, debated and defended during the period, in the development late in the century of the Aesthetic and decadent movements in art and literature, etc. *Not offered in 2002-03.*

257 British Topographies, 1790-1914 HU

S. Finley

A study of the intersections of place, locality, topography, cartographies, gardening, self-mapping, self-cancelling, ruin, remembrance, trauma, amid the historical and cultural construction of landscape. *Not offered in 2002-03.*

258 **The Novel** HU

R. Mohan, D. Sherman

The course examines the British novel as a form crucially developed from the latter part of the eighteenth century to its centralized and persuasive appeal in the middle of the 19th century and into the experimentations in narrative form in the 20th century, considering variously the development of narrative authority, the invention of generic expectations, the tension between "romance" and "realism," the engagement in a material and political culture, the novel as a critical locus of desire, the self, the other, etc.

260a **In the American Grain: Traditions in North American Literature** HU

C. Zwarg

The course conceptualizes American literature as a comparative literature whose traditions emerged from certain inalienable forces released as English became the dominant political language of North America. Theories of translation and language. Readings in Derrida, Certeau, Barthes, Shakespeare, Cabeza de Vaca, Behn, Rowlandson, Mather, Wheatly, Equiano, Franklin, Goethe, Nat Turner, Poe. The course concludes with a review of the drifting, searching world aboard Melville's Pequod in *Moby-Dick*. *Not offered in 2002-03.*

260b **American Literature 1860-1915** HU

G. Stadler

An introduction to American fiction of the late 19th and early 20th centuries with emphasis on the literary response to historical developments such as the transformation of private life, the rise of technological society, and the intensification of racial and class conflict. *Not offered in 2002-03.*

261 **African-American Literature** HU

Staff

Introduction to the study of literature written by African-American writers and the criticism of the literature in its different stages of development. *Not offered in 2002-03.*

262 **The American Moderns: 1915-1950** HU

J. Ransom

Selected readings in poetry, fiction, and drama. Readings include Pound, Eliot, Hemingway, Fitzgerald, Faulkner, Barnes, West, Stevens, Toomer, Williams, Crane, Warren, and Kerouac.

263 **19th-Century American Women's Narrative** HU

G. Stadler

This course examines narrative writing by women in the United States from its inception to the early 20th century. Its primary focus is writing by women which has conceptualized alternative visions of the nation and its history. *Not offered in 2002-03.*

264 **Cinema & Modern Life** HU

Staff

Not offered in 2002-03.

265 **American Literature: Toward *Moby-Dick*** HU

C. Devenney

This course will be a study in the intertextual composition of *Moby-Dick*, and will examine the complex patterns of philosophical and literary associations and synergetic effects that comprise this most strange and uncanny of books. While the centerpiece of the course will be Melville's *Moby-Dick*, we will also read a number of its key sources, including Homer, the Bible, Plato, Shakespeare, Rabelais, Kant, Goethe, Coleridge, Emerson, and Hawthorne,

along with a variety of 20th-century responses to the cultural and philosophical crisis outlined by Melville's masterpiece.

268 New American Fiction HU

J. Ransom

Selected readings in recent North American fiction. *Not offered in 2002-03.*

270 Portraits in Black: The Influence of an Emergent African-American Culture HU

C. Zwarg

A consideration of the influence of emergent African-American culture in the United States through parallel readings of works from the American "canon" and from the African-American tradition. (Satisfies the social justice requirement.)

271 'Race,' Writing, and Difference in American Literature HU

C. Zwarg

The complex intersections of "race" and gender in American literature, with particular attention to the problematic conceptualization of the North American Indian and African-American cultures held hostage at those intersections. *Not offered in 2002-03.*

273 Modern British Literature HU

R. Mohan

An exploration of literary modernism in Britain through analysis of fiction, criticism, and aesthetic manifestos in their historical contexts.

274 Modern Irish Literature HU

D. Sherman

Irish literature from Swift to O'Brien and Heaney. The course considers this literature as the politically articulate inscription of complex and multiple intersections of history, class and culture. Throughout the course, Irish history, particularly the Famine, (re)appears as an episode of trauma, cultural memory and literary investment. (Satisfies social justice requirement.) *Not offered in 2002-03.*

275 Thinking Globally & Writing Locally HU

R. Mohan

The course will examine the ways the global circulation of people, ideas, languages, and literary and cultural forms brought about by colonialism, decolonization, and immigration shape specific Anglophone literary traditions. *Not offered in 2002-03.*

277 Postcolonial Women Writers HU

R. Mohan

The narrative strategies enabling and sometimes subverting historically and culturally specific negotiations between the claims of postcolonial, class, and feminist politics. Focus on writings by women. (Satisfies social justice requirement.) *Not offered in 2002-03.*

278 Contemporary Women Writers HU

T. Tensuan

Readings in novels, short fiction, poetry, and some non-fictional prose by contemporary women writers. A study of the interrelations between literature written by female authors and the questions, concerns, and debates that characterize contemporary feminist theory. Readings in Hurston, Woolf, Winterson, Lorde, leGuin, Atwood, Erdrich, Bambara, Yamanaka, and Cisneros.

279 Contemporary Asian American Literature: Contexts, Pretexts, Subtexts HU

T. Tensuan

Asian American literature, including works by Kingston, Li-Young Lee, Minatoya, Chang Rae Lee, and Hagedorn. The course considers this body of work in relationship (cultural convergences, literary inheritances, thematic ties) to other canonical American literature—Whitman, Henry Adams, Chandler, and Dos Passos. *Not offered in 2002-03.*

281 Fictions of Empire HU

R. Mohan

A study of representative texts from the 18th century to the present which deal with the British colonial encounter. Readings in Defoe, Behn, Haggard, Kipling, Conrad, Forster, Dinesen, Cary, Coetzee, and Achebe. *Not offered in 2002-03.*

282 “An Energy of Profusim; An Energy of Line:” The Modernist Movement, 1900-1920 HU

D. Sherman

This course considers modernism as a collective enterprise—self-conscious and deliberate—in the earlier part of the 20th century that took various forms in art, literature and architecture. Readings are grouped around Joyce’s *Ulysses*, Cubist painting, and modernist architecture, and are comprised of both contemporary and critical prose, poetry, philosophic, political, and aesthetic manifestos. *Not offered in 2002-03.*

284 Sex, Gender, Representation: An Introduction to Theories of Sexuality HU

G. Stadler

This course investigates how cultural theory, philosophy, literary theory, and literature itself have evaluated and questioned the categories by which we understand sexualities. It pays special attention to the concept of “queerness” and the work of queer theory in defamiliarizing everyday assumptions about sexuality and sexual identity, gay and straight. *Not offered in 2002-03.*

285 Disabilities: Literature, Education, and Law HU

S. Finley

Contemporary autobiographies of disability, placed in four key contexts: academic disability studies, rehabilitation sciences, the American educational system, and the legal ramifications of the Americans with Disabilities Act of 1990. *Not offered in 2002-03.*

286 Representing Native Americans HU

J. Ransom

Critical examination of the representation of Native Americans in written texts, folklore, painting, photography, film, and commercial art from the 15th century to the present. Satisfies the social justice requirement. *Not offered in 2002-03.*

289 Contemporary Poetry HU

C. Devenney

Ostensibly a survey of American avant-garde poetry from 1950 to the present. This course will endeavor to examine the ways in which poetry since WWII has undertaken the task of redefining itself, and in the process also sought to redefine its relation to politics, to tradition and history, and more importantly to language. *Not offered in 2002-03.*

295 Interpretation and the Other: Meaning, Understanding, and Alterity HU (Humanities Seminar)*S. Finley, D. Dawson*

This interdisciplinary course aims to enhance critical awareness of a variety of practices of interpretation in the liberal arts. The seminar begins with consideration of a number of influential perspectives on language and meaning, which are then explored in relation to several case studies of interpretation that embody, amplify or challenge them. The seminar concludes with an examination of some of the ethical contours of interpretation's encounter with otherness. Cross-listed with religion, philosophy, and comparative literature. *Limited to 20.*

299a, b Junior Seminar HU*K. Benston, D. Sherman, G. Stadler*

Two-semester, year-long seminar, required of all English majors. Through class readings and discussion, and writing tutorials, students are expected to engage 1) a series of texts representing the range and diversity of the historical tradition in British and American literature, and 2) critical theory and practice as it has been influenced by hermeneutics, feminism, psychology, semiology, sociology, and the study of cultural representation, and as it reflects the methods of literary criticism.

TOPICS COURSES

The prerequisite for all 300-level topics courses is two courses in English at the 200 level or permission of instructor, unless otherwise indicated. Courses vary from year to year and include the following:

301 Sex and Gender in the Middle Ages HU*M. McInerney***325 Advanced Shakespeare***K. Benston***347 Topics in 18th-Century Literature: Enlightenment Shadows: The Gothic in British Culture HU***L. McGrane***352 Poverty and Its Representation in Victorian Britain HU***S. Finley***354 Remembrance and Mourning: Literature of the Great War HU***S. Finley***356 Topics in Autobiography: Dwelling Places, Identity, Locality, and Nationality HU***S. Finley***361 Topics in African-American Literature HU***K. Benston, C. Zwarg***362 Topics in American Literature: Genius and Gender in American Culture HU***G. Stadler***363 Topics in American Literature: John Brown's Body: Violence, National Fantasy, and Bodies that Matter HU***C. Zwarg*

364 Topics in American Literature: After Mastery: Trauma, Reconstruction, and the Literary Event HU

C. Zwarg

365 Topics in American Literature: Henry James and Others HU

G. Stadler

366 Topics in American Literature: Storytelling and the Ruins of Feminism HU

C. Zwarg

367 Topics in American Literature: The American Fifties HU

J. Ransom

368 Topics in American Literature: American Autobiographies HU

T. Tensuan

372 Topics in Irish Literature: Joyce/Beckett HU

D. Sherman

373 Modernist Narratives HU

R. Mohan

377 Problems in Postcolonial Literature HU

R. Mohan

381 Textual Politics: Marxism, Feminism, and Deconstruction HU

R. Mohan

382 On the Sublime HU

D. Sherman

383b Topics in American Literature: Autobiography HU

T. Tensuan

384 Topics in American Literature: Native-American Renaissance HU

J. Ransom

385 Topics in Apocalyptic Literature: Visions of the End HU

M. McInerney

387 The Post-Modern: Theory and Fiction HU

J. Ransom

388 Problems in Narrative: Obsession, Trauma, Hysteria, Oblivion, Bliss HU

K. Benston

389 Problems in Poetics: The Interpretation of Lyric HU

K. Benston

399b Senior Conference HU

Staff

480 Independent Study

Individual consultation, independent reading and research.

COURSES OFFERED AT BRYN MAWR COLLEGE

- 125 **Writing Workshop**
- 126 **Writing Workshop for Non-Native Speakers of English**
- 205 **Introduction to Film Studies**
- 207 **Big Books of American Literature: Representing the Intersections of Nation, Class, Race, and Gender**
- 211 **Renaissance Lyric**
- 212 **Thinking Sex: Exploring Desire & Difference**
- 214 **Law & Literature**
- 220 **Writing in Theory/Writing in Practice: The Study of the Teaching of Writing**
- 225 **Shakespeare**
- 229 **Movies and Mass Politics**
- 234 **Postcolonial Literature**
- 240 **Readings in English Literature 1660-1744**
- 242 **Historical Introduction to Poetry I**
- 243 **Historical Introduction to Poetry II**
- 250 **Methods of Literary Study I**
- 250 **Methods of Literary Study II**
- 254 **Subjects & Citizens**
- 255 **Counter-Cinema**
- 268 **Native American Literature: Historical Imagination**
- 279 **Introduction to African-American Literature**
- 283 **The Urban Novel**
- 298 **The Cultural Politics of Memory**
- 308 **The Feminist Difference in Literary Theory**
- 316 **Film Theory**
- 318 **The Matter of Troy**
- 324 **Topics in Shakespeare: "Romancing Shakespeare"**
- 330 **Writing Indians: Sidekicking the American Canon**
- 331 **Queer Theory**
- 343 **Translating América: Theories of Latin/a American Subjectivity**
- 352 **Romanticism and Interpretation**
- ArtsW 159 **Introduction to Creative Writing**
- ArtsW 260 **Writing Short Fiction I**
- ArtsW 261 **Writing Poetry I**
- ArtsW 264 **Feature Journalism**
- ArtsW 265 **Creative Nonfiction**
- ArtsW 266 **Screenwriting**
- ArtsW 361 **Writing Poetry II**
- ArtsW 371 **Fiction Master Class**
- ArtsW 373 **Experimental Writing**
- GNST **Healing, Harming, and Humanism**

FEMINIST AND GENDER STUDIES

The bi-college concentration in feminist and gender studies is committed to the interdisciplinary study of women and gender. The program includes courses on women's experiences considered both historically and cross-culturally, on literature by and about women, on gender roles and socialization, and on bias in attempts to account for gender differences. Students plan their programs in consultation with the feminist and gender studies coordinator on their home campus and members of the Steering Committee on Feminism and Gender Studies. Students may declare either a concentration or minor.

Assistant Professor Graciela Michelotti

Senior Lecturer Anne Dalke, Coordinator at Bryn Mawr

REQUIREMENTS

Six courses distributed as follows are required for the concentration:

- (1) An introductory course, such as Anthropology 106a, Political Science 123b or English 280b. Equivalent courses at Swarthmore or the University of Pennsylvania are also acceptable. Students may request to count other relevant introductory level courses toward this requirement.
- (2) The junior seminar, General Programs 290: Interdisciplinary Perspectives on Gender.
- (3) Four additional approved courses from at least two different departments, two of which are normally 300 level. Units of Independent Study (480a, b) may be used to fulfill this requirement.
- (4) Of the six courses, no fewer than two and no more than three will also form part of the student's major.

MINOR REQUIREMENTS

Same as above, excluding requirement 4.

Neither a senior seminar nor a senior thesis is required for the concentration; however, with the permission of the major department, a student may choose to count toward the concentration a senior thesis with significant feminist and gender studies content.

Students wishing to construct an independent major in feminist and gender studies will have to make a proposal to the College Committee on Student Standing and Progress (CSSP).

FEMINIST AND GENDER STUDIES AT HAVERFORD INCLUDE:

Fall 2002

English 363 **John Brown's Body: Violence, National Fantasy and Bodies That Matter**
C. Zwarg

12 slots available to English majors. 3 others. *Enrollment limited to 15 students.*

English 278 **Contemporary Women Writers: Canons, Contexts, Debates**
T. Tensuan

Enrollment limited to 30 students.

General Programs 226 **Sex and Gender on Film**
E. Sikov

Limited to 75 students. Not open to freshmen.

General Programs 252 **Women, Medicine, and Biology**
K. Edwards

Enrollment limited. Not open to freshmen.

Political Science 359 **Feminist Political Theory**

C. Beltrán

Enrollment limited to 30 students.

Spring 2003

Anthropology 216b **Women and Power**

M. Gillette

General Programs 290 **Interdisciplinary Perspectives on Gender**

T. Tensuan and Kinukawa

Classics 217 **Male & Female in Ancient Greece**

J. Russo

English 363 **American Autobiography: Writing a Woman's Life**

T. Tensuan

FEMINIST AND GENDER STUDIES AT BRYN MAWR INCLUDE:

ANTHROPOLOGY

222 **Politics of Identity in Central Asia**

223 **Anthropology of Dance**

361 **Advanced Topics in Political Anthropology**

ARTS PROGRAM - DANCE

250 **Performing the Political Body**

CLASSICAL AND NEAR EASTERN ARCHAEOLOGY

224 **Women in the Ancient Near East**

ENGLISH

212 **Thinking Sex: Representing Desire and Difference**

255 **Counter-Cinema: Radical, Revolutionary and Underground Film**

322 **Love and Money**

331 **Queer Literature/Queer Theory**

343 **Translating América: Theories of Latin/a American Subjectivity**

FRENCH AND FRENCH STUDIES

201 **Le chevalier, la dame et le prêtre: littérature et publics du Moyen Age**

GERMAN AND GERMAN STUDIES

245 **Women's Narratives in Modern Migrancy, Exile and Diasporas**

HISTORY

303 **Recent U.S. History: Queering History**

HISTORY OF ART

108 **Women, Feminism and History of Art**

340 **Representation of Gender and Power in Habsburg Spain**

ITALIAN

210 **Women and Opera**

230 **Poetics of Desire in the Lyric Poetry of Renaissance Italy and Spain**

PHILOSOPHY

221 **Ethics**

344 **Developmental Ethics**

352 **Feminism and Philosophy: Transnationalism**

POLITICAL SCIENCE

321 **Technology and Politics**

354 **Comparative Social Movements: Power and Protest**

PSYCHOLOGY

323 **Advanced Topics in Cognitive Neuroscience**

SPANISH

340 **Representation of Gender and Power in Habsburg Spain**

The fine arts courses offered by the department are structured to accomplish the following:

(1) For students not majoring in fine arts: to develop a visual perception of form and to present knowledge and understanding of it in works of art. (2) For students intending to major in fine arts: beyond the foregoing, to promote thinking in visual terms and to foster the skills needed to give expression to these in a coherent body of art works.

Professor R. Christopher Cairns

Professor William E. Williams, chairperson

Assistant Professor Ying Li

Assistant Professor Hee Sook Kim

MAJOR REQUIREMENTS

Fine arts majors are required to concentrate in either painting, drawing, sculpture, photography or printmaking: Fine Arts 101-123, two different 200-level courses outside the area of concentration; two 200-level courses and one 300-level course within that area; three art history courses to be taken at Bryn Mawr College, and Senior Departmental Studies 499.

For majors intending to do graduate work, it is strongly recommended that they take an additional 300-level studio course within their area of concentration and an additional art history course at Bryn Mawr College.

COURSES

101 Fine Arts Foundation Program HU

Staff

Drawing, painting, photography, sculpture, and printmaking are offered. Students are introduced to at least three different disciplines from the five presently offered by the department: drawing, painting, photography, sculpture, and printmaking. Each subject is an introductory course, dealing with the formal elements characteristic of the particular discipline as well as the appropriate techniques. Part of the work is from life model in drawing, painting and sculpture. These subjects are offered as half-semester courses; students may choose four for two course credits in any two semesters, not necessarily consecutive, or any three to receive one and one-half credits. For example: a student may take two sections in one semester in one year, and one or two sections in another year. The course is structured so that the student experiences the differences as well as the similarities between the various expressions in studio art, thus affording a "perspective" insight into the visual process as a basis for artistic expression. For those intending to major, Art 101 consists of taking four of the five disciplines from each of the staff, including Foundations 120 to 123.

120 Foundation Printmaking: Silkscreen HU

H. Kim

A seven-week course covering various techniques and approaches to silkscreen, including painterly monoprint, stencils, direct drawing, and photo-silkscreen. Emphasizing the expressive potential of the medium to create a personal visual statement.

121 Foundation Printmaking: Relief Printing HU

H. Kim

A seven-week course covering various techniques and approaches to the art of the woodcut and the linocut, emphasizing the study of design principles and the expressive potential of the medium to create a personal visual statement.

122 Foundation Printmaking: Lithography HU

H. Kim

A seven-week course covering various techniques and approaches to lithography, including stone and plate preparation, drawing materials, editioning, black and white printing. Emphasizing the expressive potential of the medium to create a personal visual statement.

123 Foundation Printmaking: Etching HU

H. Kim

A seven-week course covering various techniques and approaches to intaglio printmaking including monotypes, soft and hard ground, line, aquatint, chine collage, and viscosity printing. Emphasizing the expressive potential of the medium to create a personal visual statement.

223a or b Printmaking: Materials and Techniques HU

H. Kim

Further development into other printmaking techniques, covering a broad range of alternative processes within wood, lino, collagraph, monoprint, drypoint, etching, and photo etching. Students will work independently. *Prerequisite:* Permission of instructor by review of portfolio.

231a or b Drawing (2-D): All Media HU

Y. Li

Various drawing media such as charcoal, conté, pencil, ink, and mixed media; the relationship between media, techniques, and expression. The student is exposed to problems involving space, design, and composition as well as “thinking” in two dimensions. Part of the work is from life model. May be repeated for credit. *Prerequisite:* Fine Arts 101 or consent of instructor.

233a or b Painting: Materials and Techniques HU

Y. Li

Problems of (1) form, color, texture, and their interrelationships; (2) influence of the various painting techniques upon the expression of a work; (3) the characteristics and limitations of the different media; (4) control over the structure and composition of a work of art; and (5) the relationships of form and composition, and color and composition. Media are primarily oils, but acrylics, watercolors and egg tempera are explored. Part of the work is from life model. May be repeated for credit. *Prerequisite:* Fine Arts 101 or consent of instructor.

241a or b Drawing (3-D): All Media HU

C. Cairns

In essence the same problems as in Fine Arts 231a or b. However, some of the drawing media are clay modeling in half-hour sketches; the space and design concepts solve three-dimensional problems. Part of the work is done from life model. May be repeated for credit. *Prerequisite:* Fine Arts 101 or consent of instructor.

243a or b Sculpture: Materials and Techniques HU

C. Cairns

The behavior of objects in space, the concepts and techniques leading up to the form in space, and the characteristics and limitations of the various sculpture media and their influence on the final work; predominant but not exclusive use of clay modeling techniques: fundamental casting procedures. Part of the work is done from life model. May be repeated for credit. *Prerequisite:* Fine Arts 101 or consent of instructor.

251a Photography: Materials and Techniques HU*W. Williams*

Students are encouraged to develop an individual approach to photography. Emphasis is placed on the creation of black and white photographic prints which express plastic form, emotions, and ideas about the physical world. Work is critiqued weekly to give critical insights into editing of individual student work and the use of the appropriate black and white photographic materials necessary to give coherence to that work. Study of the photography collection, gallery and museum exhibitions, lectures, and a critical analysis of photographic sequences in books and a research project supplement the weekly critiques. In addition, students produce a handmade archival box to house their work which is organized into a loose sequence and mounted to archival standards. *Prerequisite:* Fine Arts 101. *Enrollment limited.*

260b Photography: Materials and Techniques HU*W. Williams*

Students are encouraged to develop an individual approach to photographic prints which express plastic form, emotions, and ideas about the physical world in color. Work is critiqued weekly to give critical insights into editing of individual student work and the use of the appropriate color photographic materials necessary to give coherence to that work. Study of the photography collection, gallery and museum exhibitions, lectures, and a critical analysis of photographic sequences in books and a research project supplement the weekly critiques. In addition, students produce a handmade archival box to house their work which is organized into a loose sequence and mounted to archival standards. *Prerequisite:* Fine Arts 101. *Enrollment limited.*

327a or b Experimental Studio: Lithography and Intaglio HU*H. Kim*

Concepts and techniques of black and white and color lithography. The development of a personal direction is encouraged. *Prerequisites:* A foundation drawing course and Foundation Printmaking, or permission of instructor.

331a or b Experimental Studio (Drawing) HU*Y. Li*

In this studio course the student is encouraged to experiment with ideas and techniques with the purpose of developing a personal expression. It is expected that the student will already have a sound knowledge of the craft and aesthetics of drawing and is at a stage where personal expression has become possible. May be repeated for credit. *Prerequisites:* Fine Arts 231a or b, or consent of the instructor.

333a or b Experimental Studio (Painting) HU*Y. Li*

In this studio course the student is encouraged to experiment with ideas and techniques with the purpose of developing a personal expression. It is expected that the student will already have a sound knowledge of the craft and aesthetics of painting and is at a stage where personal expression has become possible. May be repeated for credit. *Prerequisites:* Fine Arts 223a or b, or consent of instructor.

341a or b Experimental Studio (Drawing) HU*C. Cairns*

343a or b **Experimental Studio (Sculpture) HU**

C. Cairns

In this studio course the student is encouraged to experiment with ideas and techniques with the purpose of developing a personal expression. It is expected that the student will already have a sound knowledge of the craft and aesthetics of sculpture and is at a stage where personal expression has become possible. May be repeated for credit. *Prerequisite:* Fine Arts 243a or b, or consent of instructor.

351a or b **Experimental Studio (Photography) HU**

W. Williams

Students produce an extended sequence of their work in either book or exhibition format using black and white or color photographic materials. The sequence and scale of the photographic prints are determined by the nature of the student's work. Weekly classroom critiques, supplemented by an extensive investigation of classic photographic picture books and related critical texts guide students to the completion of their course work. This two semester course consists of the book project first semester and the exhibition project second semester. At the end of each semester the student may exhibit his/her project. *Prerequisites:* Fine Arts 101, 251, 260, and consent of the instructor.

480a or b **Independent Study HU**

Staff

This course gives the advanced student the opportunity to experiment with concepts and ideas and to explore in depth his or her talent. *Prerequisite:* Consent of instructor.

499a or b **Senior Departmental Studies HU**

Staff

The student reviews the depth and extent of experience gained, and in so doing creates a coherent body of work expressive of the student's insights and skills. At the end of the senior year, the student is expected to produce a show of his or her work.

FRENCH AND FRENCH STUDIES

The Bi-College Department of French combines the faculties of Haverford and Bryn Mawr Colleges to offer a unified program and a variety of courses and major options. The purpose of the major in French is to lay the foundation for an understanding and appreciation of French culture through its literature and language, the history of its arts, its thought and its institutions. Course offerings are intended to serve both those with particular interest in French literature, literary theory and criticism, as well as those with particular interest in French and French-speaking lands from the perspective of history, culture, and political science. A thorough knowledge of French is a common goal for both orientations, and texts and discussion in French are central both to the program focusing on French history and culture (interdisciplinary concentration) and to the literary specialization (literature concentration).

In the 100-level courses, students are introduced to the study of French literature and culture, and special attention is given to the speaking and writing of French. Courses at the 200 level treat French literature and civilization from the beginning to the present day. Three 200-level courses are devoted to advanced language training, with practice in spoken as well as in written French. Advanced (300-level) courses offer detailed study either of individual authors, genres, and movements (literature concentration) or of particular periods, themes, and problems in French culture (interdisciplinary concentration). In both tracks, students are admitted to advanced courses after satisfactory completion of two semesters of 200-level courses in French.

Students in all courses are encouraged to make use of the Language Learning Center. In French 001, 002, 003, 004, 005, 212, 260 and 262, the use of the laboratory and intensive oral practice in small groups directed by a department assistant form an integral part of the course. French majors find it valuable to supplement the work done at Bryn Mawr and Haverford by study abroad either during the summer at the Institut d'Etudes Françaises d'Avignon or during the sophomore or junior year.

All students who wish to pursue their study of French must take a placement examination upon entrance at Bryn Mawr and Haverford. Those students who begin French have two options: intensive study of the language in the intensive sections offered at Bryn Mawr (the sequence 001-002 Intensive Elementary; 005 Intensive Intermediate and 102 Textes, Images, Voix II, or 005 and 105 Directions de la France contemporaine), or non-intensive study of the language at Bryn Mawr and Haverford in the non-intensive sequence (001-002; 003-004; 101-102 or 101-105). In either case, students who pursue French to the 200 level often find it useful to take as their first 200-level course either 212 Travaux pratiques de langue-niveau avancé or 260 Stylistique et traduction. Although it is possible to major in French using either of the two sequences, students who are considering doing so and have been placed at the 001 level are encouraged to take the intensive option. The Department of French also cooperates with the Departments of Italian and Spanish in the Romance languages major.

Associate Professor **Koffi Anyinéfa**, *Chairperson*
Assistant Professor **Duane W. Kight**
Assistant Professor **David L. Sedley**, *on leave 2002-03*
Instructor **Florence Echtman**, *at Haverford and Bryn Mawr Colleges*
Visiting Instructor **Rebecca Graves**

Affiliated Faculty:

Associate Professor **Lisa Graham**, *on leave 2002-03*

At Bryn Mawr College:

Eunice Morgan Schenck 1907 Professor **Grace M. Armstrong**, *Major Advisor, on leave semester II*

Professor **Catherine Lafarge**, *on leave semester II*

Professor **Nancy J. Vickers**

Associate Professor **Brigitte Mahuzier**, *Director of Avignon Institute*

Assistant Professor **Francis Higginson**

Senior Lecturer **Janet Doner**

Senior Lecturer **Roseline Cousin**

MAJOR REQUIREMENTS

Requirements in the major subject are:

1. Literature concentration: French 101-102 or 101-105, French 212 or 260, four semesters of 200-level literature courses, two semesters of 300-level literature courses, and the two-semester Senior Conference.
2. Interdisciplinary concentration: French 101-102 or 101-105; French 212 or 260; French 291 and 294, the core courses; a minimum of two civilization courses to be chosen among 246, 248, 251, 296, 298, 299, 325, 326, with at least one course at the 300 level; two 200- or 300-level French literature courses, with one of these courses chosen at the 300 level; and the two-semester Senior Conference.
3. Both concentrations: all French majors are expected to have acquired fluency in the French language, both written and oral. Unless specifically exempted by the department, they are required to take French 212 or 260. Students may wish to continue from 212 to 260 to hone their skills further. Students placed at the 200 level by departmental examinations are exempted from the 100-level requirements. Occasionally, students may be admitted to seminars in the graduate school.

HONORS

Undergraduates who have excelled in French by maintaining a minimum grade of 3.6 may, if invited by the department, write an honors thesis during the two semesters of their senior year. Departmental honors may also be awarded for excellence in both the oral and written comprehensive examinations at the end of the senior year.

MINOR REQUIREMENTS

Requirements for a French minor are French 101-102 or 101-105; French 212 or 260; and four 200-level or 300-level courses. At least one course must be at the 300 level.

A.B./M.A. Program

Particularly well-qualified students may undertake work toward the joint A.B./M.A. degree in French. Such a program may be completed in four or five years and is undertaken with the approval of the department and of the dean of the Graduate School of Arts and Sciences.

FRENCH AND FRENCH STUDIES

Study Abroad

Students majoring in French may, by a joint recommendation of the deans of the Colleges and the Department of French, be allowed to spend their junior year in France under one of the junior year plans approved by their respective college: those organized by Sweet Briar, BCA, and Wellesley Colleges are approved by both Bryn Mawr and Haverford, and additional programs are accepted separately by Bryn Mawr and Haverford.

Students wishing to enroll in a summer program may apply for admission to the Institut d'Etudes Françaises d'Avignon, held under the auspices of Bryn Mawr. The institute is designed for selected undergraduates and graduate students with a serious interest in French literature and culture, most particularly for those who anticipate professional careers requiring a knowledge of the language and civilization of France. The curriculum includes general and advanced courses in French language, literature, social sciences, history, and art. The program is open to students of high academic achievement who have completed a course in French at the third-year level or the equivalent.

Students of French are also encouraged to take advantage of the many opportunities offered on both campuses for immersion in the language and culture of France: residence in the French House in Haffner at Bryn Mawr; the weekly film series; and the weekly Table française at Haffner, Bryn Mawr, and the Dining Center, Haverford.

Teacher Certification

The Department of French offers a certification program in secondary teacher education. For more information, see the description of the education program at Bryn Mawr College.

COURSES

001, 002 Elementary French HU

R. Cousin, J. Doner, F. Echtman, R. Graves and D. Kight

The speaking and understanding of French are emphasized particularly during the first semester. The work includes regular use of the Language Learning Center and is supplemented by intensive oral practice sessions. The course meets in intensive (nine hours a week) and non-intensive (six hours a week) sections. This is a year-long course; both semesters are required for credit.

003, 004 Intermediate French HU

R. Cousin, F. Echtman, R. Graves and M. Kaya

The emphasis on speaking and understanding French is continued; texts from French literature and cultural media are read; and short papers are written in French. Students use the Language Learning Center regularly and attend supplementary oral practice sessions. The course meets in non-intensive (three hours a week) sections that are supplemented by an extra hour per week with an assistant. This is a year-long course; both semesters are required for credit.

005 Intensive Intermediate French HU

G. Armstrong, J. Doner

The emphasis on speaking and understanding French is continued; literary and cultural texts are read and increasingly longer papers are written in French. In addition to the three class meetings a week, students develop their skills in an additional group session with the professors and in oral practice hours with assistants. Students use the Language Learning Center regularly. This course prepares students to take 102 or 105 in semester II. Open only to graduates of Intensive Elementary French or to students specially placed by the department. Students who are not graduates of Intensive Elementary French must take either 102 or 105 in semester II to receive credit.

101 Textes, Images, Voix I HU

K. Anyinéfa, D. Kight, C. Lafarge and B. Mahuzier

Presentation of essential problems in literary and cultural analysis by close reading of works selected from various periods and genres and by analysis of voice and image in French writing and film. Participation in discussion and practice in written and oral expression are emphasized, as are grammar review and laboratory exercises.

102 Textes, Images, Voix II HU

K. Anyinéfa, P. Higginson

Continued development of students' expertise in literary and cultural analysis by emphasizing close reading as well as oral and written analyses of increasingly complex works chosen from various genres and periods of French and Francophone works in their written and visual modes. Readings begin with comic theatre of the 17th and 18th centuries and build to increasingly complex nouvelles, poetry, and novels of the 19th and 20th centuries. Participation in guided discussion and practice in oral/written expression continue to be emphasized, as are grammar review and laboratory exercises. *Prerequisite:* French 005 or 101.

105 Directions de la France Contemporaine HU

R. Cousin, D. Kight

An examination of contemporary society in France and Francophone cultures as portrayed in recent documents and film. Emphasizing the tension in contemporary French-speaking societies between tradition and change, the course focuses on subjects such as family structures and the changing role of women, cultural and linguistic identity, an increasingly multiracial society, the individual and institutions (religious, political, educational), and les loisirs. In addition to the basic text and review of grammar, readings are chosen from newspapers, contemporary literary texts, and magazines, complemented by video materials. *Prerequisite:* French 005 or 101.

201 Le Chevalier, La Dame et Le Prêtre: Littérature et Publics du Moyen Age HU

G. Armstrong

Using literary texts, historical documents and letters as a mirror of the social classes that they address, this interdisciplinary course studies the principal preoccupations of secular and religious men and women in France from the Carolingian period through 1500. Selected works from epic, lai, roman courtois, fabliau, theater, letters, and contemporary biography are read in modern French translation.

202 Crise et Indentité: La Renaissance HU

D. Sedley

A study of the development of Humanism, the concept of the Renaissance and the Reformation. The course focuses on representative works, with special attention given to the prose of Rabelais and Montaigne, the Conteurs, the poetry of Marot, Scève, the *Pléiade* and *d'Aubigné*. *Not offered in 2002-03.*

203 Passion et Culture: Le Grand Siècle HU

D. Sedley

Representative authors and literary movements placed within their cultural context, with special attention to development of the theater (Corneille, Molière and Racine) and women writers of various genres. *Not offered in 2002-03.*

204 Le Siècle des Lumières HU

C. Lafarge

Representative texts of the Enlightenment and the Pre-Romantic movement, with emphasis on

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the development of liberal thought as illustrated in the *Encyclopédie* and the works of Montesquieu, Voltaire, Diderot, and Rousseau. *Not offered in 2002-03.*

205 **Le Temps des Prophètes: de Chateaubriand à Baudelaire (1800-1860)** HU

C. Lafarge

From Chateaubriand and Romanticism to Baudelaire, a study of selected poems, novels and plays. *Not offered in 2002-03.*

206 **Le Temps des Virtuoses: Symbolisme, Naturalisme et leur Progéniture (1860-1930)** HU

Staff

A study of selected works by Verlaine, Rimbaud, Zola, Valéry, Claudel, Proust, and Gide. *Not offered in 2002-03.*

207 **Missionnaires et Cannibales: de Malraux à Modiano (1930-1995)** HU

F Higginson

A study of selected works illustrating the principal literary movements from 1930 to the present.

212 **Travaux Pratiques de Langue-Niveau Avancé**

K. Anyinéfa

A general review of the most common difficulties of the French language, with intensive drill in syntax patterns and vocabulary. Practice in composition, conversation, and diction.

213 **Approches Critiques et Théoriques**

F Higginson, B. Mahuzier, D. Sedley

This course provides exposure to influential 20th-century French theorists while bringing these thinkers to bear on appropriate literary texts. It hones students' critical skills while expanding their knowledge of French intellectual history. The explicitly critical aspect of the course will also serve students throughout their coursework, regardless of field. *Not offered in 2002-03.*

216 **Le Rire** HU

J. Doner

An examination of laughter and its role in French literature through the ages. The universals of the comic tradition - recurrent techniques, stock characters, evergreen themes - as well as their adaptation within a particular context, whether social, political, historical, or literary, are considered. Works are selected from different periods (medieval through 20th century), from different genres (drama, tales, novels, poetry), and for the 20th century, from two media (print and film). *Not offered in 2002-03.*

246 **Medieval Women** SO (Also called Bryn Mawr History 246)

G. Armstrong, Staff

A study of the role of women in selected societies of medieval Europe (from Rome to Early Renaissance) with particular attention to the historical activities and literary portrayal of women in the 12th century. May be offered for interdisciplinary major when written work is presented in French. In English, with an extra weekly session in French. *Prerequisite:* French 101, History 111 or equivalent. *Not offered in 2002-03.* (Replaced by 201.)

248 **Histoire des Femmes en France** HU

B. Mahuzier

A study of women and gender in France from the Revolution to the present. The course pays

particular attention to the role of women in the French Revolution (declarations, manifestos, women's clubs, salons, etc.) and in the post-revolutionary era, as well as more contemporary feminist manifestations in France since Simone de Beauvoir's *Deuxième Sexe* and the flow of feminist texts produced in the wake of May '68. *Not offered in 2002-03.*

250 Introduction à la Littérature Francophone HU

K. Anyinéfa

A study of male and female writers of Black Africa, Arab North Africa, and the Caribbean. *Not offered in 2002-03.*

251 La Mosaïque France HU

Staff

A study that opposes discourse of exclusion, xenophobia, racism and the existence of a mythical, unique French identity by examining 20th-century French people and culture in their richness and variety, based on factors like gender, class, region, colonization and decolonization, immigration, and ethnic background. Films and texts by Beauvoir, Ernaux, Carles, Jakez Helias, Zobel, Duras, Cardinal, Begag, and Modiano. *Not offered in 2002-03.*

252 La Vision de la Femme dans la Littérature Française du XVIIIe et XVIIIe siècles HU

C. Lafarge

The vision of woman in representative French authors from Madame de Lafayette to Madame de Charrière. Novels and essays written by both men and women are studied to illustrate the variations of the vision during these two centuries. *Not offered in 2002-03.*

255 Cinéma Français/Francophone et (Post-)Colonialisme

K. Anyinéfa

A study of cinéastes from Black Africa, Arab North Africa, and the Caribbean whose films treat the colonial and postcolonial experience.

260 Stylistique et Traduction HU

R. Cousin, J. Doner

Intensive practice in speaking and writing. Conversation, discussion, advanced training in grammar and stylistics, translation of literary and nonliterary texts, and original composition.

262 Débat, Discussion, Dialogue HU

Staff

Intensive oral practice intended to bring non-native French speakers to the highest level of proficiency through the development of debating and discussion skills. Topic for 2001-02: Sujets de débat scientifiques et sociaux. *Prerequisite:* French 260. *Not offered in 2002-03.*

291 La Civilisation Française SO (Also called Bryn Mawr History 291)

B. Mahuzier

A survey of French cultures and society from the Revolution to De Gaulle's Republic. Serves as one of the core courses for the interdisciplinary concentration. *Not offered in 2002-03.*

294 La Civilisation française: Les Origines SO

Staff

A study of the historical development of French civilization from its medieval origins to the end of Louis XIV's reign. Emphasis on the interconnections among politics, history of ideas, and aesthetics. Among topics of particular importance treated in this course are romanesque versus Gothic art and architecture; medieval theocentrism versus Renaissance humanism; and

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the political, scientific, and philosophical foundations of French Classicism. This course serves as one of the introductory courses for the interdisciplinary concentration. *Not offered in 2002-03.*

295 La Ville de Paris au XVIIe et au XVIIIe siècles SO (Also called Growth and Structure of Cities 295)

C. Lafarge

A study of the geography, architecture, economics, sociology, and politics of Paris in these two periods. *Not offered in 2002-03.*

298 La France Depuis 1945 SO

Staff

This in-depth analysis of contemporary France, at a more advanced level than 105, explores the political, social, and cultural foundations of today's France from 1945 on. The course examines the main historical events (reconstruction after World War II, the colonial wars in Indochina and North Africa, De Gaulle's foundation of the Fifth Republic, the socialist experiment in 1981) and the history of ideas (the Sartre-Camus opposition, structuralism, theoretical trends in literature, cinema and the theater). Includes an introduction to the cultural variety of Francophonie. *Not offered in 2002-03.*

299 Littérature, Histoire, et Société de La Révolution à La Première Guerre Mondiale

B. Mahuzier

A study of the language and political, social and ethical messages of literary texts whose authors were "engagés" in the conflicts, wars, and revolutions that shook French society from the advent of the 1789 Revolution to the First World War. Counts for either the literary or interdisciplinary track.

302 Le Printemps de La Parole Féminine: Femmes écrivains des débuts (Also called Comparative Literature 302) HU

G. Armstrong

This study of selected women authors from the French Middle Ages, Renaissance and Classical period—among them Marie de France, the troubairitz, Christine de Pisan, Marguerite de Navarre and Madame de Lafayette—examines the way in which they appropriate and transform the male writing tradition and define themselves as self-conscious artists within or outside it. Particular attention will be paid to identifying recurring concerns and structures in their works, and to assessing their importance to female writing; among them, the poetics of silence, reproduction as a metaphor for artistic creation, and sociopolitical engagement. *Not offered in 2002-03.*

306 Libertinage et érotisme au XVIIIe siècle HU

C. Lafarge

A close study of works representative of the 18th-century French novel, with special attention to the memoir novel (Marivaux and Prévost), the philosophical novel (Diderot and Voltaire), and the epistolary novel (Rousseau, Laclos and Rétif de la Bretonne). *Not offered in 2002-03.*

307 Le Théâtre du XVIIIe siècle: Marivaux, Beaumarchais

C. Lafarge

A study of the two most famous writers of comedies in the 18th century and of the contributions of authors like Lesage, Voltaire, and Diderot, their place in the history of the genre, and an explanation of why the theater was one of the great passions of the century. *Not offered in 2002-03.*

308 **Baudelaire** HU

B. Mahuzier

A study of the *Fleurs du Mal* and the *Petits Poèmes en prose*, with emphasis upon the modernité of themes and techniques. Attention is also given to the *Paradis artificiels* and a selection of Baudelaire's critical writings as primary sources of later definitions of the nature and function of the symbol in poetry and other arts. *Not offered in 2002-03.*

312 **Advanced Topics: Littérature antillaise** HU

K. Anyinéfa, R. Graves

An in-depth study of a topic or movement in French literature. For 2002-03: Littérature antillaise and Literary Constraints.

315 **Femmes écrivains du XIXe et du XXe siècle: George Sand, Colette, Simone de Beauvoir** HU

Staff

A study of the fiction of these three major women writers, each of whom addressed some of the issues of feminism, but were more largely concerned with the problem of identity at the height of the Romantic era, La Belle Epoque, and the Age of Existentialism. *Not offered in 2002-03.*

319 **Verlaine et Rimbaud** HU

Staff

A close study of the major works of the two poets, with special attention to their distinctive evolution, treatment of archetypal themes and images, and experiments with poetic form and language. *Not offered in 2002-03.*

320 **La France et ses Orients**

P. Higginson

This course introduces students to the concept of Orientalism, as proposed by Edward Saïd, through readings of a number of canonical writers of the 19th and 20th centuries from North Africa, the Middle East, and France. In the process, students learn how to read diachronically and cross-culturally.

325, 326 **Etudes avancées de civilisation** HU

B. Mahuzier

An in-depth study of a particular topic, event or historical figure in French civilization. For 2002-03: Crime et criminalité.

350 **Voix médiévales et échos modernes** HU

G. Armstrong

A study of selected 19th- and 20th-century works inspired by medieval subjects, such as the Grail and Arthurian legends, and by medieval genres, such as the roman, saints' lives, or the miracle play. Included are works by Hugo, Flaubert, Claudel, Anouilh, Bonnefoy, Genevoix, Gracq, and Yourcenar. *Not offered in 2002-03.*

354 **Ecrivains/théoriciens engagés**

B. Mahuzier

398-399 **Senior Conference**

G. Armstrong, K. Anyinéfa

A weekly seminar examining representative French and Francophone literary texts and cultur-

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al documents from all periods, and the interpretive problems they raise. Close reading and dissection of texts, complemented by extensive secondary readings from different schools of interpretation, prepare students to analyze others' critical stances and to develop their own. In addition to short essays and oral presentations, students write a long paper each semester and end the year with Senior Comprehensives, which consist of an oral explication of a French literary text or cultural document and a four-hour written examination.

Courses that may be offered by current faculty as student interest and circumstances permit:

- 220 **Dadaïsme et Surréalisme** (Higginson)
- 301 **Le roman courtois** (Armstrong)
- 307 **Marivaux et Giraudoux** (Lafarge)
- 309 **Du symbolisme au naturalisme** (Mahuzier)
- 313 **Poètes du XXe siècle** (Staff)

GENERAL PROGRAMS

These courses, offered by visiting professors and members of the various departments of the College, are in different ways outside the major programs of the departments. They may be introductory in approach, or they may be interdisciplinary, bringing the insights and techniques of one discipline to bear on the problems important to another. They attempt to introduce students to intellectual experiences which are different from the ones that are available in our departmental curricula. These courses have no prerequisites except where explicitly stated.

Professor **Linda Gerstein**, Chairperson

Professor **Melvin Santer**, Emeritus

Associate Professor **M. Kaye Edwards**

Assistant Professor **Martin Hébert**

Assistant Professor **Shizhe Huang**

G. Richard Wynn, Vice President for Finance and Administration

Visiting Professor **Bettina Hoerlin**

Visiting Professor **Charles Stegeman**

Visiting Associate Professor **Ed Sikov**

Visiting Assistant Professor **Eric Raimy**

Mellon Post-Doctoral Fellow in Humanities **Claudia Milian**

COURSES

101a **African Civilizations** SO

K. Ngalamulume

An interdisciplinary introduction to Africana studies, emphasizing change and response among African peoples in Africa and outside. *Not offered in 2002-03.*

103b **Introduction to Probability and Statistics** NA/QU (Also called Mathematics 103b)

W. Pribitkin

Basic concepts and methods of elementary probability and quantitative reasoning, with practical applications of sample spaces, conditional probabilities, random variables, expectation values, variance, elementary combinatorics, and data analysis. No prerequisites.

108b **Physics of Modern Medicine** NA (Cross-listed as Physics 108b)

S. Amador Kane

This course introduces the nonscientist to many of the technologies used in modern medicine and the basic physical principles which underlie them. Topics will include: laser surgery, ultrasound imaging, laparoscopic surgery, diagnostic X-ray imaging, nuclear medicine, computed tomography (CAT) scans, magnetic resonance imaging (MRI) scans, and radiation therapy. Safety issues involved in the use of each technique will be considered in depth, and discussions will include societal implications of the growing use of technology in medicine. Not intended for students majoring in the natural sciences. No prerequisites. *Offered in 2002-03 and alternate years.*

110b **About Time** NA (Also listed as Physics 110b)

J. Gollub

An in-depth exploration of the concept of time, including the counter-intuitive aspects of Einstein's theory of relativity, the time reversability of some microscopic phenomena, the origin of irreversibility as a consequence of chaos and statistics, and the notion of time travel in science and science fiction. The problem of measuring time will be discussed, including the development of remarkable technologies such as the Global Positioning System. Applications of time measurement to important scientific problems will be discussed. *Not offered in 2002-03.*

111a Introduction to Peace and Conflict Studies SO

M. Hébert

A broad and interdisciplinary overview of the study of conflict management. Areas to be introduced will include interpersonal conflict and conflict management, alternative dispute resolution (ADR) and the law, community conflict and mediation, organizational, intergroup and international conflict and conflict management. This course will also serve as a foundation course for students in or considering the peace studies concentration. (Satisfies the social justice requirement.)

113a Introduction to Syntax HU

S. Huang

The investigation of sentence structures in human language.

114b Introduction to Semantics HU

S. Huang

The study of meaning in human language.

130a Foundations of Rigorous Thinking NA (Also called Computer Science 130a)

S. Lindell

Develops rigorous thinking skills through the linguistic foundations of mathematics: logic and sets. Emphasis on using symbology to represent abstract objects and the application of formal reasoning to situations in computer science. Designed to serve as a transition course for non-science students who might wish to do advanced work in computer or cognitive science. No prerequisites.

151b Case Studies in Chemistry NA (Also listed as Chemistry 151b)

T. Newirth

A general audience course which explores a particular topic in chemistry in some depth. Previous topics have been the chemistry of food, the chemistry of energy sources and sinks, and atmospheric chemistry. Students who have credit for any other chemistry course will not be admitted. *Not offered in 2002-03.*

153a Atmospheric Chemistry: Implications for the Future (Also called Chemistry 153a) NA

C. Miller

This course will focus on providing concerned citizens with the scientific foundations necessary to participate effectively in the ongoing national and international policy debates over air quality. Topics will include: the Antarctic ozone hole, acid rain, greenhouse gases, and global climate change. Critical reading and discussion of the Montreal Protocol, the Kyoto Accord, and similar documents will be a major component of the course. *Enrollment is limited to 50 students.*

203b Language, Culture, and Society

E. Raimy

An investigation of how language varies across situations, users, and cultures, by using the methods of linguistic analysis. The ramifications and the positive/negative perceptions of language variation with respect to race, gender, education, and other political issues.

214a Historical Intro to Microbiology NA

M. Santer, U. Santer

The emergence of microbiology in the 19th century, with the discovery of bacteria and viruses, and the consequent development of the fields of genetics, biochemistry, cell biology, ecology, and evolution. Including a reading of classical papers in the field and student-led semi-

nars, the course is intended for a general audience. *No prerequisites. Not open to freshmen. Enrollment limited to 30 students.*

215a **Sport and Society** SO

G. Kannerstein, A. Kitroeff

This course examines the evolution of sport in the Americas and Europe in the 19th and 20th centuries from its amateur beginnings to its transformation into a lucrative business with a global scope in the late 20th century. The course is divided into three broad chronological sections: the 19th century, the 20th century through World War II, and the post-1945 era. In each of these segments we are concerned with the way social changes affected the way sport was played, administered, and experienced as a spectacle, and how it was treated as an important social institution. *Prerequisite:* Freshman Writing. *Enrollment limited to 50 students. Not offered in 2002-03.*

221a **Issues in Public Health** NA

K. Edwards

This course will examine the interplay of biomedical, societal, and ethical concerns in the field of public health, analyzing the effectiveness and appropriateness of public health responses. In fall 1999, the course will explore the multi-disciplinary aspects of smoking; the epidemiology and pathology of tobacco-related diseases; the neuropsychological aspects of addiction; the economics and politics of tobacco products; the influence of media and popular culture on market demand; the tension between individual rights and public health. The course may be organized around other public health problems in subsequent years.

Prerequisites: an introductory biology course (H100, H200, B101, B102 or B103); Calculus (H113 or B101) required; Statistics (H103 or H203 or B104) recommended. *Enrollment limited to 25 students. Not offered in 2002-03.*

222a **Issues in Urban Public Health** SO

B. Hoerlin

This course incorporates a broad definition of health and focuses on major urban problems such as infant mortality, teens at risk, violence, substance abuse, and HIV/AIDS. Using Philadelphia as an example, the course considers how local government, hospitals, and managed care systems try to address issues, and the social-economic-racial-political barriers involved. There will be guest speakers from the Philadelphia area. *Enrollment limited to 25 students.*

225b **Introduction to Hitchcock and Film Studies** HU

D. Kight

This course, which provides the necessary foundation for reading criticism and writing analytic papers about film, has two main goals. The first is to introduce students to the themes of the Hitchcock oeuvre through representative films, as well as to relevant secondary literature on the films studied. The second is to expose students to certain key concepts of film theory (e.g. auteurism, gender, psychoanalytic, reception, film noir) and film vocabulary. The course will thus familiarize students both with Hitchcock and with film studies in general. Not open to first-year students. *Enrollment limited to 50 students. Not offered in 2002-03.*

226a **Sex and Gender on Film: Screwballs, Devil Dames, and Closet Cases** HU

E. Sikov

Classical Hollywood cinema has the reputation of being repressive and limiting in its representations of sexuality. Look again. From D.W. Griffith's silent films and the screwball comedies of the '30s to the sadistic film noirs of the '40s, the hysterical comedies of the breast-

GENERAL PROGRAMS

obsessed '50s, and the splatter/horror films of the '60s and '70s, American films are much more disruptive than they're often given credit for being. Through screenings, and readings from critical essays, and key film theories, this course uses American movies to raise questions about gender, sex, representation, and culture. This course will also introduce the basic technical and analytical vocabulary of film. Not open to first-year students. *Enrollment limited to 75 students.*

239b Introduction to Linguistics HU

E. Raimy

An introductory survey of linguistics as a field. This course examines the core areas of linguistic structure (morphology, phonology, syntax, semantics), pragmatics, and language variation in relation to language change. The course provides rudimentary training in the analysis of language data, and focuses on the variety of human language structures and on the question of universal properties of language.

241b The Economics and Finances of Higher Education SO

R. Wynn

This course explores the economics of higher education as part of the non-profit sector of the U.S. economy, focusing specifically on the business and financial structure of Haverford College as the prototype of an independent, not-for-profit organization. The course begins with an overview of the non-profit sector and the higher education industry, and includes such topics as long range and strategic planning, budgeting, endowment management, socially responsible investing, and assessing financial health, as well as other topics.

242a Chinese Language in Culture and Society HU (Also called East Asian Studies 242)

S. Huang

An examination of the use and function of the Chinese language in culture and society, both within mainland China and in the Chinese diaspora. Topics include: language standardization, language planning, language and dialects, language and ethnicity, language and politics, and linguistic construction of self and community.

246b Russian Literature and Society HU (Also listed as History 246b and Russian 246b)

L. Gerstein

The social context of the Russian novel in the 19th and 20th centuries and the uses to which literature has been put in a society of restricted political expression. Readings (in translation) in literary and historical sources. *Not offered in 2002-03.*

248a Disease and Discrimination NA (Also listed as Biology 248a)

K. Edwards

This course explores the biological and cultural dimensions of infectious diseases, such as leprosy, syphilis, AIDS and newly emerging microbial diseases; and analyzes the nature of discrimination against individuals and groups with these diseases. It examines aspects of microbiology, immunology, pathology and epidemiology; and explores how microbes challenge socially constructed identities of class, gender, nationality, race, religion and sexuality. *Prerequisites:* Biology 145 or 150 or 200 (or equivalent). (Satisfies the social justice requirement.) *Not offered in 2002-03.*

250b Literacies and Education SO

A. Cook-Sather, A. Lesnick, or J. Cohen

A critical exploration of what counts as literacy, who decides, and what the implications are for teaching and learning. Students explore theoretical and historical perspectives on literacy, individual experiences and constructions of literacy, literacy in different communities, and lit-

eracies which work within and against the structures of schooling. *Enrollment limited to 25* (writing intensive). Priority given to students pursuing certification or a minor in educational studies. (Satisfies social justice requirement.)

252a Women, Medicine and Biology SO (Also listed as Biology 252a)

K. Edwards

This course examines how biological science describes women's bodies and behaviors by analyzing arguments that certain traits are sexually dimorphic, genetically determined and hormonally sensitive. It also examines how the medical profession responds to women's health concerns by analyzing the biomedical and political factors influencing research and treatments in such areas as breast cancer, reproductive medicine, and AIDS in women.

Enrollment limited to 25 students with preference given to Feminist and Gender Studies Concentrators. (Satisfies the social justice requirement.)

273b Analysis of the Visual Vocabulary HU

C. Stegeman

The course analyzes and enhances observational skills, through slide presentations, student presentations, and student critiques. The learning experience is monitored by videotapes.

Enrollment limited to 64 students.

275b Constitutional Law: Creating Liberty Through Text and Structure SO

B. Koukoutchos

This introductory course will explore the ways in which the Constitution is both the product of historical pressures and an artifact of intelligent design. The broad theme is an examination of the means by which the Constitution tried to safeguard individual liberty: structural mechanisms, textual guarantees of rights, and right deemed explicit in our concept of ordered liberty. *Enrollment limited to 75 students. Not offered in 2002-03.*

276a Central America in the U.S. Imaginary HU

C. Milian

(Satisfies the social justice requirement.)

277b African American/Latino Autobiography and Memoir HU

C. Milian

(Satisfies the social justice requirement.)

280a Indigenous Movements (MesoAmerica) SO (Also called Anthropology 280a)

M. Hébert

An examination of indigenous activity in the Americas and Oceania from the colonial period through the present, this course will focus on issues such as first contacts and the establishment of domination structures, indigenous politico-religious movements, and the interaction of indigenous people with modern states. In this last context, we will examine cultural survival and revival movements, Indigenism, autonomist claims and praxis, as well as armed struggle as efforts toward recognition and demarginalization. *Prerequisite:* One course in anthropology or peace and conflict studies.

282b Structure of Chinese SO (Also listed as East Asian Studies 282b)

S. Huang

This course is designed to acquaint students with both the syntactic and semantic structures of Mandarin Chinese and the theoretical implications they pose to the study of natural language.

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Students will have an opportunity to further their understanding of linguistic theories and to develop skills in analyzing a non-Indo-European language systematically. *Prerequisite:* General Programs 219, 262, or consent of the instructor. *Not offered in 2002-03.*

290b **Interdisciplinary Perspectives on Gender**

T. Tensuan

Bi-college course for feminist and gender studies concentration.

295a **Gender and Science**

A. Brokes

An overview of the central questions, problems, and concerns that arise when the analytical lens of gender is used to examine the nature and practice of science.

320a **Politics and the Imaginary** SO (Also called Anthropology 320a)

M. Hébert

The use of symbols, rituals, and myths in politics appears to be one of the great cross-cultural constants. In this course, we will examine the role and nature of these reputedly “irrational” elements in a wide variety of social and cultural settings ranging from small indigenous communities to modern political institutions. We will also look at the functions of symbolic struggles (re-interpretation of the past, myth making, propaganda, public relations) in peaceful as well as aggressive mobilizations.

322b **Field Methods in Peace and Conflict Studies** SO (Also called Anthropology 322b)

M. Hébert

This course will address the problem of how to gather reliable data on a given conflict. In doing so, we will take a critical look at traditional sources used in conflict studies, such as the media and official accounts, and we will try to expand them by taking a look at first-hand data gathering in conflict settings. During the semester, students will conduct their own research on some local conflict using written and first hand accounts while reflecting on methodical questions as well as the ethical issues surrounding the researcher’s position in social conflicts.

494f **Senior Conference in Science and Society** NA

K. Edwards

A conference course for students writing their final paper for the Biology, Medicine, and Society Program. Each student will produce a paper which expands significantly on what they have learned through their own fieldwork, research, or advanced course work in this program. Students will meet individually with the instructor to discuss their written work. *Prerequisite:* Completion or concurrent fulfillment of requirements for the Biology, Medicine and Society Program. Limited to Senior students in the Science and Society Program.

GEOLOGY

The department seeks to make students more aware of the physical world and its development through time. The subject includes a study of the materials of which the Earth is made; of the physical processes which have formed the Earth, especially near the surface; of the history of the Earth and its organisms; and of the various techniques necessary to investigate Earth processes and history. Each introductory course is designed to cover a broad group of topics from a different perspective. Students may elect any of the 100-level courses. Geology applies many scientific disciplines to investigate problems of the Earth. Fieldwork is an essential part of geologic training and is part of many classes and of most independent research projects.

A minor in geology consists of Geology 101 or 103, 102 and any four of the following: Geology 201, 202, 203, 204, 205, 206 and 236.

The environmental studies concentration at Bryn Mawr allows students to explore the interactions between the geosphere, biosphere, and human societies. The concentration, offered jointly by the Departments of Anthropology, Biology, Geology, and Growth and Structure of Cities, takes the form of concentrations in each of these departments. The environmental concentration in geology consists of the five core courses required of all environmental studies concentrators—Biology 101, 220, Anthropology 101, Geology 103, and the senior seminar in environmental studies—as well as twelve courses specific to the Environmental Concentration in Geology: Chemistry 101 or 103, 104, Mathematics 101, 102, Geology 101, 201, 202, 205, 302 or 312 or 313, 403, one additional 300-level course in geology or biology, and one additional course in anthropology. Students are encouraged to take additional environmentally oriented courses in the social sciences and the humanities, such as Economics 105, 213, 214, and 234, Growth and Structure of Cities 185, and Political Science 222.

Professor Maria Luisa Crawford, chairperson

Professor William Bruce Saunders, major advisor

Assistant Professor Donald C. Barber

Assistant Professor Arlo B. Weil

Lecturer and Laboratory Coordinator Blythe L. Hoyle

MAJOR REQUIREMENTS

Fourteen courses are required for the major: Geology 101 or 103, 102, 201, 202, 203, 204, and 205; two courses each in two of the following: chemistry, mathematics, physics; Geology 403; and either two advanced geology courses or one advanced geology course and an additional upper-level course in chemistry, mathematics, or physics.

Additional courses in the allied sciences are strongly recommended and are required by most graduate schools. A student who wishes to follow a career in geology should plan to attend a summer field course, usually following the completion of the 200-level courses.

All geology majors undertake a research project (Geology 403) in the senior year. A student may elect to do a one or two semester project with the approval of the department.

REQUIREMENTS FOR HONORS

Honors are awarded to students who have outstanding academic records in geology and allied fields, and whose research work is judged by the faculty of the department to be of the highest quality.

COURSES

101 **How the Earth Works** NA

A. Weil

Three lectures, one afternoon of laboratory or fieldwork a week, and a one-day required field trip on a weekend. An introduction to the study of planet Earth—the materials of which it is made, the forces that shape its surface and interior, the relationship of geological processes to people, and the application of geological knowledge to the search for useful materials.

Laboratory and fieldwork focus on learning the tools for geological investigations and applying them to the local area and selected areas around the world.

102 **Earth History** NA

W. B. Saunders

Three lectures, one afternoon of laboratory a week. A required three-day field trip is taken in the late spring, for which an extra fee is collected. The history of the earth from its beginning and the evolution of the living forms which have populated it.

103 **Introduction to Earth Systems and the Environment** NA

D. Barber

Three lectures and one lab per week, and includes a mandatory three-day field trip for which an extra fee is collected. This integrated approach to studying the Earth focuses on interactions between geologic, biologic, climatic, and oceanographic processes. The first half of the course provides a basic understanding of systems operating within the geosphere, atmosphere, hydrosphere and biosphere. The second half of the course is devoted to developing an understanding of the interactions among these systems, including the consequences of population and economic growth, industrial development, and land use changes.

201 **Crystallography and Optical Mineralogy** NA

M. L. Crawford

Lecture three hours, laboratory three hours a week. The study of morphological and optical crystallography. Description of the external symmetry of crystalline solids and instruction in the use of the polarizing microscope for use in identifying minerals. Crystal chemistry of representative ionic and covalent atomic structures and silicate polymer repeat groups.

Prerequisites: Geology 101 or 103 or Chemistry 101 or 103 and 104.

202 **Mineralogy and Crystal Chemistry** NA

M. L. Crawford

Lecture three hours, laboratory three hours a week. Descriptive and determinative hand specimen and optical mineralogy. The relation between the physical properties of minerals and their structures and chemical composition. The occurrence and the petrography of typical mineral association. *Prerequisite:* Geology 201.

203 **Invertebrate Paleobiology** NA

W. B. Saunders

Lecture three hours, three hours of laboratory a week. Biology, evolution, ecology, and morphology of the major marine invertebrate fossil groups. A semester-long research project introducing microcomputer-based morphometric analysis will be based on material collected on a three-day trip to the Tertiary deposits of the Chesapeake Bay.

204 **Structural Geology** NA

A. Weil

Three lectures, three hours of laboratory a week, plus weekend fieldtrips. Recognition and description of deformed rocks, map reading, and an introduction to the mechanics and patterns of deformation. *Prerequisites:* Geology 101 and Mathematics 101.

205 Sedimentary Materials and Environments NA

D. Barber

Three lectures, one laboratory a week, with at least one separate day-long field trip. An introduction to the principles of sedimentology, depositional processes, facies analysis and stratigraphy. We will explore the controls on composition and texture of sedimentary materials—clastic, carbonate and chemical, placing particular emphasis on understanding the physical, chemical, and biological processes governing sedimentation in different environments. This information facilitates interpretation of sedimentary sequences and the development of facies models to aid in reconstructing past environmental conditions. *Prerequisites:* Geology 101, 102 or 103 or permission of instructor. Recommended: Geology 201, 202 and 203.

206 Energy, Resources, and Public Policy NA

Staff

Three hours of lectures a week. An examination of issues concerning the supply of energy and raw materials required by humanity. This includes an investigation of requirements and supply of energy and of essential resources, of the geological framework that determines resource availability, and of the social, economic, and political considerations related to energy production and resource development. *Prerequisite:* One year of college science. *Offered in alternate years. Not offered in 2002-03.*

209 Natural Hazards and Human Populations

D. Barber, A. Weil

Lecture three hours a week, with one day-long field trip. Discussion of Earth processes that occur on human time scales and their impact on humanity both past and present. We will quantitatively consider the past, current and future hazards presented by geologic processes, including earthquakes, volcanoes, landslides, floods and hurricanes. The course will include discussion of the social, economic, and policy contexts in which geologic processes become geologic hazards. Case studies will be drawn from contemporary and ancient societies.

Prerequisite: One year of college science or permission of the instructor.

236 Evolution NA (Cross-listed as Anthropology 236, and Biology 236)

R. Davis, S. Gardiner, and W. B. Saunders

Lecture/discussion three hours a week. The development of evolutionary thought is generally regarded as the most profound scientific event of the 19th century. Although its foundations are primarily in biology and geology, the study of evolution and its implications extends to many disciplines. This course emphasizes the nature of evolution in terms of process, product, patterns, historical development of the theory, and its application to interpretations of organic history. *Prerequisite:* A 100-level science course or consent of instructors.

301 Geochemistry of Crystalline Rocks NA

M. L. Crawford

Three lectures, occasionally augmented by fieldwork. Principles and theory of various aspects of geochemistry, to include elementary thermodynamics and phase diagrams, an introduction to isotopes, and applications of chemistry to the study of igneous and metamorphic rocks.

Prerequisites: Geology 202, Chemistry 101 or 103, and 104, or consent of instructor. *Not offered in 2002-03.*

302 Low Temperature Geochemistry NA

B. Hoyle

Three hours of lectures a week, and problem sessions. The geochemistry of Earth surface processes. Emphasis is on the chemistry of surface waters, atmosphere-water, environmental

chemistry, chemical evolution of natural waters, and pollution issues. Fundamental principles are applied to natural systems with particular focus on environmental chemistry.

Prerequisites: Chemistry 103, 104, and Geology 202, or two 200-level chemistry courses, or consent of instructor.

303 **Advanced Paleontology** NA

W. B. Saunders

Three lectures, three hours of laboratory, with occasional fieldwork. Principles, theory, and application of various aspects of paleobiology such as evolution. Seminar-based, with a semester-long research project. *Prerequisite:* Geology 203 or consent of instructor.

304 **Tectonics**

A. Weil

Lecture three hours, one problem session a week. Plate tectonics and continental orogeny are reviewed in light of the geologic record in selected mountain ranges and certain geophysical data. *Prerequisite:* Geology 204. *Not offered 2002-03.*

305 **Igneous and Metamorphic Petrology**

M. L. Crawford

Three lectures, three hours of laboratory or equivalent fieldwork a week; occasional weekend field trips. The origin, mode of occurrence, and distribution of igneous and metamorphic rocks. The focus is on the experimental and field evidence for interpreting rock associations and the interplay between igneous and metamorphic rock genesis and tectonics. *Prerequisites:* Geology 201, 202, and Chemistry 101 or 103, and 104. *Not offered 2002-03.*

306 **Advanced Sedimentary Geology** NA

D. Barber

Three hour lecture/discussion a week, and a weekend field trip. For those students wishing to pursue advanced study of sediments, sedimentary facies and depositional processes. This topically focused course involves the collection and analysis of sedimentological and/or geomorphological data. *Prerequisites:* Geology 202 and 205, or consent of instructor. *Not offered 2002-03.*

310 **Introduction to Geophysics**

Staff

Three class hours per week. What do we know about the interior of the Earth? How do we know it? Geophysical observations of the Earth's magnetic field, gravity field, heat flow, radioactivity, and the propagation of seismic waves through the Earth each provide a means to study the mechanisms of plate tectonics and provide a window to the remote (subsurface) regions of the Earth. Geophysical techniques are some of the principal tools used in the exploration for mineral and energy resources; in the monitoring of groundwater, earthquakes and volcanoes; and in the investigation of other planets in our solar system. This course is designed for all geology majors, for astronomy majors interested in the study of planets, and for physics majors interested in how physics is applied to the study of the Earth.

Prerequisites: Geology 101 and Physics 101-102.

312 **Quaternary Geology**

D. Barber

Three class hours a week, including hands-on data analysis, and one day-long field trip. The Quaternary Period comprises the last 1.5 million years of Earth history, an interval dominated by climate fluctuations and the waxing and waning of large northern hemisphere ice sheets.

This course will cover the many types of geological evidence, from glacial geomorphology to deep-sea geochemistry, that are used to reconstruct ocean and atmospheric conditions (e.g., temperature) through the Quaternary. We will also consider recent non-glacial deposits and landforms, including coastal features, but the general emphasis is on how the landscape has evolved within the context of the Quaternary climate variability. *Prerequisite:* Geology 101, 102 or 103.

313 Groundwater, Contamination, and Remediation

Staff

Lecture three hours, laboratory three hours, plus one weekend field trip. This course reviews the science and policy of ground water contamination. Part I introduces groundwater hydrogeology and tools for groundwater-resource characterization. Part II covers groundwater contamination and remediation schemes. We also discuss the role of groundwater in geologic processes, numerical modeling of groundwater flow, and public policy regarding contamination and cleanup. *Prerequisite:* Geology 101 or 103. Co-requisite: Mathematics 101. *Not offered 2002-03.*

314 Marine Geology

D. Barber

An introduction to the structure and tectonics of ocean basins, their sedimentary record, and the place of marine systems in the geologic record. Includes an overview of physical and chemical oceanography, and a review of how paleoceanographic research has shaped our knowledge of the Earth's climate history. Meets twice weekly for a combination of lecture, discussion and hands-on exercises, including one day-long field trip. *Prerequisite:* Geology 101, 102 or 103. *Not offered 2002-03.*

336 Evolutionary Biology: Advanced Topics NA

W. B. Saunders, S. Gardiner

One three-hour discussion per week. A seminar course on current issues in evolution. Discussion based on readings from the primary literature. Topics vary from year to year. *Prerequisite:* Anthropology/Biology/Geology 236 or consent of instructor.

397 Senior Seminar in Environmental Studies

D. Barber

403 Independent Research

Staff

An independent project in the field, laboratory, or library culminating in a written report and oral presentation.

GRADUATE COURSES

Graduate seminars in the Department of Geology are open to qualified undergraduates with the permission of the instructor, the student's dean and the Dean of the Graduate School of Arts and Sciences.

GERMAN AND GERMAN STUDIES

The Department of German draws upon the expertise of the German faculty at both Bryn Mawr and Haverford Colleges to offer a broadly conceived German studies program, incorporating a variety of courses and major options. The purpose of the major in German is to lay the foundation for a critical understanding of German culture in its contemporary international context and its larger political, social, and intellectual history. To this end, we encourage a thorough and comparative study of the German language and culture through its linguistic and literary history, systems of thought, institutions, political configurations, and arts and sciences. The German program aims, by means of various methodological approaches to the study of another language, to foster critical thinking, expository writing skills, understanding of the diversity of culture(s), and the ability to respond creatively to the challenges posed by cultural difference in an increasingly multicultural world. Course offerings are intended to serve both students with particular interests in German literature and literary theory and criticism and those interested in studying German and German-speaking cultures from the perspective of communication arts, film, history, history of ideas, history of art and architecture, history of religion, institutions, linguistics, mass media, philosophy, politics, urban anthropology, and folklore.

A thorough knowledge of German is a common goal for both major concentrations. The objective of our language instruction is to teach students communicative skills that would enable them to function effectively in authentic conditions of language use and to speak and write in idiomatic German. A major component of all German courses is the examination of issues that underline the cosmopolitanism as well as the specificity and complexity of contemporary German culture. Many German majors can and are encouraged to take courses in interdisciplinary areas, such as comparative literature, history, political science, philosophy, music, and feminist and gender studies, where they read works of criticism in these areas in the original German.

At Haverford College

Associate Professor **Ulrich Schönherr**, chairperson

Visiting Assistant Professor **Christopher Pavsek**

At Bryn Mawr College

Fairbank Professor in the Humanities and Professor of German and Comparative Literature

Azade Seyhan

Associate Professor **Imke Meyer**

Visiting Assistant Professor **David Kenosian**

Affiliated Faculty

At Haverford College:

Professor of Philosophy **Kathleen Wright**

Associate Professor of Music **Richard Freedman**

At Bryn Mawr College:

Marjorie Walter Goodhart Professor of History **Jane Caplan**

Rufus M. Jones Professor of Philosophy **Robert J. Dostal**

Associate Professor of Political Science **Carol J. Hager**

Associate Professor of History of Art **Christiane Hertel**

MAJOR REQUIREMENTS

The German major consists of 10 units. All courses at the 200 or 300 level count toward the major requirements, either in a literature concentration or in a German studies concentration. A literature concentration normally follows the sequence 201 and/or 202; 205 or 206; or 214, 215; plus additional courses to complete the ten units, two of them at the 300 level; and finally one semester of Senior Conference. A German studies major normally includes 223 and/or 224; one 200- and one 300-level course in German literature; three courses (at least one should be a 300-level course) in subjects central to aspects of German culture, history, or politics; and one semester of German 321 (Advanced Topics in German Cultural Studies). Within each concentration, courses need be selected so as to achieve a reasonable breadth, but also a degree of disciplinary coherence. Within departmental offerings, German 201 and 202 (Advanced Training) strongly emphasize the development of conversational, writing, and interpretive skills.

MINOR REQUIREMENTS

A minor in German and German studies consists of seven units of work. To earn a minor, students are normally required to take German 201 or 202, four additional units covering a reasonable range of study topics, of which at least one unit is at the 300 level. The two remaining upper-level courses may be taken either within the German program, or be chosen with the approval of the department from the recommended electives for German studies majors.

STUDY ABROAD

Students majoring in German are encouraged to spend some time in German-speaking countries in the course of their undergraduate studies. Various possibilities are available: summer work programs, DAAD (German Academic Exchange) scholarships for summer courses at German universities, and selected junior year abroad programs (Berlin, Freiburg, Vienna).

Students of German are also encouraged to take advantage of the many opportunities on both campuses for immersion programs in German language and culture: residence in Haffner Hall foreign language apartments at Bryn Mawr College; the German Film Series; the German Lecture Series; the weekly *Stammtisch*, and more informal conversational groups attended by faculty members.

REQUIREMENTS FOR HONORS

Any student whose grade point average in the major at the end of the senior year is 3.8 or above qualifies by grade point average alone for departmental honors. Students whose major grade point average at the end of the senior year is 3.6 or better, but not 3.8, are eligible to be discussed as candidates for departmental honors. A student in this range of eligibility must be sponsored by at least one faculty member with whom s/he has done course work, and at least one other faculty member must read some of the student's advanced work and agree on the excellence of the work in order for departmental honors to be awarded. If there is a sharp difference of opinion, additional readers will serve as needed.

COURSES

001, 002 **Elementary German HU**

D. Kenosian, I. Meyer, C. Pavsek

Meets five hours a week with the individual class instructor, two hours with student drill instructors. Strong emphasis on communicative competence both in spoken and written German in a larger cultural context. This is a year-long course; both semesters are required for credit.

GERMAN AND GERMAN STUDIES

101, 102 **Intermediate German** HU

D. Kenosian, U. Schönherr, A. Seyhan

Thorough review of grammar, exercises in composition and conversation. Enforcement of correct grammatical patterns and idiomatic use of language. Study of selected literary and cultural texts and films from German-speaking countries. Two semesters.

201 **Advanced Training: Language, Text, Context** HU

I. Meyer, U. Schönherr, A. Seyhan

Emphasis on the development of conversational, writing, and interpretive skills through an introductory study of German political, cultural, and intellectual life and history including public debate, institutional practices, mass media, crosscultural currents, folklore, fashion, and advertising. Course content may vary.

202 **Advanced Training: Introduction to German Studies** HU

U. Schönherr, A. Seyhan

Interdisciplinary and historical approaches to the study of German language and culture. Selected texts for study will be drawn from autobiography, anthropology, Märchen, satire, philosophical essays and fables, art and film criticism, discourses of gender, travel writing, cultural productions of minority groups, and scientific and journalistic writings. Emphasis is on a critical understanding of issues such as linguistic imperialism and exclusion, language and power, gender and language, and ideology and language.

205, 206 **Introduction to Genre Studies** HU

I. Meyer, U. Schönherr, A. Seyhan

Introduction to the fundamentals of literary history through a discussion of various genres, e.g., lyric, drama, Märchen, novel, novella, film, and fragment and their place in history and the German literary canon. Two semesters; each can be taken independently. *Not offered in 2002-03.*

209 **Introduction to Literary Analysis: Philosophical Approaches to Criticism** (Cross-listed as Comparative Literature and Philosophy 209) HU

A. Seyhan

Course focuses on applications and implications of theoretical and aesthetic models of knowledge for the study of literary works.

212 **Readings in German Intellectual History** HU

C. Pavsek, A. Seyhan

Study of selected texts of German intellectual history, introducing representative works of G. E. Lessing, Immanuel Kant, Friedrich Schiller, Georg W. F. Hegel, Karl Marx, Friedrich Nietzsche, Sigmund Freud, Martin Heidegger, Werner Heisenberg, Theodor W. Adorno, Walter Benjamin, Ludwig Wittgenstein, Hannah Arendt, and Jürgen Habermas. The course aims to introduce students to an advanced cultural reading range and the languages and terminology of humanistic disciplines in German-speaking countries, and seeks to develop their critical and interpretive skills.

214, 215 **Survey of Literature in German** HU

C. Pavsek, U. Schönherr

A study of the major periods of German literature within a cultural and historical context, including representative texts for each period.

223, 224 Topics in German Cultural Studies HU

C. Pavsek, U. Schönherr

Course content varies. Topic for fall 2001: Gendered Identities, Post-Fascist Ideologies: East German Film and Fiction. Topic for spring 2002: German Cinema after World War II. *Not offered in 2002-03.*

262 Film and the German Literary Imagination HU

C. Pavsek

An overview of cinematic "translations" of literary works and their cultural and historical context. This course provides an introduction to narrative structures and strategies in fiction and film. It focuses on different ways written texts and visual media tell their stories, represent their times, and promote forms of cultural remembering.

299 Cultural Diversity and its Representations

A. Seyhan

This course focuses on representations of "foreignness" and "others" in selected German works since the 18th century, including works of art, social texts, and film, and on the cultural productions of non-German writers and artists living in Germany today. *Not offered in 2002-03.*

305 Modern German Drama

A. Seyhan, I. Meyer, U. Schönherr

Theory and practice of dramatic arts in selected plays by major German, Austrian, and Swiss playwrights from the 18th century to the present. *Not offered in 2002-03.*

320 Topics in German Literature (Cross-listed with Comparative Literature 320) HU

U. Schönherr, A. Seyhan

Course content varies. Some of the previous course offerings were Configurations of Femininity, The Birth of Modernism and the Aesthetics of Transgression (1800-1933), Nietzsche and Modern Cultural Criticism, Post-War Women's Writing and Contemporary German Fiction. Topic for spring 2003: Literature and New Media: From the Gutenberg-Galaxy to Cyberspace.

321 Advanced Topics in German Cultural Studies (Cross-listed with Comparative Literature 321 and Growth and Structure of Cities 321) HU

C. Hertel, I. Meyer

Course content varies. Topic for spring 2002: The City as Cultural Focus: Vienna 1900. *Not offered in 2002-03.*

399 Senior Conference

Staff

403 Independent Study

Staff

In addition to courses that focus on the study of German language, culture, and civilization offered by the Department of German, courses relating to any aspect of German culture, history, and politics given in other departments can count toward requirements for a major or minor in German studies. This is particularly true of courses in comparative literature, feminist and gender studies, film, history, history of art, music, philosophy, political science, and theater.

GERMAN AND GERMAN STUDIES

The following courses at Bryn Mawr College are recommended electives for German studies majors:

Comparative Literature 200 **Intro to Comparative Literature**
Comparative Literature 211 **The Holocaust and its Aftermath**
Comparative Literature 323 **Culture and Interpretation**
History 319 **Hitler, National Socialism, and German Society**
History of Art 237 **Northern Renaissance**
History of Art 348 **Topics in German Art**
Political Science 308 **Germany and its Neighbors**

The following Haverford courses are recommended electives for German studies majors:

Comparative Literature 216a **Fiction of the Holocaust**
Music 250b **Words and Music World**
Philosophy 225a **Hegel**
Philosophy 229b **Nineteenth Century Philosophy**

THE GROWTH AND STRUCTURE OF CITIES AT BRYN MAWR COLLEGE

The interdisciplinary cities major challenges the student to understand the relationship of urban spatial organization and the built environment to politics, economics, cultures and societies. Core introductory classes present analytic approaches that explore the changing forms of the city over time and analyze the variety of ways through which men and women have recreated urban life across cultures. With these foundations, students pursue their interests through classes in planning, architecture, urban social relations, urban history and the environmental conditions of urban life. Advanced seminars bring together these discussions by focusing on specific cities and topics.

Professor **Gary W. McDonogh**, director
Assistant Professor **Juan Arbona**
Assistant Professor **Carola Hein**, on leave 2002-03.
Senior Lecturer **Jeffrey A. Cohen**
Senior Lecturer **Daniela Holt Voith**
Visiting Studio Critic **Samuel Olshin**

Affiliated Faculty:

Professor **David J. Cast** (*History of Art*)
Professor **Linda Gerstein**
Professor **Laurie Hart**
Professor **Steve McGovern**
Professor **Marc Howard Ross** (*Political Science*)
Professor **Robert E. Washington** (*Sociology*)
Professor **James C. Wright** (*Classical and Near Eastern Archaeology*)
Helen Taft Manning Associate Professor of History **Madhavi Kale** (*History*)
Associate Professor **Harriet Newburger** (*Economics*)
Assistant Professor **Kalala Ngalamulume** (*History*)

MAJOR REQUIREMENTS

A minimum of 15 courses (11 courses in cities and four allied courses) are required to complete the major. Four introductory courses (185, 190, 229, and 253 or 254) balance formal and sociocultural approaches to urban form and the built environment, and introduce cross-cultural and historical comparison of urban development. These courses should be completed as early as possible in the first and second years; at least two of them must be taken by the end of the first semester of the sophomore year.

In addition to these introductory courses, each student selects six elective courses within the cities program, including cross-listed courses. At least two must be at the 300 level. In the senior year, a third advanced course is required. Most students join together in a research seminar, 398 or 399. Occasionally, however, after consultation with the major advisers, the student may elect another 300-level course or a program for independent research.

Both the cities program electives and the four or more related courses outside the program must be chosen in close consultation with the major advisers in order to create a strongly coherent sequence and focus. Note that those cities courses that are cross-listed with other departments or originate in them can be counted only once in the course selection, although they may be either allied or elective courses.

Students should also note that many courses in the program are given on an alternate-year basis. Many carry prerequisites in art history, economics, history, sociology and the natural sciences. Hence, careful planning and frequent consultations with the major advisers are particularly important. Special arrangements are made for double majors.

Given the interdisciplinary emphasis and flexibility of the program, it is rare that the programs of any two cities majors will be the same. Recurrent emphases, however, reflect the strengths of the major and incorporate the creative trajectories of student interests. These include:

Architecture and architectural history. Students interested in architectural and urban design should pursue the studio courses (226, 228) in addition to regular introductory courses. They should also select appropriate electives in architectural history and planning to provide a broad exposure to architecture over time as well as across cultural traditions. Affiliated courses in physics and calculus meet requirements of graduate programs in architecture; these may also be planned to incorporate design projects. Those students focusing more on the history of architecture should consider related offerings in the Departments of History of Art and Classical and Near Eastern Archaeology, and should carefully discuss selections with regard to study abroad in the junior year. Those preparing for graduate work should also make sure that they develop the requisite language skills. These students should consult as early as possible with Carola Hein, Daniela Voith, or Jeffrey Cohen, especially if they wish to pursue graduate study outside of the United States.

Communication. Students themselves have developed issues centered on the flow of knowledge and information in contemporary societies that are critical to the future of urban citizenry. Students interested in communication should develop a strong quantitative and qualitative background, complemented by courses in film and mass media as well as an appropriate senior thesis. Again, choices of study abroad in the junior year may be especially important in dealing with communication systems and issues outside of Europe and the United States. These students should consult with Gary McDonogh.

Planning and policy. Student's study plan should reflect a strong background in economics as well as relevant courses on social divisions, politics and policymaking, and ethics. As in other areas of interest, it is important that students also learn to balance their own experiences and commitments with a wider comparative framework of policy and planning options and implementation. This may include study abroad in the junior year as well as internships. Students working in policy and planning areas may consult with Juan Arbona or Gary McDonogh.

Other programs: Additional trajectories have been created by students who coordinate their interests in cities with law, medicine, public health or the fine arts, including photography, drawing, and other fields. The cities program recognizes that new issues and concerns are emerging in many areas. These must be met with solid foundations in the data of urban space and experience, cogent choices of methodology, and clear analytical writing and visual analysis. In all these cases, early and frequent consultation with major advisers and discussion with other students in the major are an important part of the cities program.

MINOR REQUIREMENTS

Requirements for the minor in the cities program are at least two out of the four required courses and four cities electives, of which two must be at the 300 level. Senior Seminar is not mandatory in fulfilling the cities minor.

CONCENTRATION IN ENVIRONMENTAL STUDIES

Students and faculty have forged strong ties with the environmental studies concentration, and cities is now moving to coordinate fully with that program. Students interested in environmental policy, action or design should take Geology 103 as a laboratory science and choose relevant electives such as Economics 234 or Political Science 222. They should also pursue appropriate science courses as affiliated choices and consider their options with regard to study abroad in the junior year. Consultation with Gary McDonogh and the director of the environmental studies concentration is advised early in the planning of courses.

Volunteerism and Internships

In addition to regular coursework, the cities program promotes student volunteer activities and student internships in architectural firms, offices of urban affairs and regional planning commissions. Students wishing to take advantage of these opportunities should consult with the advisers before the beginning of the semester.

Study Abroad and Off Campus

Programs for study abroad or off campus are also encouraged, within the limits of the Bryn Mawr and Haverford rules and practices. In general, a one-semester program is preferred, but exceptions are made. The cities program regularly works with off-campus and study-abroad programs that are strong in architectural history, planning and design as well as those that allow students to pursue social and cultural interests. Students interested in spending all or part of their junior year away must consult with the major advisers and appropriate deans early in their sophomore year.

COURSES AT BRYN MAWR COLLEGE

103 Introduction to Earth System Science and the Environment NA (Also called Geology 103)

D. Barber

For course description see Geology 103.

180 Introduction to Urban Planning SO

Staff

Lecture and technical class that considers broad issues of global planning as well as the skills and strategies necessary to the field. This may also be linked to the study of specific issues of planning like waterfront development or sustainability.

Not offered in 2002-03.

185 Urban Culture and Society SO (Also called Anthropology 185)

J. Arbona, G. McDonogh

The techniques of the social sciences as tools for studying historical and contemporary cities. Topics include political-economic organization, conflict and social differentiation (class, ethnicity and gender), and cultural production and representation. Both qualitative and quantitative methods are explored. Philadelphia features prominently in discussion, reading, and exploration.

190 The Form of the City: Urban Form from Antiquity to the Present (Also called History 190)

Staff

The city as a three-dimensional artifact. A variety of factors—geography, economic and population structure, politics, planning and aesthetics—are considered as determinants of urban form.

203 Ancient Greek Cities and Sanctuaries (Also called Classical and Near Eastern Archaeology 203)

J. C. Wright

207 Topics in Urban Studies

Staff

This course involves systematic intermediate-level study of urban issues and topics aimed at polishing skills in data collection, analysis and writing. Such study may focus on particular cities, sets of institutions across cities or global issues such as development, immigration, or mass media.

THE GROWTH AND STRUCTURE OF CITIES AT BRYN MAWR COLLEGE

212 **Medieval Architecture** (Also called History of Art 212)

Easton

213 **Taming the Modern Corporation** (Also called Economics 213)

M. H. Ross

214 **Public Finance** (Also called Economics 214)

Church

217 **Research Methods and Theories**

J. Arbona

This class engages quantitative, qualitative and spatial techniques in the investigation and analysis of urban issues. Form and topic will vary. *Enrollment may be limited.*

221 **U.S. Economic History** (Also called Economics 221)

Redenius

Not offered in 2002-03.

222 **Introduction to Environmental Issues** (Also called Political Science 222)

Hager

Not offered in 2002-03.

223 **Ancient Near Eastern Architecture and Cities** (Also called Classical and Near Eastern Archaeology 223)

Ellis

226 **Introduction to Architectural and Urban Design**

S. Olshin, D. Voith

An introduction to the principles of architectural and urban design. *Prerequisites:* some history of art or history of architecture and permission of instructor.

227 **Topics in the History of Planning**

Staff

An introduction to planning that focuses, depending on year and professor, on a general overview of the field or on specific cities or contexts.

228 **Problems in Architectural and Urban Design**

S. Olshin, D. Voith

A continuation of Cities 226 at a more advanced level. *Prerequisites:* Cities 226 or other comparable design work and permission of instructor.

229 **Comparative Urbanism** (Also called Anthropology 229 and East Asian Studies 229)

G. McDonogh

An examination of approaches to urban development that focuses on intensive study and systematic comparison of individual cities through an original research paper. Themes and cities vary from year to year, although a variety of cultural areas are examined in each offering. In spring 2003, the class will look at the impact of colonialism on global cities. Case studies will be drawn from Hong Kong/Macao, Belfast, French North Africa and the Mexican-American border.

232 Latin American Urban Development

J. Arbona

A theoretical and empirical analysis in a historical setting of the factors that have shaped the urban development of Latin America, with emphasis on the relationship between political and social change and economic growth.

234 Environmental Economics (Also called Economics 234)

M. H. Ross

246 Women's Narratives on Modern Migrancy, Exile and Diaspora (Also called Anthropology 246 and Comparative Literature 245)

Seyhan

250 Growth and Spatial Organization of American Cities

J. A. Cohen

Overview of the changes, problems and possibilities of American cities. Various analytical models and theoretical approaches are covered. Topics may include American urban history, comparisons among cities, population and housing, neighborhoods and divisions, and urban design and the built environment. *Not offered in 2002-03.*

253 Survey of Western Architecture (Also called History of Art 253)

D. J. Cast, C. Hein

The major traditions in Western architecture illustrated through detailed analysis of selected examples from classical antiquity to the present. The evolution of architectural design and building technology, and the larger intellectual, aesthetic, and social context in which this evolution occurred, are considered. *Not offered in 2002-03.*

254 History of Modern Architecture (Also called History of Art 254)

Staff

A survey of the development of modern architecture since the 18th century, with principal emphasis on the period since 1890.

255 Survey of American Architecture (Also called History of Art 255)

J. A. Cohen

An examination of forms, figures, contexts, and imaginations in the construction of the American built environment from colonial times to the present. Materials in and from Philadelphia figure as major resources. *Not offered in 2002-03.*

257 Unreal Cities: Bombay, London, New York (Also called History 257)

M. Kale

261 Postmodernism and Visual Culture (Also called History of Art 261)

Saltzman

267 History of Philadelphia: 1682 to Present (Also History 267)

Shore

283 The Urban Novel (Also called Comparative Literature 283 and English 283)

Bernstein

THE GROWTH AND STRUCTURE OF CITIES AT BRYN MAWR COLLEGE

295 **La Ville de Paris au XVIIe et au XVIIIe siècle** (Also called French and French Studies 295)

Lafarge

Not offered in 2002-03.

301 **Confronting Globalization: Latin American Urban Social Movements**

Staff

Social movements have been described as the new force challenging the process of globalization and demanding social justice. This course sets out to explore the conceptual underpinnings of social movements and examine specific cases in urban Latin America—the roofless movement in São Paulo, women’s movement in Lima, youth movement in San Salvador and queer movement in Santiago. While these movements are not exclusive to these cities or to specific countries, they provide insights on the specific situations that articulated their formation as well as the strategies and outlooks that shape them.

302 **Greek Architecture** (Also called Classical and Near Eastern Archaeology 302)

J. C. Wright

306 **Advanced Fieldwork Techniques: Places in Time**

J. A. Cohen

A seminar and workshop for research into the history of place, with student projects presented in digital form on the Web. Architectural and urban history, research methods and resources for probing the history of place, the use of tools for creating Web pages and digitizing images, and the design for informational experiences are examined.

313 **Advanced Architecture and Urban Design**

S. Olshin, D. H. Voith

This course offers advanced studio tutelage in architecture and urban design. Students may pursue independent projects that will last the entire term while also participating in discussions with other designers and classes. The class will be offered on a special-need basis and requires prior completion of a year of design studio. *Not offered in 2002-03.*

314 **Topics in Social Policy** (Also called Economics 314)

H. B. Newburger

315 **Cities and Sanctuaries of the Ancient Mediterranean** (Also called Classical and Near Eastern Archaeology 315)

J. C. Wright

316 **Trade and Transport in the Ancient World** (Also called Classical and Near Eastern Archaeology 316)

Turfa

319 **Topics in German Art: Vienna 1900** (Also called German and German Studies 321 and History of Art 348)

Hertel, Meyer

324 **Seminar on the Economics of Poverty and Discrimination** (Also called Economics 324)

H. B. Newburger

331 **Palladio and Palladianism** (Also called History of Art 331)

D. J. Cast

335 Elite and Popular Culture

G. McDonogh

An examination of urban culture as a ground for conflict, domination, and resistance through both theoretical and applied analysis of production, texts, readings, and social action within a political/economic framework. (Division I; cross-listed as Anthropology 335) *Not offered in 2002-03.*

339 The Policymaking Process (Also called Political Science 339)

Golden

Not offered in 2002-03.

342 Sex, Gender, and Sexuality in the City

Staff

An examination of the city as a social, cultural, and physical space in which sex, gender, and difference have taken on varied and even conflictive meanings. Specific topics vary from year to year. *Not offered in 2002-03.*

355 Topics in the History of London (Also called History 355 and History of Art 355)

Cast

Not offered in 2002-03.

357 The Phoenicians (Also called Classical and Near Eastern Archaeology 351)

Turfa

Not offered in 2002-03.

360 Topics in Urban Culture and Society

Staff

Advanced theoretical perspectives blend with contemporary and historical cases to explore specific problems in social scientific analysis of the city, such as space and time, race and class, elite and popular culture, or the construction of social and cultural distance in suburbs and downtowns.

365 Techniques of the City: Vice, Virtue, and Citizenship

G. McDonough

Over time, cities have been seen both as the epitomes of human civilization and, whether in whole or in part, as dystopic sites of decay and despair. In the end, the construction/identification of good and evil in the city, whether defined by space, institution or people, is a fundamental component of metropolitan knowledge and urban reform. Drawing on case studies and theoretical materials, this seminar asks how the good and bad citizen come to be defined, who defines such roles, and the impact of questions of gender, sexuality, race, immigration, and community on such mappings. It also explores how images, ideologies, and fears imbue mass media as much as social-science and reform projects, and how we can move critically beyond our own models to rethink global urbanism. *Enrollment limited to 15 by permission of the instructor.* Preference given to majors.

370 Japanese Architecture and Planning

C. Hein

The built environment in Japan does not resemble its American or European counterparts, leading visitors to characterize it as visually chaotic even as recent observers praise its lively traditional neighborhoods. This course will explore characteristics of Japanese cities, their history and presence, and examine the particular cultural, political, economic, and social contexts of urban form in Japan. *Not offered in 2002-03.*

THE GROWTH AND STRUCTURE OF CITIES AT BRYN MAWR COLLEGE

377 Topics in the History of Modern Architecture (Also called History of Art 377)

Lane

In spring 2003, the class will deal with the issues of housing and dwelling, focusing on Europe and America in the 19th and 20th centuries, relating ideology, social history, and vernacular traditions. *Enrollment is limited.*

398, 399 Senior Seminar

J. A. Cohen, G. McDonogh

An intensive research seminar.

450 Urban Internships

Staff

Individual opportunities to engage in praxis in the greater Philadelphia area; internships must be arranged prior to registration for the semester in which the internship is taken. Enrollment is limited to five students a semester. *Prerequisite:* Permission of instructor.

Haverford and Swarthmore courses may fulfill electives in the cities program. They may be identified in course listings and discussed with the major advisers. Courses at the University of Pennsylvania may sometimes be substituted for certain electives in the cities program; these should be examined in conjunction with the major advisers.

HEBREW AND JUDAIC STUDIES

Hebrew language instruction is available at Bryn Mawr on the elementary, intermediate, and advanced levels. At Haverford, Judaic Studies courses are offered by the Department of Religion. Bryn Mawr also offers courses which complement Haverford's offerings in Judaic Studies. All these courses are listed in the Course Guide under the heading "Hebrew and Judaic Studies."

Visiting Lecturer David Rabeeya

001, 002 Elementary Hebrew

D. Rabeeya

This course prepares students for reading classical religious texts as well as modern literary work. It covers grammar, composition, and conversation with primary emphasis on fluency in reading as well as the development of basic conversational skills. This is a year-long course.

101, 102 Readings in the Bible (Prose and Poetry)

D. Rabeeya

Critical reading in the book of Genesis with an emphasis on discussions related to modern commentaries. Writings of compositions on modern topics are emphasized, as well as fluent conversation in the Hebrew language. This is a year-long course.

203 Advanced Hebrew: The Five Scrolls

D. Rabeeya

The course deals with the linguistic, religious, and historical development of the Five Scrolls. Special emphasis will be placed upon the Hebrew dialects of the book in comparison with modern Israeli conversation. Conversational Hebrew will also be conducted.

211 Primo Levi, the Holocaust, and Its Aftermath (Also called Italian and Comparative Literature 211)

N. Patruno

A consideration, through analysis and appreciation of his major works, of how the horrific experience of the Holocaust awakened in Primo Levi a growing awareness of his Jewish heritage and led him to become one of the dominant voices of that tragic historical event, as well as one of the most original new literary figures of post-World War II Italy. Always in relation to Levi and his works, attention will also be given to Italian women writers whose works are also connected with the Holocaust.

298 The Cultural Politics of Memory (Also called English and Comparative Literature 298)

C. Bernstein

Among the distinguishing features of collective or cultural memory are its construction by a national or social group, its social quality, its oblique and sometimes antagonistic relation to "official" histories, and its interest in appropriating the past into a contemporary dynamic of power, identity formation, or determination of cultural norms. Its "documents" can be as diverse as acts of commemoration and monuments, memoirs, novels and films, works of high and low art, jokes, children's textbooks, written or filmed testimony relating to a particular cultural event or era, clothes, and other material objects. In this course, we will explore cultural memory as it informs novels, memoirs, and films.

304 Advanced Hebrew: Tractate Megillah

D. Rabeeya

This course deals with the historical and the religious aspects of Tractate Megillah. Special emphasis will be placed upon the linguistic development of rabbinic Hebrew and its connection to modern Israeli Hebrew.

380 Visual Culture and Holocaust (Also called History of Art 380)

L. Saltzman

Poems and novels, films and photographs, paintings and performances, monuments and memorials, even in the aftermath of Art Spiegelman's *Maus*, comics have been the cultural forms that engage us with the catastrophic and traumatic history of the Holocaust. Through these cultural forms we have come to know events considered by some to defy the very possibility of historical, let alone aesthetic, representation. Our task will be to examine such cultural objects, aided by the extensive body of critical, historical, theoretical, and ethical writings through which such work has been variously critiqued and commended.

Not offered in 2002-03.

403 Tutorial in Semitic Languages

D. Rabeeya

HISTORY

The study of history involves a reflective and critical analysis of human civilization through an investigation of a wide variety of its characteristic institutions. The curriculum in history is designed to encourage the development of both critical and reflective habits of mind by balancing emphasis on primary source materials with the study of important secondary works. The department welcomes comparative studies and seeks to relate its courses to the broadest possible spectrum of academic disciplines. In this connection, the history major is easily integrated into the Africana, East Asian studies, education and educational studies, feminist and gender studies, Latin American and Iberian studies, and peace and conflict studies areas of concentration.

The department has no specific language requirement, but students who wish to major in history should note that some advanced courses require special preparation in foreign languages.

Professor **Linda G. Gerstein**

Professor **Emma Jones Lapsansky**

John R. Coleman Professor of Social Sciences **Paul Jakov Smith**

Associate Professor **Lisa Jane Graham**

Associate Professor **Paul Jefferson**

Associate Professor **Alexander Kitroeff**

Associate Professor **James Krippner-Martinez**, *chairperson*

Assistant Professor **Bethel Saler**

MAJOR REQUIREMENTS

History 111 or History 114; History 361a; History 399b or History 400 (Senior Thesis); plus six or seven additional semesters in history, distributed among three fields and including one or two 300-level courses, as follows:

History 361a is a seminar on the critical use of evidence, and is normally taken in the first semester of the junior year. History 399b is a seminar on historiography, taken in the second semester of the senior year. However, students choosing to write a senior thesis will take History 400 (a two-semester sequence) instead of History 399b. Students opting for a senior thesis will take six additional semesters in history, organized in three fields of two semesters each, and including one 300-level course; students opting for History 399b will take seven additional courses, including two 300-level courses.

The history department offers five fields: (1) United States history; (2) Early European history, pre-1763; (3) modern European history; (4) Latin American history; and (5) East Asian history. In addition, a student may design a field based on courses offered at Bryn Mawr (such as British Colonial, French Colonial, or African History) or that addresses specific approaches or themes (such as comparative history, women's history, or history of the African diaspora). A student may take only two fields in the same geographic region where such a distinction is relevant.

COURSE RESTRICTIONS

History 111 and 114 are open to all students without prerequisite. Courses numbered 200-299 are open to sophomores, juniors, and seniors; exceptions require the prior consent of the instructor. Courses numbered 300 and above are normally open only to juniors and seniors.

REQUIREMENTS FOR HONORS

Honors in history will be granted to those senior majors who, in the department's judgment, have combined excellent performance in history courses with a good overall record. A

grade of 3.7 or above in a history course is considered to represent work of honors quality. High Honors may be awarded to students showing unusual distinction in meeting these criteria.

COOPERATION WITH BRYN MAWR COLLEGE

The history departments of Haverford College and Bryn Mawr College have coordinated their course offerings. All courses offered by both departments are open to students of both colleges equally, subject only to the prerequisites stated by individual instructors. Both departments encourage students to avail themselves of the breadth of offerings this arrangement makes possible at both colleges.

COURSES

111 **Introduction to Western Civilization** SO

Staff

A year-long course that surveys Western European civilization from the fall of Rome to the present. It focuses on the institutional and intellectual dimensions of the western tradition, by closely interrogating both primary sources and secondary accounts.

114 **An Introduction to Global History** SO

Staff

A year-long survey of topics in world history from the era of classical empires (Rome, Han China) to the present; with emphasis on the changing relationships among different regions and peoples of the world, and on the geo-politics of point of view in making history and in understanding it.

200b **Methods and Approaches in East Asian Studies** SO (Cross listed in East Asian Studies)

P. Smith

Prerequisite: East Asian Studies majors, minors, and concentrators.

203a **The Age of Jefferson and Jackson, 1789-1850** SO

B. Saler

This course charts the transformation in American political institutions, economy, and society from the ratification of the Constitution to the eve of the Civil War. Often identified as the crucial period when the American nation cohered around a national culture and economy, this period also witnessed profound social rifts over the political legacy of the American Revolution, the national institutionalization of slavery, and the rise of a new class system. We will consider the points of conflict and cohesion in this rapidly changing American nation. *Not offered in 2002-03.*

204b **The History of American Women and Gender to 1870** SO

B. Saler

This course surveys the history of American women from the colonial period through 1870. We will consider and contrast the lives and perspectives of women from a wide variety of social backgrounds and geographic areas as individuals and members of families and communities, while also examining how discourses of gender frame such topics as colonization, slavery, class identity, nationalism, religion, and political reform. *Not offered in 2002-03.*

209a **Colonial Latin America** SO

J. Krippner-Martinez

Traces the initial confrontation between Amer-Indian peoples and European colonizers, the emergence of distinctively Latin American societies under Spanish and Portuguese rule, and the variety of national experiences in Latin America since Independence.

209b Modern Latin America SO

J. Krippner-Martínez

This course surveys Latin American history from the end of colonial rule to the present. Special attention is paid to the social dynamics of class, race, and gender; to the emergence and redefinition of contemporary republics; and to conflict, crisis, and historical change.

225a Europe in the 19th Century SO

L. Gerstein

Industrialization; Nationalism; Socialism; the revolutionary movements; Imperialism; the reconfiguration of sexuality; and the challenge of modernity.

226b Twentieth Century Europe SO

L. Gerstein

The emergence of the culture of Modernism; revolutionary dreams and Stalinist nightmares in Russia; Fascism; the trauma of war 1914-1945; the divisions of Cold War Europe; and the challenge of a new European attempt at re-integration in the 1990s.

227a The 17th Century Crisis SO

L. J. Graham

This course examines the political, social, and cultural responses to the perceived crisis of authority that followed on the heels of the Reformation. The crisis in faith was accompanied by extraordinary innovations in all areas of human life from political thought and science to art and literature. Topics include the emergence of the royal state, absolutism and constitutionalism, protest and rebellion, witchcraft and popular culture, court society and Baroque aesthetics, and scientific discovery. *Not offered in 2002-03.*

227b The Age of Enlightenment SO

L. J. Graham

This course approaches the Enlightenment as a process of political and cultural change rather than a canon of great texts. Special emphasis will be placed on the links between the institutions of the public sphere and the new forms of sociability that accompanied them. We will also pay close attention to the rise of the novel as a literary genre and the question of subjectivity as distinguishing features of 18th century European life. *Not offered in 2002-03.*

228b The French Revolution SO

L. J. Graham

Most historians identify the French revolution of 1789 with the birth of the modern world. The French captured international attention when they tore down the Old Regime and struggled to establish a democratic society based on Enlightenment principles of liberty and equality. The problems confronted by revolutionary leaders continue to haunt us around the world today. This course examines the origins, evolution, and impact of the French Revolution with special emphasis on the historiographical debates that have surrounded the revolution since its inception. *Not offered in 2002-03.*

229a Gender and Power in Europe, 1550-1850 SO

L.J. Graham

Drawing on recent theoretical work, this course traces changing definitions of gender and sexuality in early modern Europe through a variety of primary and secondary sources. It focuses on the intersection of gender and power in specific sites such as the royal court, the law courts, the theater, the convent, and the workshop. Special attention will be paid to the way gender interacted with the new medium of print. *Not offered in 2002-03.*

230b Europe in the 19th and 20th Centuries: Between War and Peace SO

A. Kitroeff

War was integral to the spread of nationalism and nationalist rhetoric in Europe from the Napoleonic Era to World War II; war also gave rise to a European counter-discourse, best described as patriotic pacifism. This course surveys debates among European politicians, intellectuals, and ordinary citizens in this era about the true interests of the nation.

234a Nationalism and Politics in the Balkans SO

A. Kitroeff

The interrelationship of politics with communism and nationalism in the Balkans. The political legacies of the region; the rise of communism and the way in which communist regimes dealt with nationalist issues in each of the region's nation-states; the sharpening of nationalist conflicts in the post-communist era; focusing on the Yugoslav war and the post war efforts to restore democratic rule and resolve nationalist differences equitably.

235b Colonial North America SO

E. Lapsansky

Surveys the political, economic, and community aspects of North America, with an emphasis on the areas that became the United States, and the varieties of peoples and cultures that helped shape the convergence of cultures. *Not offered in 2002-03.*

240b History and Principles of Quakerism SO (Also called Religion 240b)

E. Lapsansky

The development of Quakerism and its relationship to other religious movements and to political and social life, especially in America. The roots of the Society of Friends in 17th-century Britain, and the expansion of Quaker influences among Third World populations, particularly the Native American, Hispanic, East African, and Asian populations.

243b African American Political and Social Thought SO

P. Jefferson

The best of times and the worst of times: black modernism, 1895-1945. This course reconstructs the development of a modern African American intellectual and cultural tradition in the context of a changing political economy and our national coming of age. *Not offered in 2002-03.*

244a Medieval and Early Modern Russia SO (Cross listed in Russian)

L. Gerstein

Literary and artistic culture, the growth of Muscovite absolutism, the impact of the West and Russia's emergence into the European state system. *Not offered in 2002-03.*

244b Russia from 1800-1917 SO (Cross listed in Russian)

L. Gerstein

Topics considered include the culture of serfdom, Westernization, reforms, modernization, national identities, and Revolution.

245b Russia in the 20th Century SO (Cross listed in Russian)

L. Gerstein

Continuity and change in Russian and Soviet society since the 1890s. Major topics: the revolutionary period, the cultural ferment of the 1920s, Stalinism, the Thaw, the culture of dissent, and the collapse of the system. *Not offered in 2002-03.*

246b Literature and Society in Modern Russia SO (Cross listed in Russian)

L. Gerstein

The social context of the Russian novel in the 19th and 20th centuries and the uses to which

literature has been put in a society of restricted political expression. Readings (in translation) in literary and historical sources. *Not offered in 2002-03.*

255a, b American Intellectual History SO

P. Jefferson

A two-semester course which reconstructs our national historical "project[s]," from the landing of the first Africans at Jamestown in 1619 and the founding of Plymouth Plantation in 1620 to the present. Our Ariadne's thread will be the persisting problems of race, class, and regional differences for a would-be republican commonwealth. Reading widely in the sources, we will relate the architecture of public discourse in America—its rhetorical scaffolding, its recurrent themes, and its alternative blueprints for a well-ordered society—to the perceived constraints of a changing political economy. This course may be divided. The first semester covers the years 1619 to the Civil War; the second semester covers the period from the Civil War to the present. *Not offered in 2002-03.*

260a Mid Imperial China, ca. A.D. 850-1600 SO (Cross listed in East Asian Studies)

P. Smith

Not open to first-year students; preference to East Asian and history majors.

261 The Emergence of Modern China and Japan SO

P. Smith

Traces and compares the evolution of basic institutions and social structures in China and Japan from the seventh century through the present with special focus on Sino-Japanese cultural and political interaction, trajectories of political and economic change, and the relationship of China and Japan to the wider world. *Not offered in 2002-03.*

262a Chinese Social History SO (Cross listed in East Asian Studies)

P. Smith

Surveys a rotating series of topics in Chinese social and cultural history. Topic for fall 2000: "Confucianizing China, 1100 to 1800." Focuses on the ascent of the fundamentalist [or Neo-Confucian] movement from the Song through the Qing dynasties, with special attention to its impact on the legal and examinations systems, elite and peasant family life, and gender roles, and on Neo-Confucian efforts to establish religious orthodoxy and eradicate popular [heterodox] gods and cults. *Not offered in 2002-03.*

263b The Chinese Revolution SO

P. Smith

Places the causes and consequences of the Communist Revolution of 1949 in historical perspective, by examining its late-imperial antecedents and tracing how the revolution has (and has not) transformed China, including the lives of such key revolutionary supporters as the peasantry, women, and intellectuals. *Not offered in 2002-03.*

265b Modern Japan SO

P. Smith

Explores selected topics in the rise of modern Japan from the late-16th century to the Pacific War, including the creation of the centralized Tokugawa state, the urban culture of the 17th and 18th centuries, the Meiji Restoration and modernization in the late-19th and early-20th centuries, and the sources and consequences of Japanese imperialism. *Not offered in 2002-03.*

270b From Empire to Nation: the Ottoman World Transformed SO

A. Kitroeff

Introduces students to the historical study of empires and the circumstances and consequences

of their collapse by focusing on the Ottoman Empire. A cluster of recent studies treat the history of the Ottoman Empire (1453-1923) as a complex, dynamic, and changing entity revising the older perspectives that viewed it as epitomizing the supposedly backward, unchanging, and mysterious Orient. Based on the more accessible works among this new literature, the course examines the transformation of the Ottoman Empire in terms of its political structures, its ties with Islam, its social make-up and its economy, as well as its relationship with Europe and its responses to the forces of modernity. *Not offered in 2002-03.*

281a Mexican Cultural History: Ancient and Colonial SO

J. Krippner-Martinez

This course provides an introduction to Mexican cultural history from antiquity through the colonial centuries. Particular attention will be paid to elite and popular understandings and forms of expression as recorded in visual culture, material objects, and the writings of the colonial era.

281b Mexican Cultural History: Modern and Postmodern SO

J. Krippner-Martinez

This course provides an introduction to Mexican cultural history from the late 18th century to the present. Students will gain a historical sense for the emergence and redefinition of the Mexican nation, while being introduced to Mexican contributions in the world of painting, photography, filmmaking, and literature.

317b Topics in Latin American History SO

J. Krippner-Martinez

Seminar meetings, reports, and papers. May be repeated for credit with change of topic. Topic for spring 2003: Visions of Mexico. An introduction to the visual and print culture (painting, literature, photography, and cinema) of the 19th and 20th centuries in which Mexico and Mexicanness are represented.

333a Topics in History and Theory

B. Saler

Seminar meetings, reports, and papers. May be repeated for credit with change of topic. Topic for fall 2001: Nation-States and Colonial Subjects. An introduction to recent theoretical approaches to the relations between developing nation-states and their colonies. Questions to be addressed include: How were liberal political theories of universal citizenship and natural rights connected to "civilizing" projects within colonial states? How did indigenous peoples, racially mixed, and European-descent colonials challenge colonial authority? *Not offered in 2002-03.*

340b Topics in American History SO

E. Lapsansky

Seminar meetings, reports, and papers. May be repeated for credit with change of topic. Topic for spring 2002: The West in Fact and Fiction. The American western "frontier" has caught our imagination as myth and symbol, photograph and painting, costume and politics, definer and redefiner of gender and race, and technological challenge. Through individual and group readings, discussion and bibliographic exploration, we will pursue the elusive "truth" of the American western frontier. *Not offered in 2002-03.*

341b Topics in Comparative American History

B. Saler

Seminar meetings, reports and papers. May be repeated for credit with change of topic. Topic for fall 2000: Borderlands. Borderlands are zones of cultural contestation, transformative ter-

rains by definition. This course will compare the histories of "American" regions bordering on Mexico and Canada as well as interior parts of the American Republic where European, Euro-Americans and native peoples vied for political and cultural control. *Not offered in 2002-03.*

343a Topics in American Intellectual History SO

P. Jefferson

Seminar meetings, reports, and papers. May be repeated for credit with change of topic. Topic for fall 2002: American Constitutional Law: History, Theory, Sociology, and Politics, 1787 to the Present. This seminar will reconstruct the development and functioning of constitutional law in American society from 1787 to the present. We will consider the major episodes in American constitutional history; the mooted issues in constitutional law; the sociology of the legal profession; and the ideological implications of different theories of jurisprudence. Other topics include: Social Science, Ideology, and Public Policy, 1890 to the Present; American Philosophy: The Pragmatic Tradition.

343b Topics in African American Intellectual History SO

P. Jefferson

Seminar meetings, reports, and papers. May be repeated for credit with change of topic. Topic for spring 2003: Black Paris: Art and Ideology in a Modern[ist] Diaspora, 1925-1975. Conceptualizing (black) expatriation as a type of cultural performance, we will read the lives and work of (selected) African American artists and intellectuals in Paris in their framing cultural contexts -- local and global. Other topics include: African American Sociology; African American Historiography; Autobiography as History; and Two Faces of Cultural Nationalism: The Harlem Renaissance and the Black Arts Movement.

347a Topics in East Asian History SO

P. Smith

Seminar meetings, reports, and papers. May be repeated for credit with change of topic. Topics include: Peasants, Elites, and the State in China; Travelers' Accounts of China; Literature and the Social History of China. *Not offered in 2002-03.*

349b Topics in Comparative History SO

P. Smith

Seminar meetings, reports, and papers. May be repeated for credit with change of topic. Topic for spring 2001: Outlaw Heroes in China and England, 1100 to 1700. This course uses the Robin Hood and Water Margin story cycles as represented in ballads, romances, plays, and novels to analyze the cultural role of bandit heroes in China and England. *Not offered in 2002-03.*

354b Topics in Early Modern European History SO

L. J. Graham

Seminar meetings, reports, and papers. May be repeated for credit with change of topic. Topic for spring 2002: The Culture of Discontent. How did individuals excluded from the formal political process make their grievances heard, and to what effect? This course examines theories and strategies of resistance at the individual and collective level between 1500-1850. *Not offered in 2002-03.*

356a Topics in Modern European History SO (Cross listed in Russian)

L. Gerstein

Seminar meetings, reports, and papers. May be repeated for credit with change of topic. Topic for fall 2002: Fin de Siecle Europe, 1890-1914: Sex, War, Revolution, and Modern Art.

357a Topics in Modern European History SO

A. Kitroeff

Seminar meetings, reports, and papers. May be repeated for credit with change of topic. Topic for fall 2001: Nationalism. Seminar. Meetings focusing on the evolution of nationalist ideology, contemporary theories on nationalism, and the role of national identity in the European society. *Not offered in 2002-03.*

361a Seminar on Historical Evidence SO

Staff

Seminar meetings, reports, and papers. Consideration of the nature and forms of historical evidence and of critical techniques for handling it; an essay interrogating/exploiting material and visual artifacts as evidence; and an essay involving a "professional" exercise in historical editing, to wit: fashioning a critical edition of a manuscript source. *Enrollment limited to history majors, for whom it is required.*

399b Senior Departmental Studies SO

Staff

A seminar focusing on issues of historical interpretation, on historiography, and on the intersection of "historical memory" and current human concerns. Multiple short essays, a term paper, and a final oral examination. *Enrollment limited to senior history majors.*

400 Senior Thesis SO

Staff

A two-semester course designed to develop further the research skills students have acquired as history majors, and to guide them through the extended process of writing an undergraduate thesis. *Enrollment limited to senior history majors.*

480a, b, f, i Independent Study

Staff

COURSES AT BRYN MAWR COLLEGE

101 The Historical Imagination

190 Form of the City

200 History of Three Worlds

205 Ancient Greece

207 Hellenistic and Roman History

230 History of Chinese and Japanese Thought

237 Urbanization in Africa

243 Slave Society in the New World

257 Unreal Cities: Bombay, London, New York

264 Indian Diaspora: 1800 - Present

265 American Colonial Encounters

267 History of Philadelphia 1682 to Present

284 Modernity and its Discontents

336 West African Social History

339 The Making of the African Diaspora

357 Topics in British Empire: The Sporting Life, Sport, and Empire

392 Sexuality and Public Order in Victorian Britain

398 Senior Thesis

HISTORY OF ART AT BRYN MAWR COLLEGE

The major in history of art focuses on methods of interpretation and the construction of an historical context for works of art. Special subject concentrations include the history of architecture, European painting and sculpture and western art historiography. Majors are encouraged to study abroad for a semester, and to supplement courses taken in this department with courses in art history offered at Swarthmore College and the University of Pennsylvania.

Professor **David Cast**, Major Advisor

Professor **Christiane Hertel**, on leave 2002-03

Professor **Dale Kinney**, on leave semester I

Katherine E. McBride Professor **Barbara Miller Lane**

Leslie Clark Professor in the Humanities **Steven Z. Levine**, Chairperson

Andrew W. Mellon Professor in the Humanities **Gridley McKim-Smith**, on leave semester I

Associate Professor **Lisa Saltzman**, on leave 2002-03

Lecturer **Homay King**

Visiting Lecturer **Martha E. Easton**

MAJOR REQUIREMENTS

The major requires 10 units, approved by the major advisor, in the following distribution: one or two 100-level courses, four or five 200-level courses, two 300-level courses, senior conference (398-399). Courses are distributed over at least three of the following chronological divisions: antiquity, middle ages, renaissance, baroque, modern (including American), and contemporary. With approval of the major advisor, units in fine arts, film studies, or another subject to which visual representation is central may be substituted for one or more of the 200-level courses listed below; similarly, units of art history taken abroad or at another institution in the U.S. may be substituted, upon approval.

A senior paper, based on independent research and using scholarly methods of historical and/or critical interpretation, must be submitted at the end of semester II. Seniors whose major average at the beginning of semester II is 3.7 or higher will be invited to write an honors thesis instead of the senior paper.

MINOR REQUIREMENTS

A minor consists of six units in history of art selected in consultation with the major advisor.

COURSES

103-108 Critical Approaches to Visual Representation

These small seminars (*limited enrollment of 20 per class*) introduce the fundamental skills and critical vocabulary of art history in the context of thematic categories of artistic expression. All seminars follow the same schedule of writing assignments and examinations and are geared to students with no or minimal background in history of art.

103 Icons and Idols HU

A study of potent imagery in Judeo-Christian culture from late antiquity to modern times, with consideration of the Greco-Roman background and the non-western alternatives. *Not offered in 2002-03.*

104 The Classical Tradition HU

D. Cast

An investigation of the historical and philosophical ideas of the classical, with particular attention to the Italian renaissance and the continuance of its formulations throughout the westernized world.

105 Poetry and Politics in Landscape Art HU

C. Hertel

An introduction to the representation and perception of nature in different visual media, with attention to such issues as: nature and utopia, nature and violence, natural freedom, the femininity of nature. *Not offered in 2002-03.*

107 Self and Other in the Arts of France, 1500-2000 HU

S. Levine

A study of artists' self-representations in the context of the philosophy and psychology of their time, with particular attention to issues of political patronage, gender and class, power and desire.

108 Women, Feminism, and History of Art HU

M. Easton

An investigation of the history of art organized around the practice of women artists, the representation of women in art, and the visual economy of the gaze.

205 Introduction to Film HU (Also called English 205)

J. Kahana

210 Medieval Art HU

M. Easton

An overview of artistic production in Europe and the near east from the end of antiquity to the 14th century, focused on the characteristic art forms of Europe, Byzantium, and early Islam. Special attention to problems of interpretation, recent developments in scholarship, and the survival of medieval objects in the modern world.

212 Medieval Architecture HU (Also called Growth and Structure of Cities 212)

D. Kinney

A survey of building types and styles in the Mediterranean and northern Europe from the 4th through 13th centuries, including churches, synagogues, mosques, castles and fortifications, palaces, and government buildings. *Not offered in 2002-03.*

230 Renaissance Art I HU

D. Cast

A survey of painting in Florence and Rome in the 15th and 16th centuries (Giotto, Masaccio, Botticelli, Leonardo, Michelangelo, Raphael), with particular attention to contemporary intellectual, social, and religious developments.

237 Northern Renaissance HU

C. Hertel

An introduction to painting, graphic arts, and sculpture in Germany in the first half of the 16th century, with emphasis on the influence of the Protestant Reformation on the visual arts. Artists to be studied: Altdorfer, Cranach, Dürer, Grünewald, Holbein, and Riemenschneider. *Not offered in 2002-03.*

241 Art of the Spanish-Speaking World HU

G. McKim-Smith

A study of painting and sculpture in Spain from 1492 to the early 19th century, with emphasis on artists such as El Greco, Velázquez, Zurbarán, Goya, and the polychrome sculptors. As relevant, commentary is made on Latin America and the Spanish world's complex heritage, with its contacts with Islam, northern Europe, and pre-Columbian cultures. Continuities and disjunctions within these diverse traditions as they evolve both in Spain and the Americas are noted, and issues of canon formation and national identity are raised. *Not offered in 2002-03.*

245 Dutch Art of the 17th Century HU

C. Hertel

A survey of painting in the northern Netherlands with emphasis on such issues as Calvinism, civic organization, colonialism, the scientific revolution, popular culture, and nationalism. Attention is given to various approaches to the study of Dutch painting; to its inherited classification into portrait, still life, history, scenes of social life, landscape, and architectural painting; and to the oeuvre of some individual artists, notably Vermeer and Rembrandt. *Not offered in 2002-03.*

249 17th and 18th Century Art in France HU

S. Levine

Close attention is selectively given to the work of Poussin, LeBrun, Watteau, Chardin, Boucher, Fragonard, Greuze, and David. Extensive readings in art criticism are required. *Not offered in 2002-03.*

250 19th Century Painting in France HU

S. Levine

Close attention is selectively given to the work of David, Ingres, Géricault, Delacroix, Courbet, Manet, Monet, Degas, Pissarro, Morisot, Cassatt, and Cézanne. Extensive readings in art criticism are required.

251 20th Century Art HU

S. Levine

Close attention is selectively given to the work of Gauguin, Matisse, Picasso, Kandinsky, Malevich, Mondrian, Duchamp, and Dali. Extensive readings in art criticism are required. *Not offered in 2002-03.*

253 Survey of Western Architecture HU (Also called Growth and Structure of Cities 253)

D. Cast and C. Hein

Detailed analysis of selected examples of the major traditions in Western architecture from classical antiquity to the present. The course deals with the evolution of architectural design and building technology, as well as with the larger intellectual, aesthetic, and social context in which this evolution occurred. *Not offered in 2002-03.*

254 History of Modern Architecture HU (Also called Growth and Structure of Cities 254)

A survey of the development of modern architecture since the 18th century, with principal emphasis on the period since 1870.

255 Survey of American Architecture (Also called Growth and Structure of Cities 225)

J. Cohen

Not offered in 2002-03.

260 Modern Art and Abstraction HU

L. Saltzman

An inquiry into the history of the visual culture of European and American modernism through an exploration of art, history, art criticism, and art theory. Against the dominant and paradigmatic narrative and theory of modernism, the course introduces and uses materials aimed at their critique. *Not offered in 2002-03.*

261 Postmodernism and Visual Culture HU

L. Saltzman

An examination of the emergence of postmodernism as a visual and theoretical practice. Emphasizing the American context, the course traces at once developments within art practice

HISTORY OF ART AT BRYN MAWR COLLEGE

and the implications of critical theory for the study, theory, and practice of visual representation. *Not offered in 2002-03.*

Note: 300-level courses are seminars offering discussion of theoretical or historical texts, and/or the opportunity for original research.

300 Methodological and Critical Approaches to Art History HU

S. Levine

A survey of traditional and contemporary approaches to the history of art. A critical analysis of a problem in art historical methodology is required as a term paper. *Not offered in 2002-03.*

303 Art and Technology HU

G. McKim-Smith

The technological examination of paintings. While studying the appropriate aspects of technology (such as the infrared vidicon, the radiograph and autoradiograph, analysis of pigment samples and pigment cross-sections), the course will also encourage the student to approach the laboratory in a spirit of creative scrutiny. Raw data neither ask nor answer questions, and it will remain the province of the student to shape meaningful questions and answers. The course will both acquaint the student with the technology involved in examining paintings and encourage the student to find fresh applications for available technology in answering art historical questions. *Not offered in 2002-03.*

306 Film Theory HU (Also called English 306)

J. Kahana

310 Medieval Art in American Collections HU

A research seminar on objects in regional collections (Philadelphia, New York, Baltimore). Attention to questions posed by the physical qualities of works of art: materials, production techniques, stylistic signatures; to issues of museum acquisition and display; and to iconography and historical context. *Not offered in 2002-03.*

311 Topics in Medieval Art HU

M. Easton

323 Topics in Renaissance Art HU

D. Cast

Selected subjects in Italian art from painting, sculpture, and architecture between the years 1400 and 1600. *Not offered in 2002-03.*

331 Palladio and Palladianism HU

D. Cast

340 Topics in Baroque Art HU

G. McKim-Smith

Latin-American Art.

345 Topics in Northern Baroque Art HU

C. Hertel

Topics include monographic and thematic approaches to the study of Dutch art within the parameters of History of Art 245. Examples: Rembrandt and Rubens, genre painting and the question of genre, Dutch art in American collections. *Not offered in 2002-03.*

348 Topics in German Art HU

C. Hertel, I. Meyer

Vienna 1900. *Not offered in 2002-03.*

350 Topics in Modern Art HU

S. Levine

Not offered in 2002-03.

354 Topics in Art Criticism HU

S. Levine

Individual topics in art-historical methodology such as psychoanalysis, feminism, post-structuralism, or semiotics. *Not offered in 2002-03.*

355 Topics in the History of London HU (Also called Growth and Structure of Cities 355)

D. Cast

Selected topics of social, literary, and architectural concern in the history of London, emphasizing London since the 18th century. *Not offered in 2002-03.*

360 Feminism, Feminist Theory and Art History HU

L. Saltzman

An examination of the meaning of gender and feminism for the practice, criticism, and theorizing of modern and postmodern visual culture. In conjunction with an analysis of visual practice by women and men, feminists and non-feminists, the course explores Anglo-American feminism, theories of spectatorship, and French feminist theory. *Not offered in 2002-03.*

377 Topics in the History of Modern Architecture HU (Also called Growth and Structure of Cities 377)

B. Lane

Housing and Dwelling.

380 Topics in Contemporary Art HU (Also called Hebrew and Judaic Studies 380)

L. Saltzman

Visual culture and the Holocaust. *Not offered in 2002-03.*

398 Senior Conference HU

S. Levine, M. Easton

A seminar leading to the articulation of the senior paper topic. Special attention to the narrative assumptions of the standard history and its critique from the vantage points of feminism, social history, psychoanalysis, etc. *Required of all majors.*

399 Senior Conference HU

D. Cast

A seminar for the discussion of senior research papers and such theoretical and historical concerns as may be appropriate to them. Interim oral reports. *Required of all majors; culminates in the senior paper.*

403 Supervised Work HU

Staff

Advanced students may do independent research under the supervision of a faculty member whose special competence coincides with the area of the proposed research. *Consent of the supervising faculty member and of the major advisor is required.*

ITALIAN AT BRYN MAWR COLLEGE

The aims of the major are to acquire a knowledge of Italian language and literature and an understanding of Italian culture. Elementary Italian and occasionally Intermediate Italian (101) are taught at both Bryn Mawr and Haverford. The major in Italian is available only at Bryn Mawr.

Professor Nancy Dersofi

Professor Nicholas Patruno, chairperson

Professor and President of the College Nancy Vickers

Lecturer Titina Caporale

At Haverford College

Instructor Ute Striker

MAJOR REQUIREMENTS

Major requirements in Italian are 10 courses, as follows: Italian 101, 102, and eight additional units, at least two of which to be chosen from the offerings on the 300 level and no more than two chosen from some allied field. All students must take a course on Dante, one on the Italian Renaissance, and one on modern Italian literature. Where courses in translation are offered, students may, with the approval of the department, obtain major credit provided they read the texts in Italian, submit written work in Italian, and when the instructor finds it necessary, meet with the instructor for additional discussion in Italian.

Courses allied to the Italian major include, with departmental approval, all courses for major credit in ancient and modern languages and related courses in archaeology, art history, history, music, philosophy, and political science. Each student's program is planned in consultation with the department.

Students who begin their work in Italian at the 200 level will be exempted from Italian 101 and 102.

MINOR REQUIREMENTS

Italian 101, 102, and four additional units including at least one at the 300 level. With departmental approval, students who begin their work in Italian at the 200 level will be exempted from Italian 101 and 102. With courses in translation, the same conditions for majors in Italian apply.

STUDY ABROAD

Italian majors are encouraged to study in Italy during the junior year in a program approved by the College. The Bryn Mawr/University of Pennsylvania summer program in Florence offers courses for major credit in Italian, or students may study in other approved summer programs in Italy or in the United States. Courses for major credit in Italian may also be taken at the University of Pennsylvania. Students on campus are encouraged to live in the Italian House and they are expected to make extensive use of the facilities offered by the Language Learning Center.

REQUIREMENTS FOR HONORS

The requirements for honors in Italian are a grade point average of 3.7 in the major and a research paper, written at the invitation of the department, either in Senior Conference or in a unit of supervised work.

COURSES

001, 002 **Elementary Italian HU**

N. Patruno, U. Striker, T. Caporale

A practical knowledge of the language acquired by studying grammar, listening, speaking,

writing, and reading. Course work includes use of the Language Learning Center. Credit will not be given for Italian 001 without completion of Italian 002. This course meets in intensive (eight hours each week at Bryn Mawr) and non-intensive (six hours each week at Bryn Mawr and Haverford) sections.

101, 102 Intermediate Course in the Italian Language HU

N. Dersofi, T. Caporale

A review of grammar and readings from selected Italian authors with topics assigned for composition and discussion; conducted in Italian.

200 Advanced Conversation and Composition HU

N. Patruno

Increases fluency in Italian and facilitates the transition to literature courses. The focus is on spoken Italian and on the appropriate use of idiomatic and everyday expressions. Students will be expected to do intensive and extensive language drills, orally and in the form of written compositions as well as Web-related material. Literary material will be used; conducted in Italian.

201 Prose and Poetry of Contemporary Italy HU

N. Patruno

This course presents a study of the artistic and cultural developments of pre-Fascist, Fascist, and post-Fascist Italy seen through the works of poets such as Ungaretti, Montale, and Quasimodo, and through the narratives of Pirandello, Moravia, P. Levi, Silone, Vittorini, Pavese, Ginzburg, and others. *Not offered in 2002-03.*

203 Italian Theater HU

N. Dersofi

Examines selected plays from the Renaissance to the present. Readings include plays by Ruzante, Goldoni, Alfieri, Verga, Pirandello, Dacia Mariani, Natalia Ginzburg, and Dario Fo. *Not offered in 2002-03.*

205 The Short Story of Modern Italy HU

N. Patruno

Examination of the best of Italian short stories from post-unification to today's Italy. In addition to their artistic value, these works will be viewed within the context of related historical and political events. Among the authors to be read are Verga, D'Annunzio, Pirandello, Moravia, Calvino, Buzzati, and Ginzburg. *Not offered in 2002-03.*

207 Dante in Translation HU

N. Vickers

An historical appraisal and critical appreciation of the Vita Nuova and the Divine Comedy. *Not offered in 2002-03.*

210 Women and Opera HU (also listed as Comparative Literature 210)

N. Dersofi

Explores ways in which opera represents, reflects, and influences images of women. Both women singers and the portrayal of women in a group of about ten operas will be considered. Students wishing major credit in Italian must do appropriate assignments in Italian.

211 Primo Levi: The Holocaust and Its Aftermath HU (Also listed as Comparative Literature and Hebrew and Judaic Studies 211)

N. Patruno

A consideration, through analysis and appreciation of his major works, of how the horrific

ITALIAN AT BRYN MAWR COLLEGE

experience of the Holocaust awakened in Primo Levi a growing awareness of his Jewish heritage and led him to become one of the dominant voices of that tragic historical event, as well as one of the most original new literary figures of post-World War II Italy. Always in relation to Levi and his works, attention will also be given to other Italian Jewish women writers whose works are also connected with the Holocaust.

230 **Poetics of Desire in the Lyric Poetry of Renaissance Italy and Spain**

(Also listed as Comparative Literature and Spanish 230)

N. Dersofi, M. Quintero

A study of the evolution of the love lyric in Italy and Spain during the Renaissance and the Baroque periods. Topics include: the representation of women as objects of desire and pretexts for writing, the self-fashioning and subjectivity of the lyric voice, the conflation and conflict of eroticism and idealism, theories of imitation, parody, and the feminine appropriation of the Petrarchan tradition. Although concentrating on the poetry of Italy and Spain, readings include texts from France, England, and Mexico. Students wishing major credit in Italian must do appropriate assignments in Italian. *Offered in 2002-03.*

301 **Dante** HU

N. Dersofi

A study of the *Divina Commedia* with a focus on *Inferno*. *Prerequisite:* Two years of Italian or the equivalent. *Not offered in 2002-03.*

304 **Il Rinascimento** HU

N. Dersofi

Humanism and a study of selected Renaissance texts. Topics include courtliness, images of power, epic romance, and the lyric voice. *Prerequisite:* Two years of Italian or the equivalent. *Not offered in 2002-03.*

399 **Senior Conference**

N. Dersofi, N. Patrino

Under the direction of the instructor, each student prepares a paper on an author or a theme which the student has chosen. *This course is open only to senior Italian majors.*

403 **Independent Project**

Staff

Offered with the approval of the department.

JAPANESE

The Japanese Language Program offers a full undergraduate curriculum of courses in modern Japanese. Students who will combine language study with focused work on East Asian society and culture may wish to consider the major, minor or concentration in East Asian studies. Information about study abroad programs can be found under the East Asian studies heading in this catalog.

Senior Lecturer Yoko Koike, Acting Director of the Japanese Language Program
Visiting Instructor Yukino Tanaka

COURSES

001, 002 **First-Year Japanese (Intensive)** HU

Y. Koike

An introduction to the four basic skills (reading, writing, speaking, and listening), with special emphasis on the development of conversational fluency in socio-cultural contexts. Six hours per week of lecture and oral practice. This is a year-long course; both semesters are required for credit.

003, 004 **Second-Year Japanese** HU

Fall: Y. Koike. Spring: Y. Tanaka.

A continuation of first-year Japanese, with a focus on the further development of oral proficiency, along with reading and writing skills. Five hours per week of lecture and oral practice. *Prerequisite:* First-Year Japanese or equivalent. This is a year-long course; both semesters are required for credit.

101, 102 **Third-Year Japanese** HU

Y. Tanaka

A continuation of language study with further development of oral proficiency. Emphasis on reading and discussing simple texts. Advanced study of grammar and kanji; introduction to composition writing. Three hours of class, one hour of oral practice. *Prerequisite:* Second-Year Japanese or equivalent.

201, 202 **Fourth-Year Japanese** HU

Fall: H. Glassman. Spring: Y. Koike.

Advanced study of written and spoken Japanese utilizing texts and audio-visual materials. *Prerequisite:* Third-Year Japanese or equivalent and consent of the instructor.

LATIN AMERICAN AND IBERIAN STUDIES

This concentration is an interdisciplinary program for students majoring in a related discipline who wish to undertake a comprehensive study of the cultures of Spanish America or Spain. Students supplement a major in one of the cooperating departments (e.g., history, history of art, religion, political science, anthropology, psychology, economics, comparative literature, or Spanish) with courses that focus on Latin American and Iberian issues and themes.

Associate Professor Roberto Castillo Sandoval, Coordinator

REQUIREMENTS

Requirements for the concentration (6 courses and one essay):

a) Competence in Spanish to be achieved no later than the junior year, demonstrated by the completion of at least one course in Spanish at the 200 level or above.

b) Spanish/General Programs 240 at Haverford, or Spanish/General Studies 240 at Bryn Mawr.

c) Four other related courses, two of which must be taken outside the major department; one of these four courses should be at the 300 level. These courses are to be chosen from the offerings listed under the concentration in the Haverford College Catalog or the Course Guide. Students should consult with their advisors as to which courses are most appropriate for their major and special interests: some apply more to Latin America, others to Spain. Other courses may be offered in fulfillment of this requirement if their pertinence to the student's program can be demonstrated.

d) A long paper (at least 20 pages) on Spain or Latin America, to be completed no later than the first semester of the senior year, as part of the work for a course in the student's major or the concentration. Whenever possible, the paper should be written while in residence at the College. A proposal for the paper topic, accompanied by a bibliography, must be submitted in advance for approval by the concentration coordinator. While the topic is open and should reflect the student's interests in a particular discipline, the paper should demonstrate the student's ability to discuss intelligently the history, literature, social, or political thought of Latin America or Spain as it applies to her individual research project.

Visit our Web site at <http://www.haverford.edu/span/spanish/docs/lais.html>

COURSES— Please note that this list is not exhaustive; see c) above.

ANTHROPOLOGY

280a **Indigenous Movements**

GENERAL PROGRAMS

276a **Central America in the U.S. Imaginary**

277b **African American/Latino Autobiography and Memoir**

HISTORY

209a **Colonial Latin America**

209b **Modern Latin America**

317b **Visions of Mexico**

POLITICAL SCIENCE

229a **Latino Politics in the U.S.**

232a Peace Building: Reintegration, Reconciliation, and Reconstruction
237a Latin American Politics

SPANISH

All courses in Spanish at Haverford, Bryn Mawr, and Swarthmore count toward the concentration.

Linguistics is the study of language, the medium which allows us to communicate and share our ideas with others. As a discipline, linguistics examines the structural components of sound, form, and meaning, and the precise interplay between them. Modern linguistic inquiry stresses analytical and argumentation skills, which will prepare students for future pursuits in any fields where such skills are essential.

Linguistics is also relevant to other disciplines, such as psychology, philosophy, sociology, and anthropology.

The primary goals of the linguistics minor are: To introduce students to the field of linguistics proper through a series of foundation courses in linguistics theory and methodology; to provide training in the application of certain theoretical and methodological tools to the analysis of linguistic data; and to offer an array of interdisciplinary courses that allow students to explore other related fields that best suit their interests.

Professor Marilyn Boltz (Psychology)

Professor Ashok Gangadean (Philosophy), on leave fall of 2002

Professor Donna Jo Napoli (Linguistics at Swarthmore)

Lecturer Jeanette Owen (Russian at Bryn Mawr)

Professor George Weaver (Philosophy at Bryn Mawr)

Associate Professor Theodore Fernald (Linguistics at Swarthmore)

Associate Professor Danielle Macbeth (Philosophy), on leave 2002-2003

Assistant Professor Shizhe Huang (East Asian Studies, Linguistics)

Visiting Assistant Professor Eric Raimy (Linguistics at Bryn Mawr, Haverford, and Swarthmore), Coordinator

MINOR REQUIREMENTS

Students may minor in linguistics by completing 6 credits in the following three areas of study:

A. MANDATORY FOUNDATION COURSES (three credits):

GNPRH 113a **Introduction to Syntax** HU (or Swarthmore LING 050)

S. Huang

This course will provide an introduction to the investigation of sentence structures in human language. Students will be led to discover for themselves the insights into this field that linguists have gained in the past 40 years. The class will develop an increasingly complex theory starting with some basic assumptions about language and then seeing where the assumptions lead. In the process, students will not only come to a clearer understanding of how grammar works, they will also develop and refine skills of analysis, writing, and argumentation. We will focus mainly on English, since everybody in class speaks it. Occasionally, we will look at other languages to get a sense of the ways in which human languages are similar to each other and how they are different.

GNPRH 114b **Introduction to Semantics** HU (or Swarthmore LING 040)

S. Huang

This course is an introduction to semantics, the study of meaning in human language. We will explore semantic issues that arise from the lexicon, the sentences, and the discourse. Along the way, we will investigate not only the semantic structure of natural language but also pragmatic factors that affect our interpretation of the use of language. This is a participation-intensive course. In the process, students will not only learn the basic semantic theory but will also develop skills in observing linguistic patterns and analyzing these patterns in order to come to some generalizations on their own.

GNPRH 245b Phonetics and Phonology HU

E. Raimy

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.

B. SYNTHESIS COURSES (choose one):

GNPRH 282 Structure of Chinese SO

S. Huang

This course is designed to acquaint students with both the syntactic and semantic structures of Mandarin Chinese and the theoretical implications they pose to the study of natural language. Students will have an opportunity to further their understanding of linguistic theories and to develop skills in analyzing a non-Indo-European language systematically. *Not offered in 2002-03.*

LING 006 (Swarthmore) Structure of American Sign Language SO

D. Napoli

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.

LING 060 (Swarthmore) Structure of Navajo SO

T. Fernald

An examination of the major phonological, morphological, syntactic, and semantic structures in a non-Indo-European language. We will also consider the history of the language and its cultural context. *Prerequisites:* At least two out of Ling. 001, 030, 040, 043, 045, and 050.

C. ELECTIVE COURSES (choose two):

PHILB 103 Introduction to Logic HU

G. Weaver

Training in reading and writing proof discourses (i.e., those segments of writing or speech that express deductive reasoning) to gain insight into the nature of logic, the relationship between logic and linguistics, and the place of logic in the theory of knowledge.

GNSTB104 Learning Foreign Languages: An Introduction

J. Owen

This interdisciplinary course introduces students to major issues in foreign language learning, including language universals, language learning processes, and the role of a native language in second language acquisition. Discussions also address broader questions of multilingualism and communication among peoples around the world resulting from globalization.

PHILB 203 Formal Semantics HU

G. Weaver

A study of the adequacy of first order logic as a component of a theory of linguistic analysis. Grammatical, semantic, and proof theoretic inadequacies of first order logics are examined and various ways of enriching these logics to provide more adequate theories are developed, with special attention to various types of linguistic presuppositions, analyticity, selection restrictions, the question-answer relation, ambiguity, and paraphrase. *Prerequisite:* Philosophy 103.

GNPRH 203 Language, Culture, and Society HU

E. Raimy

In this course we will investigate how language varies across situations, users, and cultures by using the methods of linguistic analysis. The ramifications and the positive/negative perceptions of language variation with respect to race, gender, and other political issues will be addressed later in the course. Specific topics covered include linguistic methodology used in

sociolinguistics, dialectal variation, language and gender, language and education, and politics of language. No previous knowledge of linguistics is assumed. *Not offered in 2002-03.*

GNPRH 239 Introduction to Linguistics HU

E. Raimy

An introductory survey of linguistics as a field. This course examines the core areas of linguistic structure (morphology, phonology, syntax, semantics), pragmatics, and language variation in relation to language change. The course provides rudimentary training in the analysis of language data, and focuses on the variety of human language structures and on the question of universal properties of language.

PSYCH 238 The Psychology of Language SO

M. Boltz

An interdisciplinary examination of linguistic theory, language evolution, and the psychological processes involved in using language. Topics include: speech perception and production, processes of comprehension, language and the brain, language learning, language and thought, linguistic diversity, and nonverbal communication. *Prerequisite:* Psychology 108e or consent of instructor.

GNPRH242a Chinese Language in Culture and Society HU

S. Huang

An examination of the use and function of the Chinese language in culture and society, both within mainland China and in the Chinese diaspora. Topics include: language standardization, language planning, language and dialects, language and ethnicity, language and politics, and linguistic construction of self and community. (Cross-listed in the East Asian Studies.)

PHILH 253 Analytic Philosophy of Language HU

D. Macbeth

A close study of seminal essays by Frege, Russell, Kripke, Quine, Davidson, and others focusing on questions of meaning, reference, and truth. An overarching aim of the course is to understand how one can approach fundamental issues in philosophy through a critical reflection on how language works. *Not offered in 2002-03.*

PHILH 260 Historical Introduction to Logic HU

D. Macbeth

An introduction to various systems of logic, (e.g., term logic, propositional logic, and quantificational logic) through study of their historical roots in Aristotle, Kant, Frege, Russell, and Wittgenstein. Both the systems themselves and their wider philosophical significance will be explored. *Not offered in 2002-03.*

A sample of additional courses offered at Swarthmore College (please note we will accept for elective credit ALL courses listed in the linguistics program at Swarthmore):

LING.001 **Introduction to Language and Linguistics**

LING.025 **Language, Culture, and Society**

LING.026 **Language and Meaning**

LING.030 **Languages of the World**

LING.043 **Morphology and the Lexicon**

LING.046 **Language Learning and Bilingualism**

LING.049 **Brain, Language, and Cognition**

LING.051 **Romance Syntax**

LING.052 **Historical and Comparative Linguistics**

LING.054 **Oral and Written Language**

LING.055 **Writing Systems, Decipherment, and Cryptography**

LING.080 **Intermediate Syntax and Semantics**

MATHEMATICS

The aims of courses in mathematics are: (1) to promote rigorous thinking in a systematic, deductive, intellectual discipline; (2) to present to the student the direction and scope of mathematical development; (3) to foster technical competence in mathematics as an aid to the better comprehension of the physical, biological and social sciences; and (4) to guide and direct the mathematics majors toward an interest in mathematical research.

Mathematics majors take a three-year core sequence of courses in calculus, linear algebra, abstract algebra, and analysis, designed to provide a foundation for further study in the major areas of modern mathematics. Students with substantial advanced placement may complete this sequence by the end of their sophomore year. Students who have completed the core sequence may take advanced courses in algebra, analysis, topology, or other special topics.

The department offers several intermediate-level courses designed for both majors and non-majors. These include Mathematics 121, 204 and 215-216, which provide an important foundation for more advanced work in mathematics and other sciences. Mathematics 113, 114 and 115 (or equivalent advanced placement) is sufficient background for any of these courses. A program including Mathematics 113, 114, 116, 117, 203, 210, and 215 is especially appropriate for majors in the social sciences. Students planning graduate study in economics should consider taking Mathematics 317.

Mathematics majors are urged to gain facility in the use of computers, either through the introductory courses Computer Science 205, 206, or through independent work. Students interested in pursuing computer science in depth as part of a mathematics major should consider the possibility of a concentration in computer science. Mathematics majors interested in applying their skills to economic problems have the option of pursuing an area of concentration in mathematical economics. Students interested in teaching mathematics can concentrate in educational studies. The requirements for concentration in computer science, mathematical economics, and educational studies are described under their own headings in this catalog.

Mathematics minors preparing for a mathematics teaching career should take one elective in probability and statistics (Math 203 or 218) and one in geometry or topology (Math 205 or 335). Minors preparing for employment in industry immediately after college should take electives in probability and statistics (Math 203 or 218) and mathematical modelling (Math 204 or 210). Minors preparing for graduate work in physical chemistry or theoretical physics should take Complex Analysis (Math 220) and Analysis II (Math 318). Minors desiring a deep understanding of an area of pure math should take 300-level courses in that area (Math 318 and 392 for analysis, Math 334 and 390 for algebra, Math 335 and 336 for topology).

Professor Emeritus William C. Davidon

J. McLain King Professor of Mathematics Curtis Greene

Professor Lynne M. Butler

Associate Professor Yung-sheng Tai, on leave 2002-03

Assistant Professor Robert Manning

Visiting Assistant Professor Keith Pardue

Visiting Assistant Professor Wladimir Pribitkin

Senior Lecturer Jeffrey Tecosky-Feldman, chairperson

MAJOR REQUIREMENTS

- (1) Mathematics 215, and either Mathematics 121, or Mathematics 216.
- (2) Mathematics 317, 333 and one of Mathematics 318 or 334.
- (3) Four additional electives in mathematics or approved related courses at the 200 level or higher. At least one of these must be at the 300 level. Neither Math 399 nor Math 460 nor Math 480 used for senior paper preparation may be counted toward these requirements.
- (4) The senior seminar. This requirement consists of Mathematics 399f or Mathematics 480f in the fall, and Mathematics 399i in the spring.
- (5) A senior paper and oral presentation.

Students planning graduate study in mathematics or related fields are strongly advised to take additional courses at the 300 level.

Equivalent courses in mathematics at Bryn Mawr College may be substituted for any requirement, subject to advisor approval.

REQUIREMENTS FOR HONORS

Honors are granted to those senior mathematics majors who, by means of their course work, senior paper and oral presentation, have given evidence of their ability, initiative, and interest in the study of mathematics. High Honors are awarded to the exceptionally able student.

MINOR REQUIREMENTS

- (1) Mathematics 215 and either Mathematics 121 or Mathematics 216.
- (2) Mathematics 317 and 333.
- (3) Two additional electives in mathematics at the 200 level or higher.

CORE COURSES

113a **Calculus I** NA/QU

W. Pribitkin

An introduction to calculus of a single variable. Topics include limits, differentiation and integration and the fundamental theorem of calculus with applications to the natural and social sciences. *Prerequisite:* A solid background in precalculus mathematics.

113b **Calculus I - Intensive Section**

J. Tecosky-Feldman

This course covers the same material as 113a, but is designed for students who need and desire extra help with precalculus concepts. The course meets for three 2-hour sessions each week. *Prerequisite:* Consent of the instructor.

114d, g **Introductory Integral Calculus** NA/QU

K. Pardue

An introduction to the theory and applications of the definite and indefinite integral. Includes numerical and analytical techniques for computing integrals and applications to differential equations. *Prerequisite:* Math 113 or advanced placement.

115d,e,h **Calculus Applications: Series, Parametric Curves and Complex Numbers** NA/QU

C. Greene, K. Pardue

Covers infinite sequences and series, Taylor approximations, polar coordinates, complex numbers, and the calculus of parametric curves. *Prerequisite:* Math 114 or advanced placement.

116 e.g **Calculus Applications: Probability Distributions** NA/QU

C. Greene, L. Butler

Probability distributions and their applications in the natural and social sciences. The concept of probability and conditional probability. Discrete and continuous random variable. Expected value and variance. Central limit theorem. Applications of the binomial, Poisson, exponential and normal distributions. *Prerequisite:* Math 114 or advanced placement.

117h **Calculus Applications: Multivariable Optimization** NA/QU

L. Butler

Introduction to multivariable differential calculus. Partial derivatives, gradients, unconstrained and constrained optimization, Lagrange Multiplier method and applications to economic models. *Prerequisite:* Math 114 or advanced placement.

121a, b **Calculus III** NA/QU

L. Butler, K. Pardue

An introduction to functions of several variables, vector geometry, partial derivatives, maxima & minima, Taylor's Theorem, infinite series, multiple integrals, line integrals, and Green's and Stokes' Theorem. *Prerequisites:* Math 114 and 115 or 116 or 117, or advanced placement.

215a,b **Linear Algebra** NA/QU

J. Tecosky-Feldman, R. Manning

An introduction to linear algebra: Vector spaces, linear transformations and matrices, determinants, quadratic forms and eigenvalue problems. Applications to differential equations and linear models are discussed. *Prerequisites:* Math 114 and 115 or 116 or 117, or 121, or advanced placement.

216b **Advanced Calculus** NA

J. Tecosky-Feldman

Calculus of several variables: Continuous and differentiable functions on Euclidean spaces, extreme value problems, inverse and implicit function theorems, multiple integration, Green's and Stokes' Theorems. *Prerequisite:* Math 215.

317a **Analysis I** NA

R. Manning

A rigorous development of the differential calculus, including detailed treatment of the axioms of the real number line, cardinality, topology of normed spaces, compactness, and various notions of convergence. This course also serves as a thorough introduction to clear, correct writing of mathematical proofs. *Prerequisites:* Math 215 and either Math 121 or 216, or consent of the instructor.

318b **Analysis II** NA

R. Manning

A rigorous development of the integral, series of functions, Fourier series and the implicit function theorem. Other advanced topics (such as Hilbertspaces, Fourier transforms, special functions, approximation theorems, or fixed point theorems) can be included in response to student interest. *Prerequisite:* Math 317.

333a **Algebra I** NA

C. Greene

A rigorous treatment of fundamental algebraic structures. Topics include: Axioms for integers, modular arithmetic, polynomials, rings, fields, and introduction to groups. *Prerequisites:* Math 215 and either Math 121 or 216, or consent of instructor.

334b Algebra II NA

C. Greene

A continuation of Math 333a. Topics include: Sylow's theorems for groups, finite abelian groups, finite fields, Galois theory, modules, and advanced linear algebra.

Prerequisite: Math 333.

399f,i Senior Seminar NA-1/2

C. Greene, R. Manning

Seminar for students writing senior papers, dealing with the oral and written exposition of advanced material.

ELECTIVES

103b Introduction to Probability and Statistics NA/QU (Also called General Programs 103b)

W. Pribitkin

Basic concepts and methods of elementary probability and quantitative reasoning, with practical applications of sample spaces, conditional probabilities, random variables, expectation values, variance, elementary combinatorics, and data analysis. No prerequisites.

104a Calculus: Concepts and History NA/QU (Also called General Programs 104a)

J. Tecosky-Feldman

An introduction to the history and development of the ideas of calculus, one of the most beautiful and useful creations of the human intellect. Beginning with a study of the achievements of Archimedes and his predecessors, the course will follow the historical progression of the concepts of function, derivative and integral, including recent developments, such as fractals. In addition to regular problem sets, students will be required to write essays explaining the important concepts of the course. *Note: This course is suitable for students interested in a nontechnical survey of the ideas of calculus. In particular, it does not cover the same amount of material as Math 113, and cannot substitute for Math 113 in any course requiring Math 113 as a prerequisite (such as Math 114).*

203b Statistical Methods and their Applications NA/QU

An introduction to statistical methods used to analyze data in the natural and social sciences. It covers probability distributions, sample mean and variance, the normal distribution, hypothesis testing, comparison of two samples, the binomial and Poisson distributions, regression, and analysis of variance. *Prerequisite:* Math 114 or 120, or advanced placement. *Not offered in 2002-03.*

204a Differential Equations NA/QU

W. Pribitkin

Ordinary differential equations, the general theory of first-order equations, linear equations of higher order, series solutions, singular points, stability of linear and nonlinear systems, and computational methods. An introduction to complex numbers and series and an introduction to Fourier series and orthogonal functions also are included. Elements of linear algebra are developed as needed. Emphasis is on applications, especially on differential equations as mathematical models in the physical, biological and social sciences. *Prerequisites:* Math 114 and 115 or 116 or 117, or advanced placement.

205b Topics in Geometry NA

J. Tecosky-Feldman

An introduction to several areas in classical and modern geometry including: Analytic geometry, conic sections, Platonic solids and polyhedra, tessellations of the plane, projective, hyper-

bolic, and differential geometry. Students will see how symmetry groups serve as a unifying theme in geometry. This course will introduce students to the skill of writing formal mathematical proofs. *Prerequisite:* Math 121 or permission of the instructor. *Offered in 2003-04 and alternate years.*

210a Linear Optimization and Game Theory NA (Also called Economics 210a and Computer Science 210a)

C. Greene

Covers in depth the mathematics of optimization problems with a finite number of variables subject to constraints. Applications of linear programming to the theory of matrix games and network flows are covered, as well as an introduction to nonlinear programming. Emphasis is on the structure of optimal solutions, algorithms to find them, and the underlying theory that explains both. This course is designed for students interested in computer science, economics, or mathematics. *Prerequisites:* Math 121 and consent of instructor, or Math 215. *Not offered in 2002-03.*

218b Probability and Statistics NA/QU

C. Greene

Probabilistic techniques with applications: The concept of probability and conditional probability, random variables, stochastic processes, applications to statistics, Markov chains and processes, and queuing theory. *Prerequisite:* Math 116 or 121, or consent of instructor.

220a Elementary Complex Analysis NA

W. Pribitkin

Line integrals; complex derivatives; Cauchy's theorem and residue calculations; elementary conformal mapping; harmonic functions. *Prerequisite:* Math 121 or 215. *Not offered in 2002-03.*

222a Introduction to Scientific Computing NA/QU

R. Manning

A survey of major algorithms in modern scientific computing (including root-finding, optimization, Monte Carlo, discretization of differential equations, and search algorithms) and their application across the natural and social sciences. *Prerequisites:* Math 121 or 216, and experience with Mathematica or a programming language, or permission of the instructor.

235a Information and Coding Theory NA/QU (Also called Computer Science 235a)

S. Lindell

Covers the mathematical theory of the transmission (sending or storing) of information. Included will be encoding and decoding techniques, both for the purposes of data compression, and for the detection and correction of errors. *Prerequisite:* Math 215 or equivalent.

236b Set Theory and Foundations NA

S. Lindell

An introduction to the set-theoretic foundations of mathematics using the axiomatic method including relations, Peano's axioms for the natural numbers, construction of the real numbers, axiom of choice, ordinals and cardinals. *Prerequisite:* Any college-level math course or permission of the instructor. *Not offered in 2003-03.*

237a Logic and the Mathematical Method NA

S. Lindell

An introduction to the proof-theoretic methodology of modern mathematics using propositional and first-order predicate logic including truth, models, deductions, soundness, completeness, compactness, with discussions of effectiveness, decidability, and incompleteness. A cooperative learning course in which students participate in class. *Not offered in 2002-03.*

335a Topology I NA

L. Butler

Prerequisites: Math 317 and 333.

336b Topology II NA

L. Butler

General topology; homotopy theory; singular homology theory. *Prerequisite:* Math 335.

340b Analysis of Algorithms NA (Also called Computer Science 340)

S. Lindell

Qualitative and quantitative analysis of algorithms and their corresponding data structures, from a precise mathematical point of view. Performance bounds, asymptotic and probabilistic analysis, worst case and average case behavior. Correctness and complexity. Particular classes of algorithms such as sorting and searching will be studied in detail. *Prerequisites:* Math/Computer Science 231, Computer Science 206, and some additional mathematics at the 200 level, or consent of instructor.

345b Theory of Computation NA (Also called Computer Science 345)

Staff

Introduction to the mathematical foundations of computer science: Finite state automata, formal languages and grammars, Turing machines, computability, unsolvability, and computational complexity. *Prerequisites:* Math/Computer Science 231, Computer Science 206, and some additional mathematics at the 200 level, or consent of instructor. *Not offered in 2002-03.*

390a Advanced Topics in Algebra and Geometry: Cryptography NA

K. Pardue

Prerequisite: Math 333 or permission of the instructor.

392b Advanced Topics in Analysis and Geometry NA

W. Pribitkin

Prerequisite: Math 317 or permission of the instructor.

394a,b Advanced Topics in Discrete Mathematics and Computer Science NA (Also called CMCS 394a, b)

S. Lindell

Not offered in 2002-03.

396b Advanced Topics in Probability, Statistics, and Applied Mathematics NA

C. Greene

Not offered in 2002-03.

398b Advanced Topics in Logic and Foundations of Mathematics NA

Staff

Not offered in 2002-03.

460f, i Teaching Assistantship in Mathematics NA

Students work as assistants to a faculty member in an introductory mathematics course for a semester, offering various kinds of classroom support including problem sessions, review, tutoring, and laboratory assistance. *Open to junior and senior majors by invitation. May be taken at most twice.*

480f, i **Independent Study NA**
Staff

COURSES AT BRYN MAWR COLLEGE

001 Fundamentals of Mathematics

101,102 Calculus with Analytic Geometry

104 Elements of Probability and Statistics

201 Multivariable Calculus

203 Linear Algebra

206 Transition to Higher Mathematics

210 Differential Equations with Applications

221 Introduction to Topology and Geometry

231 Discrete Mathematics

301, 302 Introduction to Real Analysis

303, 304 Abstract Algebra

311 Partial Differential Equations

322 Functions of Complex Variables

503, 504 Graduate Algebra

511 Graduate Complex Analysis

MATHEMATICAL ECONOMICS

In the last several decades, the disciplines of mathematics and economics have become more and more closely allied. Most fields of contemporary economic theory are built on mathematical foundations, and every graduate program in economics has several faculty members who specialize in mathematical economics. In mathematics, several recent developments have been driven by economic problems. Work by mathematicians on fixed-point theorems, for instance, was motivated largely by applications to general equilibrium theory in economics. The Area of Concentration in mathematical economics integrates these developments in the two disciplines into Haverford's curriculum.

The concentration is open to students majoring in mathematics or economics. It provides structure and guidance to economics majors wishing to strengthen their math background, and to mathematics majors wishing to explore ways in which the tools of their discipline are applied.

Completing a concentration in mathematical economics is highly advantageous to a large subset of economics majors. Graduate study in economics requires a preparation in math substantially beyond the minimum required for an undergraduate economics major. A strong math background also benefits students going on to business school or public policy school. Even for students not interested in graduate school, completing the concentration is advantageous for finding a variety of economics-related jobs that require quantitative and analytical skills, both in government and business.

The concentration in mathematical economics also benefits mathematics majors. Many students find mathematics more exciting and meaningful when they see it applied to a discipline they find interesting and concrete. Almost every undergraduate mathematics course covers topics useful in economic applications: optimization techniques in multivariable calculus, quadratic forms in linear algebra, and fixed point theorems in topology. In intermediate and advanced courses in economics, mathematics majors can see these applications.

Professor Lynne Butler, Mathematics Department representative

Associate Professor Richard Ball, Economics Department representative and Concentration Coordinator

REQUIREMENTS

To complete the concentration in mathematical economics, mathematics majors must take four required economics courses and one additional elective, and economics majors must take three required mathematics courses and two additional electives. The courses required for mathematics majors provide a solid foundation in both micro and macro, the two major subfields in economics, as well as exposure to empirical methods. The courses required for economics majors cover mathematical topics commonly encountered in economics.

REQUIRED COURSES FOR MATHEMATICS MAJORS

Econ 101 **Introduction to Microeconomics**

Econ 102 **Introduction to Macroeconomics**

Econ 203 **Statistical Methods in Economics**

Econ 300 **Intermediate Microeconomic Analysis**

ELECTIVES: AN ADDITIONAL COURSE IN ECONOMICS AT THE 200 OR 300 LEVEL

Notes: With permission of the instructor, Economics 304: Introduction to Econometrics may be substituted for Economics 203. Permission will usually be given to students with a background in statistics equivalent to Economics 203.

Mathematics 203 may also be substituted for Economics 203. If the concentrator is using Mathematics 203 as an elective toward the mathematics major, however, one supplementary economics course at the 200 or 300 level will be required.

REQUIRED COURSES FOR ECONOMICS MAJORS

Math 121 **Calculus III**

Math 215 **Linear Algebra**

Math 317 **Analysis I**

ELECTIVES: TWO ADDITIONAL MATHEMATICS COURSES CHOSEN FROM AMONG THE FOLLOWING:

Math 204 **Differential Equations**

Math 210 **Linear Optimization and Game Theory**

Math 218 **Probability and Statistics**

Math 222 **Introduction to Scientific Computing**

Math 318 **Analysis II**

Math 335 **Topology I**

BMC Math 351 **Chaotic Dynamical Systems**

In their senior theses, economics majors concentrating in mathematical economics are expected to incorporate formal models and/or techniques that reflect their additional training in mathematics. The thesis will thus serve as a synthesizing experience in which the tools gained in the mathematics coursework are integrated into the students' economic analyses.

The music curriculum is designed to deepen understanding of musical form and expression through development of skills in composition and performance joined with analysis of musical works and their place in various cultures. A major in music provides a foundation for further study leading to a career in music.

The theory program stresses proficiency in aural, keyboard and vocal skills, and written harmony and counterpoint. Composition following important historical models and experimentation with contemporary styles are emphasized.

The musicology program, which emphasizes European, North American, and Asian traditions, considers music in the rich context of its social, religious, and aesthetic surroundings.

The performance program offers opportunities to participate in the Haverford-Bryn Mawr Chamber Singers, Chorale, Orchestra, and ensembles formed within the context of Haverford's Chamber Music program. Students can receive academic credit for participating in these ensembles (Music 102, 214, 215, 216, and 219), and can receive credit for Private Study (Music 217) in voice or their chosen instrument.

Ruth Marshall Magill Professor **Curt Cacioppo**, chairperson

Associate Professor **Ingrid Arauco**

Professor **Richard Freedman**

Associate Professor **Heidi Jacob**, director of the Haverford-Bryn Mawr Orchestral Program, on leave second semester

Associate Professor **Thomas Lloyd**, director of the Haverford-Bryn Mawr Choral Program

Visiting Instructor **Christine Cacioppo**

SPECIAL PROGRAMS AND FUNDS

The Music Department **Guest Artists Series** presents distinguished and emerging performers in public concerts, master classes, lecture-demonstrations, reading sessions, and informal encounters. Featured artists last season were Native American flutist Mary Youngblood, the Cuarteto Latinoamericano, pianist Charles Abramovic, violinist Arnold Steinhardt, the Network for New Music, and the American String Quartet. The **William Heartt Reese Music Fund** was established in 1977 to honor William Heartt Reese, professor of music and conductor of the glee club and orchestra at Haverford from 1947 to 1975. The fund supports applied music lessons for students enrolled in the department's private study program. The **John H. Davison '51 Fund for Student Composers** supports new works by student composers. This fund recognizes John's 40 years of teaching and musical creativity at Haverford. The **Orpheus Prize** is awarded for exceptional achievement in the practice of tonal harmony. The **Kessinger Family Fund for Asian Performing Arts** sponsors musical performances and lecture-demonstrations that enrich Haverford's cross-cultural programs. Since its inception in 1997, the fund has sponsored visits by artists representing traditions of South, Central, and East Asia, and Indonesia.

MAJOR REQUIREMENTS

- 1) Theory-composition: 203a, 204b, 303a.
- 2) Musicology: two courses chosen from 221a, 222b, 223a, 224b.
- 3) Three electives in music, chosen from: 207 a or b, 221a, 222b, 223a, 224b, 227a, 228a, 250a or b, 251a or b, 265b, 266b, 304b, and 403 a or b.
- 4) Performance: participation in a department-sponsored performance group is required for at

-
- least a year. Music 217f, i instrumental or vocal private study for one year. Continuing ensemble participation and instrumental or vocal private study are strongly urged.
- 5) An additional full course credit is required of majors in their senior year. This work may be fulfilled either as an upper level elective or as an independent project (composition, recital, or research paper) as directed by the department. The department will determine, prior to the date of final registration in the fall of the senior year, which track each individual major should pursue in completing this requirement — course elective, or independent project. Once the determination is made, senior work will be carried out according to the guidelines set forth by the department for each particular case.
- 6) Majors are expected to attend the majority of department-sponsored concerts, lectures, and colloquia.

MINOR REQUIREMENTS

- 1) Theory-Composition: 203a, 204b
 - 2) Musicology: two courses chosen from 221a, 222b, 223a, 224b.
 - 3) One elective chosen from: 207a or b, courses not already taken in fulfillment of requirement 2), 228a or b, 250a or b, 251a or b, 265b, 266b, 303a, 304b, 403a or b
 - 4) Music 217f, i instrumental or vocal private study or department ensemble participation for one year. Continuing ensemble participation and instrumental or vocal private study are strongly urged.
- Substitutions for Haverford College courses in fulfillment of the major or minor in music must be approved in advance by the music department.

REQUIREMENTS FOR HONORS

Departmental Honors or High Honors will be awarded on the basis of superior work in music courses combined with exceptional accomplishment in the senior project.

COURSES

THEORY AND COMPOSITION

110a **Musicianship** HU

I. Arauco

Intensive introduction to the notational and theoretical materials of music, complemented by work in sight-singing and keyboard harmony. Discussion of musical forms and techniques of melody writing and harmonization; short projects in composition.

203a **Tonal Harmony I** HU

Curt Cacioppo

The harmonic vocabulary and compositional techniques of Bach, Haydn, Mozart, Beethoven, Schubert, and others. Emphasis is on composing melodies, constructing phrases, and harmonizing in four parts. Composition of Minuet and Trio or other homophonic piece is the final project. Three class hours plus laboratory period covering related aural and keyboard harmony skills. *Prerequisite:* Music 110.

204b **Tonal Harmony II** HU

I. Arauco

An extension of Music 203 concentrating on chorale harmonization, construction of more complex phrases; a composition such as original theme and variations as final project. Three class hours plus laboratory period covering related aural and keyboard harmony skills. *Prerequisite:* Music 203.

265b Symphonic Technique and Tradition HU*Curt Cacioppo*

Study and practice of the techniques of orchestration from Baroque through Modern times with close examination of masterpieces from the symphonic tradition. Development of individual instruments, evolution of the orchestra, notation, clefs, transposition, timbre, range, effects, doubling, reduction, transcription, composition for large instrumental ensemble.

Prerequisite: Music 203.

266b Composition HU*I. Arauco*

An introduction to the art of composition through weekly assignments designed to invite creative, individual responses to a variety of musical ideas. Scoring for various instruments and ensembles; experimentation with harmony, form, notation and text setting. Weekly performance of student pieces; end-of-semester recital. *Prerequisite:* Music 203 or consent of instructor.

303a Advanced Tonal Harmony HU*I. Arauco*

An introduction to chromatic harmonization; composition in forms such as waltz, nocturne, intermezzo, and exploration of accompaniment textures. Analysis of works by Schumann, Chopin, Brahms, Mendelssohn, Dvorak, Wagner, Liszt, Mahler, Elgar, Strauss, and others. Three class hours plus laboratory period covering related aural and keyboard harmony skills.

Prerequisite: Music 204.

304b Counterpoint HU*Curt Cacioppo*

18th century contrapuntal techniques and forms with emphasis on the works of J. S. Bach. Canon; composition of two-part invention; fugal writing in three parts; chorale prelude; analysis. Three class hours plus laboratory period covering related aural and keyboard harmony skills. *Prerequisite:* Music 204.

403a or b Seminar in 20th Century Theory and Practice HU*I. Arauco*

Classic and contemporary 20th-century composers, works, and trends, with reference to theoretical and aesthetic writings and the broader cultural context. *Prerequisite:* Music 303.

PERFORMANCE**102c, f, i Chorale HU1/2***T. Lloyd*

Chorale is a large mixed chorus that performs major works from the oratorio repertoire with orchestra. Attendance at weekly two-hour rehearsals and dress rehearsals during performance week is required. *Prerequisite:* Audition and consent of instructor.

107f, i Introductory Piano HU 1/2*Christine Cacioppo*

For students with little or no keyboard experience. Basic reading skills and piano technique; scales, arpeggios, and compositions in small forms by Bach, Mozart and others. *Enrollment limited to 16 students.*

207a and b Topics in Piano HU*Curt Cacioppo*

(Topic for fall 2002: Haydn, Mozart, Beethoven. Topic for spring 2003: Schubert, Schumann, Brahms.) Combines private lessons and studio/master classes, musical analysis, research

questions into performance practice and historical context, critical examination of sound recorded sources. Preparation of works of selected composer or style period for end of semester class recital is required. *Prerequisite:* Audition and consent of instructor.

214c, f, i Chamber Singers HU

T. Lloyd

Chamber Singers is a 30-voice mixed choir that performs a wide range of mostly a cappella repertoire from the Renaissance to the present day in original languages. Attendance required at three 80-minute rehearsals weekly. *Prerequisite:* Audition and consent of instructor.

215c, f, i Chamber Music HU

H. Jacob/staff

Intensive rehearsal of works for small instrumental groups, with supplemental research and listening assigned. Performance is required. The course is available to those who are concurrently studying privately, or who have studied privately immediately prior to the start of the semester. *Prerequisite:* Audition and consent of instructor.

216c, f, i Orchestra HU

H. Jacob/staff

For students participating in the Haverford-Bryn Mawr Orchestra, this course addresses the special musical problems of literature rehearsed and performed during the semester.

Prerequisite: Audition and consent of instructor.

217f, i Vocal or Instrumental Private Study HU 1/2

Supervisors: T. Lloyd (vocal), H. Jacob/fall, I. Arauco/spring (instrumental), Curt Cacioppo (keyboard)

Prerequisites: Departmental audition and consent of supervisor. To continue beyond the initial semester, the student must have taken or be taking one of the regular theory offerings — Music 110, 203, 204 — or musicology offerings — Music 221, 222, 223, or 224. Students should be participating in a departmentally directed ensemble or activity (Chorale, Orchestra, etc.) as advised by their program supervisor. Private teachers are assigned by the respective program supervisor. All students in the private study program perform for a faculty jury at the end of the semester. A maximum of two credits of private study may be applied toward graduation. Students assume the cost of their private lessons, but may apply for private study subsidies at the beginning of each semester's study through the department.

219i Art Song HU

T. Lloyd

Intensive rehearsal of art songs representative of various style periods and languages, with supplemental research and listening assigned. Performance is required. The course is available to those who are concurrently studying privately, or who have studied privately immediately prior to the start of the semester. *Prerequisite:* Audition and consent of instructor.

MUSICOLOGY

111b Introduction to Western Music HU

R. Freedman

A survey of the European musical tradition from the middle ages to modern times. Students will hear music by Monteverdi, Bach, Mozart, Beethoven, Wagner, Stravinsky, Glass, among many others, developing both listening skills and an awareness of how music relates to the culture that fosters it. In addition to listening and reading, students will attend concerts and prepare written assignments.

130b Beethoven HU*Curt Cacioppo*

This course will consider Ludwig van Beethoven in his primary role as composer by examining works in different genres from his early, middle, and late periods. These will include piano sonatas, piano chamber music, string quartets, concerti, symphonies, and his opera "Fidelio." In addition, Beethoven's debt to earlier composers, his relationship to musical and intellectual contemporaries, and his struggle against deafness will be explored, as well as his pedagogical, political, and spiritual dimensions. His impact upon later composers and upon the definition and expectation of the creative artist will be weighed. Along with aural investigations, critical and historical readings will be assigned, as well as Beethoven's own letters, journals, conversation books, and the Heiligenstadt Testament.

221a Medieval and Renaissance Music HU*R. Freedman*

Music of the 12th through 16th centuries, emphasizing changing approaches to composition, notation, and expression in works by composers such as Hildegard von Bingen, Guillaume de Machaut, Josquin Desprez, and Orlando di Lasso (among many others). Classroom assignments will consider basic problems raised by the study of early music: Questions of style of structure, debates about performance practice, and issues of cultural history. Extensive reading and listening culminating in individual research or performance projects. *Prerequisite:* Music 110, 111, or consent of instructor.

222b Baroque Music HU*R. Freedman*

Music of the 17th and 18th centuries, with focus on central developments of opera, sacred music, and instrumental genres. Through careful study of works by Monteverdi, Lully, Corelli, Handel, Rameau, and Bach, students will explore changing approaches to musical style and design, basic problems of performance practice, and how musicologists have sought to understand the place of music in cultural history. *Prerequisite:* Music 110, 111, or consent of the instructor.

223a Classical Music HU*R. Freedman*

The music of Haydn, Mozart, Beethoven, and Schubert (among many others). Classroom assignments will lead students to explore the origins and development of vocal and instrumental music of the years around 1800, and to consider the ways in which musicologists have approached the study of this repertory. *Prerequisite:* Music 110, 111, or consent of instructor.

224b Romantic Music HU*R. Freedman*

Music by Chopin, Schumann, Verdi, Wagner, Brahms, and Mahler (among others), with special focus on changing approaches to style of expression, and to the aesthetic principles such works articulate. Assignments will allow students to explore individual vocal and instrumental works, and will give students a sense of some of the perspectives to be found in the musical literature on 19th century music. *Prerequisite:* Music 110, 111, or consent of instructor.

250a or b Words and Music HU (Also listed as Comparative Literature 250a or b)*R. Freedman, Curt Cacioppo*

Under this title, four separate courses are available: The Operas of Verdi and Wagner, Wagner's Ring and the Modern World (also a German Studies elective), The Renaissance

Text and its Musical Readers, and Tones, Words, and Images. *Prerequisite:* Any full-credit course in music, or consent of instructor.

251b Music, Film, and Narrative

R. Freedman

An introduction to music and film, with special attention to works from the 1930s through the 1950s by composers such as Auric, Copland, Eisler, Herrmann, Korngold, Prokofiev, Shostakovich, Steiner, Tiomkin, and Waxman. Close study of orchestration, harmony and thematic process as they contribute to cinematic narrative and form. Source readings to include artistic positions staked out by film composers themselves, as well as critical and scholarly essays by leading writers on the narrative possibilities of film music. Extensive reading, listening, and viewing assignments. Weekly writing assignments culminating in a major project. *Prerequisite:* Music 203 or equivalent knowledge of music theory.

480a, f, b, i Independent Study

Staff

Prerequisite: Approval of department and consent of instructor.

DIVERSE TRADITIONS

149b Native American Music and Belief HU

Curt Cacioppo

Through singing, listening and analysis, cultural and political readings, film discussion and guest visits, this course attempts to reveal the diversity, complexity, and beauty of representative Native American traditions. It further aims to illuminate the history, past and ongoing, of hostile action taken by mainstream interests against indigenous peoples of North America. (Satisfies the social justice requirement.)

227a Jazz and the Politics of Culture HU

R. Freedman

A study of jazz and its social meanings. Starting with an overview of jazz styles and European idioms closely bound to jazz history, the course gives students a basic aural education in musical forms, the process of improvisation, and the fabric of musical performance in the context of how assumptions about order and disorder in music reflect deeply felt views about society and culture. *Prerequisite:* Sophomore standing or higher. *Enrollment limited to 35 students.* (Satisfies the social justice requirement.)

228a or b Musical Voices of Asia HU (Also called East Asian Studies 228a or b)

R. Freedman

The musical traditions of South, East, and Central Asia, as well as Indonesia. Extensive discussion of vocal and instrumental genres, approaches to texts and stories, and systems of learning. We will also pay special attention to the place of music in broader cultural and social contexts: as a definer of gender or religious identities, as an object of national or political ownership, and in its interaction with Western classical and popular forms. *Prerequisite:* Sophomore standing or higher.

NEURAL AND BEHAVIORAL SCIENCE

Over the several decades, a new interdisciplinary field called neuroscience has emerged from the fields of physiological/behavioral psychology and biology. At its best, neuroscience is informed both by sensitivity to the difficulties in classifying and interpreting behavior and by mastery of the technical skills needed to study the physiology of the brain. In other words, the ideal neuroscientist is trained both as a psychologist and a biologist. With this ideal in mind, the concentration in neural and behavioral science requires students to gain expertise both in behavioral research and the study of brain structure and function, by taking courses with NBS content from various perspectives. The program is administered by the Department of Psychology at Haverford and the Departments of Biology and Psychology at Bryn Mawr. Haverford students in the concentration are required to complete all of the traditional coursework in psychology (including laboratory work) while also taking a broad range of courses in the natural and physical sciences. Students are then expected to synthesize the behavioral and biological approaches in their senior thesis.

Completing the concentration should be of particular value for two kinds of students. Those planning to go on to medical school will receive more training in research methodologies in the behavioral/life sciences than normally experienced on the pre-med track. Many physicians leave medical school with little research training, and experience in the concentration should put students one step ahead if they choose to pursue a career in medical research. For students planning to go on to graduate school, the concentration should provide an ideal background for programs in either psychology or biology. Graduate training in the neurosciences prepares students for careers in a variety of settings, including academic departments in psychology and biology and research centers affiliated with medical schools.

Professor Margaret Hollyday, Psychology and Biology at Bryn Mawr

Professor Karen Greif, Biology at Bryn Mawr

Professor Paul Grobstein, Biology at Bryn Mawr

Professor Earl Thomas, Concentration Advisor in Psychology at Bryn Mawr, on leave 2002-03

Associate Professor Peter Brodfuehrer, Concentration Advisor in Biology at Bryn Mawr

Professor Leslie Rescorla, Psychology at Bryn Mawr

Associate Professor Wendy Sternberg, Concentration Advisor in Psychology at Haverford and Concentration Coordinator

Assistant Professor Kimberly Cassidy, Psychology at Bryn Mawr

Assistant Professor Rebecca Compton, Psychology at Haverford, on leave 2002-03

Associate Professor Deepak Kumar, Computer Science at Bryn Mawr

Assistant Professor Anjali Thapar, Psychology at Bryn Mawr

REQUIREMENTS FOR HAVERFORD PSYCHOLOGY STUDENTS ENROLLED IN THE NBS CONCENTRATION

NBS concentrators majoring in HC psychology must satisfy the usual major requirements and must take the following courses (where indicated, some NBS courses satisfy psychology major requirements)

A core course in biological psychology (HC Psychology 217 or BMC Psychology 218, this course counts as a biological area course toward the psych major).

One semester of introductory biology with lab. (*Note: HC Biology 100 does not satisfy this requirement.*) Must be taken before the senior year.

One advanced course (200 or 300 level) containing NBS-relevant material, taken from any offering department. This course can count as the fourth advanced course required for the psychology major. A list of acceptable courses is presented below. (*Note:* BMC Psychology 218, BMC Biology 202, and Haverford Psychology 217 do not fulfill this requirement.)

One advanced course containing NBS-relevant material, taken from outside the home discipline (i.e., biology or computer science). Appropriate courses are listed below, but other relevant courses may be substituted with permission of the departmental concentration advisor.

Senior year seminar in neural and behavior sciences (BMC Psychology/Biology 396).

Senior Research Tutorial (also a requirement for the psychology major) must be undertaken in an area of biological psychology, under the supervision of an NBS faculty member. If a faculty advisor outside of the HC psychology department supervises the project, the student is still responsible for meeting the usual requirements of a senior thesis in Haverford psychology.

BIOLOGY AT BRYN MAWR COLLEGE

202 **Neurobiology and Behavior**

271 **Developmental Biology**

303 **Animal Physiology**

304 **Cell and Molecular Neurobiology**

336 **Advanced Evolution**, *not offered in 2002-03*

BIOLOGY AT HAVERFORD COLLEGE

309 **Molecular Neurobiology** (a half-semester course)

350 **Patterning in the Nervous System** (a half-semester course)

Note: Two half-semester courses equal one full-semester course

COMPUTER SCIENCE AT BRYN MAWR COLLEGE

371 **Cognitive Science**, *not offered in 2002-03*

372 **Artificial Intelligence**

PSYCHOLOGY AT BRYN MAWR COLLEGE

323 **Cognitive Neuroscience: Trends in Human Memory**

350 **Developmental Cognitive Disorders**

395 **Psychopharmacology**

397 **Laboratory Methods in the Brain and Behavioral Sciences**

PSYCHOLOGY AT HAVERFORD

221 **Primate Origins of Society**

250 **Biopsychology of Emotion and Personality**, *not offered in 2002-03*

320 **Evolutionary Human Psychology**

350 **Biopsychology of Stress**, *not offered in 2002-03*

340 **Human Neuropsychology**, *not offered in 2002-03*

PEACE AND CONFLICT STUDIES

The goal of the Bi-College concentration is to help focus students' coursework around specific areas of interest central to peace and conflict studies. The concentration is composed of a six-course cluster centering around conflict and cooperation within and between nations. Of these six courses, at least two and no more than three may be in the student's major. Peace and conflict studies draws upon the long-standing interest in war, conflict and peacemaking, and social justice, as well as questions associated with the fields of anthropology, economics, history, political science, social psychology, and sociology. It draws on these fields for theoretical understandings of matters such as bargaining, internal causes of conflict, cooperative and competitive strategies of negotiation, intergroup relations, and the role of institutions in conflict management.

Students meet with the coordinator in the spring of their sophomore year to work out a plan for the concentration. All concentrators are required to take three core courses: (1) the introductory course, peace and conflict studies (General Programs 111a); (2) either Conflict and Conflict Management: A Cross-Cultural Approach (Political Science 206) or Field Methods in Peace and Conflict Studies (General Programs 322); and (3) Advanced Issues in Peace and Conflict Studies (Political Science 347). It is advised that concentrators complete at least two of these three courses by the end of their junior year.

Students are required to take three additional courses chosen in consultation with the coordinator, working out a plan that focuses this second half of their concentration regionally, conceptually, or around a particular substantive problem. These courses might include: international conflict and resolution; ethnic conflict in general or in a specific region of the world (e.g. South Africa, the Middle East, Northern Ireland); a theoretical approach to the field, such as nonviolence, bargaining, or game theory; an applied approach, such as reducing violence among youth, the arts and peacemaking, community mediation, or labor relations.

At Haverford:

Assistant Professor of Peace and Conflict Studies and Anthropology **Martin Hébert**, Coordinator

At Bryn Mawr:

William F. Kenan, Jr. Professor of Political Science **Marc Howard Ross**

COURSES AT HAVERFORD COLLEGE:

ANTHROPOLOGY

257b **Ethnic Conflict**

280a **Indigenous Movements**

320a **Politics and the Imaginary**

BIOLOGY

221a **The Primate Origins of Society**

ECONOMICS

226e **Economic Policy Reform in Developing Countries**

232b **Economics and Sociology of Urban Black America**

GENERAL PROGRAMS

111a **Peace and Conflict Studies**

322b **Field Methods in Peace and Conflict Studies**

HISTORY

- 284 A History of North American Indian Peoples**
- 357a Topics in Modern Europe: Citizenship and Nationality**

PHILOSOPHY

- 352b Topics in Philosophy of Language: Metaphor and Meaning**
- 356a Topics in Social and Political Philosophy: Violence of Sexism, Racism, and the Reasoning of Power Politics**

POLITICAL SCIENCE

- 141b International Politics**
- 225 Mobilization Politics**
- 226 Social Movement Theory**
- 232a Peacebuilding: Reintegration, Reconciliation, and Reconstruction**
- 235a Democracy and Development: Africa**
- 236b Contemporary U.S. Foreign Policy, Process, and Purpose: Africa**
- 245a International Political Systems**
- 246b The Politics of International Institutions**
- 253a Comparative Communal Politics: Ethnicity, Religion, and Nationalism**

PSYCHOLOGY

- 220a Individuals in Groups and Society**

RELIGION

- 240b History and Principles of Quakerism**

COURSES AT BRYN MAWR COLLEGE:

ANTHROPOLOGY

- 206 Conflict and Conflict Management: A Cross-Cultural Approach**
- 224 Anthropology of Law**

GENERAL STUDIES

- 209 Conflict Resolution in Community Settings**

HISTORY

- 319 Topics in Modern European History**
- 349 Topics in Comparative History: Gender, Sex, and Empire**

POLITICAL SCIENCE

- 141b International Politics**
- 206 Conflict and Conflict Management: Cross-Cultural Approach**
- 241 Politics of International Law and International Institutions**
- 316 The Politics of Ethnic, Racial, and National Groups**
- 347 Advanced Issues in Peace and Conflict Studies**
- 348 Cultural and Ethnic Conflict**
- 358 Political Psychology of Group Identification**

PSYCHOLOGY

- 358 Political Psychology of Group Identification**

SOCIOLOGY

- 205 Social Inequality**
- 212 Sociology of Poverty**
- 354 Comparative Social Movements: Power, Protest, Mobilization**
- 355b Marginals and Outsiders: The Sociology of Deviance**

The philosophy curriculum has three major aims. First, it helps students develop thoughtful attitudes toward life and the world through encounters with the thought of great philosophers. Students are encouraged to reflect critically on such problems as the nature of our individual and social lives, the nature of the world in which we live, and the nature of our consciousness of and response to that world. Second, the philosophy curriculum is designed to help students acquire philosophical materials and skills that supplement and integrate their other studies in the liberal arts and sciences. Finally, the philosophy curriculum offers interested students a foundation in knowledge and skills that will prepare them for graduate study in philosophy or in related fields. Unless otherwise indicated, one philosophy course at the 100 level is a prerequisite for all other courses in philosophy. Courses at the 300 level require, in addition, a 200-level course plus junior standing, or consent of the instructor. Some advanced philosophy courses may require a reading knowledge of a foreign language as a prerequisite for admission.

Professor Ashok Gangadean, on leave semester I

John Whitehead Professor of Philosophy L. Aryeh Kosman, chairperson, on leave semester II

Professor Kathleen Wright

Associate Professor Danielle Macbeth, on leave 2002-03

Visiting Assistant Professor Adam Kovach

Visiting Assistant Professor Lauren Barthold

Visiting Assistant Professor Curtis Bowman

MAJOR REQUIREMENTS

(1) One philosophy course at the 100 level, or Bryn Mawr Philosophy 101, 102, or 201, or the equivalent elsewhere.

(2) Five philosophy courses at the 200 level, at least four of which must be completed by the end of the junior year, and three philosophy courses at the 300 level. These eight courses at the 200 and 300 level must exhibit breadth and coherence in the following ways, to be elaborated by the majors and their advisors and approved by the department:

(i) Historical and Cultural Breadth: (a) One course must be from among those that deal with the history of European philosophy prior to Kant; (b) One course must be from among those that deal with the traditions of Asian or African philosophy.

(ii) Topical Breadth: (a) One course must be from among those dealing with value theory, including aesthetics, social and political philosophy, ethics, and legal philosophy; (b) One course must be from among those dealing with metaphysics and epistemology, including ontology, philosophy of mind, and philosophy of action; (c) One course must be from among those dealing with logic or the philosophy of language.

(iii) Systematic Coherence: Four of these courses, two at the 200 level and two at the 300 level, must exhibit some systematic coherence in theme or subject satisfactory to the major advisor and the department.

(3) The Senior Seminar (399c). Students electing a major in philosophy but unable to comply with normal requirements because of special circumstances should consult the chairperson regarding waivers or substitutions.

REQUIREMENTS FOR HONORS

The award of Honors in philosophy will be based upon distinguished work in philosophy courses, active and constructive participation in the senior seminar, and the writing and presentation of the Senior essay. High Honors requires in addition exceptional and original work in the Senior essay.

MINOR REQUIREMENTS

- (1) One philosophy course at the 100 level, or Bryn Mawr Philosophy 101, 102, or 201, or the equivalent elsewhere.
- (2) Three philosophy courses at the 200 level.
- (3) Two philosophy courses at the 300 level.

COURSES

INTRODUCTORY LEVEL COURSES: A maximum of two introductory level courses may be taken for credit, one even-numbered course and one odd-numbered course.

103 Global Ethics HU

A. Gangadean

An exploration of selected texts on ethics in a global context. This course seeks to develop a global perspective on human values through a critical exploration of vital texts on ethics across diverse philosophical traditions. A central focus is on the challenge of articulating global ethics and global values across cultures, worldviews, and traditions. Readings include Aristotle's *Nicomachean Ethics*, *Bhagavad-Gita*, the *Analects* of Confucius, and Kant's *Fundamental Principles*. Not offered in 2002-03.

104b Global Wisdom HU

A. Gangadean

A critical exploration of classic texts from diverse philosophical traditions in a global context. This course seeks to cultivate a global perspective in philosophy and brings classical texts from diverse philosophical worlds into global dialogue. One aim is to help students to appreciate global patterns in rationality across traditions and to gain a critical understanding of common ground and significant differences in diverse wisdom traditions. Readings include *Bhagavad-Gita*, *Dhamapada*, Plato's *Phaedo*, and Descartes's *Meditations*.

105b Love, Friendship, and the Ethical Life

K. Wright

Different conceptions of the role of love and friendship in ethical life. Readings include ancient Greek philosophy (Plato's *Symposium*, and Aristotle's *Nicomachean Ethics*), modern European philosophy (Kant's *Grounding for the Metaphysics of Morals*, and Mill's *On the Subjection of Women*), and contemporary postmodern and feminist philosophy (Derrida's *The Politics of Friendship*, and Irigaray's *The Ethics of Sexual Difference*).

106 The Philosophy of Consciousness and the Problem of Embodiment

K. Wright

This course examines different conceptions of and solutions to the mind-body problem. Readings include ancient Greek philosophy (Plato's *Phaedrus*, *Phaedo*, and *Republic*, and Aristotle's *On the Soul*), modern European philosophy (Descartes' *Mediations* and Spinoza's *Ethics*), and contemporary postmodern and feminist philosophy (Foucault's *The History of Sexuality*, and Irigaray's *Speculum of the Other Woman*). Not offered in 2002-03.

107a Happiness, Virtue, and the Good Life

A. Kosman

An introduction to some of the central philosophical texts concerned with the idea of a good and successful human life. Issues dealt with include the role in a good life of virtues as states of character, of duty, of pleasure, and of happiness. Readings include Plato's *Republic*, Aristotle's *Nicomachean Ethics*, Paul's letters to the Romans and Galatians, Maimonides' *Eight Chapters*, Kant's *Groundwork of the Metaphysics of Morals*, Mill's *Utilitarianism*, and Murdoch's *The Sovereignty of Good*. Not offered in 2002-03.

108a Modern Theories of Consciousness

C. Bowman

An introduction to some of the ways in which modern philosophy has thought about the notion of consciousness. Topics to be discussed will include skepticism, the mind's place in nature, the objectivity of experience, and self-awareness. Readings will be drawn from the works of René Descartes, David Hume, Immanuel Kant, Jean-Paul Sartre, and John Searle.

109 Philosophy and the Good Life

D. Macbeth

An exploration of the question of the nature of a good human life. Readings include selections from Confucius's *Analects*, Plato's *Euthyphro*, *Apology*, and selections from *Republic*, selected books of Aristotle's *Nicomachean Ethics*, Kant's *Groundwork for the Metaphysics of Morals*, and Nietzsche's *Genealogy of Morality*. *Not offered in 2002-03.*

110a Mind and World

D. Macbeth

An introduction to the history of our conception of ourselves as rational beings in the world through a close reading of central texts in the European tradition that address both the sorts of beings we are and the nature of the world as it is the object of our natural scientific knowledge. *Not offered in 2002-03.*

111a Death and the Meaning of Life

A. Kovach

Metaphysical problems and ethical issues related to human mortality. Our topics include: What is death? Is death definable? Is there any reason to believe in an afterlife? Is reincarnation possible? Is human immortality possible? Is immortality desirable? Can death really harm us? Should we fear death? Under what conditions, if any, is suicide justifiable? What kind of treatment do we owe the dead? What limits should there be on the use of human remains for scientific research?

113a The Good and the Good Life

L. Barthold

When we think about leading the "good life" what do we think of? Does leading the "good life" imply being a "good" person? How do we understand "good" in each of these senses? Through a close reading of several key texts in the history of Western philosophy, we will examine philosophical conceptions of the good and explore their relevance for the possibility of achieving the "good life."

INTERMEDIATE LEVEL COURSES: These courses require one course at the 100 level or its equivalent, or consent of the instructor.

210a Plato HU

A. Kosman

A close and interpretative reading of four to five selected dialogues of Plato. Emphasis is upon a philosophical interpretation of the theories offered by the dialogues concerning the nature of the good life, of human understanding, and of the general nature of being. Attention is also paid to the literary form of the dialogues and to the view of philosophical argument and understanding that emerges.

212b Aristotle HU

A. Kosman

An analytic study of the main works of Aristotle. Particular attention is paid to the theory of being and substance developed in Aristotle's *Metaphysics*, to the theory of animal life devel-

oped in his treatise *On the Soul*, and to the understanding of good human action and choice developed in the *Nicomachean Ethics*. Primary emphasis is on the interpretation and understanding of the philosophical arguments that are elaborated in these works. *Not offered in 2002-03.*

221 Early Modern Continental Philosophy HU

A. Kosman

A close analytical reading of selected texts from 17th century European philosophy. Particular attention is given to Descartes' *Meditations on First Philosophy* and to Spinoza's *Ethics*. Emphasis is upon an interpretive understanding of the theories of these texts concerning human consciousness and cognition, as well as of their more general theories concerning the nature of human being in the world.

Not offered in 2002-03.

222b Early Modern British Philosophy HU

A. Kosman

A close analytical reading of selected texts from 17th- and 18th-century British philosophy. Particular attention is given to Hume's *Treatise of Human Nature* and to Locke's *Essay on Human Understanding*. Emphasis is upon an interpretive and philosophical understanding of the theories of human cognition and human nature in general developed in these texts. *Not offered in 2002-03.*

225a The Concept of Freedom and the Dialectic of Master and Slave HU

K. Wright

How are we to think about freedom in light of Hegel's positive evaluation of the slave's experience of freedom in his *Phenomenology of Spirit* (paragraphs 178-196) and Nietzsche's negative assessment of the mentality and moral psychology of the slave in *On the Genealogy of Morality*? Additional readings include the section on Spirit from Hegel's *Phenomenology*, Marx's *Economic and Philosophic Manuscripts of 1844*, Kierkegaard's *Fear and Trembling*, and Kant's *Grounding of a Metaphysics of Morals*. (Satisfies the social justice requirement.)

226b Nietzsche HU

K. Wright

What, after Nietzsche, is truth? A close reading of Nietzsche's "On Truth and Lies in an Extramoral Sense," *The Gay Science* (2nd edition; 1887), and *Thus Spoke Zarathustra*. *Not offered in 2002-03.*

227a The Linguistic Turn in Modern European Philosophy HU

K. Wright

A close study of how the linguistic turn in modern European philosophy is enacted and reflected upon in Husserl's *On the Origin of Geometry and Cartesian Meditations*, Heidegger's *Being and Time* and *On the Way to Language*, Gadamer's *Truth and Method*, and Derrida's *Speech and Phenomena* and *Of Grammatology*.

228 The Logos and the Tao (Also called Comparative Literature and East Asian Studies 228b) HU

K. Wright

This course challenges the postmodern construction of "China" as the (feminine) poetic "Other" to the (masculine) metaphysical "West" by analyzing postmodern concepts of word, image, and writing in relation to Chinese poetry, painting, and calligraphy. *Not offered in 2002-03.*

231 American Philosophy HU

Staff

A critical and comparative study of examples of articulations of considerations (of “philosophizings”) by a variety of persons who made their home in the Americas and for whom problems of life in some portion of the Americas (a particular region or nation-state, for example) occasioned their considerations and articulations. *Not offered in 2002-03.*

232 African-American Philosophy HU

Staff

A critical examination of selected American Thinkers of African descent such as Frederick Douglass, Ida B. Wells-Barnett, Martin Delany, Anna Julia Cooper, Booker T. Washington, Maria Stewart, and W.E.B. Du Bois. (Satisfies the social justice requirement.) *Not offered in 2002-03.*

241a Hindu Philosophy HU

A. Gangadean

A critical exploration of classical Hindu thought (Vedanta) in a global and comparative context. Special focus on selected Principal *Upanisads*, a close meditative reading of the *Bhagavad Gita* and an in-depth exploration of Shankara’s *Brahmasutra Commentary*. *Not offered in 2002-03.*

242b Buddhist Philosophy HU

A. Gangadean

An introduction to classical Indian Buddhist thought in a global and comparative context. The course begins with a meditative reading of the classical text—*The Dhamapada*—and proceeds to an in-depth critical exploration of the teachings of Nagarjuna, the great dialectician who founded the Madhyamika School.

244b Contemporary European Philosophy HU

C. Bowman

A study of the Frankfurt School. Background readings from Kant and Marx, followed by a detailed study of the views of Max Horkheimer, Theodor Adorno, and Herbert Marcuse. Additional background material will be drawn from the works of Sigmund Freud as the course progresses. Topics to be discussed will include the nature of critical theory, the sociology of knowledge, the relation of art to political and economic life, and the manifestation of irrationality in mass culture.

251a Philosophy of Mind HU

A. Kovach

What is it to have a mind? Are we born with minds? Could we build a computer to have one? What can we know about other people’s minds? What can we know about our own minds? Approaches to these and related questions will be critically assessed. *Not offered in 2002-03.*

252a Philosophy of Logic and Language HU

A. Gangadean

A comparative exploration of alternative paradigms of language and meaning from a logical and philosophical point of view. Special attention is given to the classical Aristotelian grammar of thought and the modern grammars developed by Frege, Wittgenstein, Quine, Heidegger, Sommers, Derrida, and others. Focus is on the quest for the fundamental logic of natural language. *Not offered in 2002-03.*

253a Analytic Philosophy of Language HU

A. Kovach

A close study of seminal essays by Frege, Russell, Kripke, Quine, Davidson, and others focussing on questions of meaning, reference, and truth. An overarching aim of the course is to understand how one can approach fundamental issues in philosophy through a critical reflection on how language works.

254 Metaphysics HU

A. Gangadean

A critical examination of philosophical accounts of reality and being. Special attention is given to how worldviews are formed and transformed; an ontological exploration of diverse alternative categorial frameworks for experience. Metaphysical narratives of diverse thinkers in the evolution of the European tradition are explored in a global context. *Not offered in 2002-03.*

255b Truth and Knowledge HU

A. Kovach

A study of recent work on the issue of the relationship between truth and knowledge, both arguments aiming to show that truth has nothing to do with knowledge, and arguments aiming to show that knowledge is incoherent without truth. The possibility of steering a middle path between these views will also be explored.

256 Social and Political Philosophy HU

Staff

Race and Democracy in the United States of America: A critical exploration of the ways in which philosophical articulations and the historical development and institutionalization of democracy have been complicated and impaired by commitments to notions of racialism, especially in the perverted form of White racial supremacy, in a decidedly multiracial and multiethnic United States. (Satisfies the social justice requirement.) *Not offered in 2002-03.*

260a Historical Introduction to Logic HU

A. Kovach

An introduction to various systems of logic, (e.g., term logic, propositional logic, and quantificational logic) through study of their historical roots in Aristotle, Kant, Frege, Russell, and Wittgenstein. Both the systems themselves and their wider philosophical significance will be explored. *Not offered in 2002-03.*

277 Modern Christian Thought HU (Also called Religion 277)

D. Dawson

281 Modern Jewish Thought HU (Also called Religion 281)

K. Koltun-Fromm

ADVANCED COURSES: These courses require one 200-level course plus junior standing, or consent of the instructor. Topics courses consider different specific issues in different years, and may be taught by members of the staff other than those listed.

301a Topics in the Philosophy of Literature (Also called Comparative Literature 301) HU

A. Kosman

310a Topics in Ancient Greek and Roman Philosophy HU

A. Kosman

Topic for 2002-03: Aristotle's *Nicomachean Ethics*.

321 Topics in Early Modern Philosophy HU

A. Kosman

323b Topics in 19th Century Philosophy HU

A. Kovach

Topic for 2002-03: Pragmatism from Pierce to Dewey.

331b Topics in Recent Anglo-American Philosophy HU

Staff

332a Topics in 20th Century Continental Philosophy HU

L. Barthold

Topic for 2002-03: Defining a person: Rationality, Desire, Action, Freedom.

335a Topics in Modern European Philosophy: Kant and Heidegger HU

K. Wright

This course critically assesses two conflicting theories of human understanding and the world found in Kant's *Critique of Pure Reason* and Heidegger's *Being and Time*.

336b Topics in Post-Kantian Philosophy: Hegel and the Problem of Modernity HU

K. Wright

A close reading of Hegel's *Phenomenology of Spirit* in relation to the "unfinished project" of modernity (Habermas, Kolb, and Pippin) and the challenge of postmodernity (Butler, Lyotard, and Rorty).

342 Topics in Asian Philosophy HU

A. Gangadean

351 Topics in the Philosophy of Mind HU

D. Macbeth

353b Topics in the Philosophy of Language HU

A. Gangadean

354a Topics in Metaphysics

D. Macbeth

355 Topics in Epistemology HU

D. Macbeth

356 Topics in Social and Political Philosophy HU

Staff

357b Topics in Aesthetics HU

C. Bowman

Topic for 2002-03: 18th Century Aesthetics.

370 Topics in Ethics HU

A. Kosman

399c Senior Seminar HU

A. Kosman, Staff

This one-semester course, spread over the whole of senior year, has several components: (a) Four meetings in the fall devoted to a systematic reading of texts from several diverse philo-

sophical traditions, (b) Participation in the Altherr Symposium, including several meetings devoted to preparation for the symposium, (c) Participation in the Distinguished Visitors series, (d) The writing of a senior essay, and (e) Presentation of one's work for critical discussion with others in the seminar, as well as a final formal presentation. *Open to senior majors only.*

403-413f, i **Discussion Leader** HU

Staff

Qualified major or non-major seniors receive one-half course credit for supervised leading of discussion groups and assisting of students in the various 100-level introductory philosophy courses. *Consent of the instructor of the relevant introductory course is required.*

480 **Independent Study** HU

COURSES OFFERED AT BRYN MAWR COLLEGE

101 **Historical Introduction to Philosophy: Greek Philosophy** HU

102 **Introduction to Problems in Philosophy** HU

103 **Introduction to Logic** HU

151 **Western Political Philosophy: Ancient and Early Modern** HU

201 **Historical Introduction to Philosophy: Modern Philosophy** HU

202 **Culture and Interpretation** HU

203 **Formal Semantics** HU

209 **Introduction to Literary Analysis: Philosophical Approaches** HU

210 **Philosophy of Social Science: Introduction to Cultural Analysis** HU

211 **Theory of Knowledge** HU

212 **Metaphysics** HU

213 **Introduction to Mathematical Logic** HU

214 **Modal Logic** HU

215 **Introduction to Set Theory** HU

220 **Early Chinese Belief: The Five Classics of Confucianism** HU

221 **Ethics** HU

222 **Aesthetics** HU

228 **Western Political Philosophy: Ancient and Early Modern** HU

229 **Concepts of the Self** HU

231 **Western Political Philosophy (Modern)** HU

233 **Taoism: The Religion and the Philosophy** HU

236 **Plato: Early and Middle Dialogues** HU

238 **Science, Technology, and the Good Life** HU

244 **Philosophy and Cognitive Science** HU

252 **Feminist Theory** HU

254 **Philosophy of Religion** HU

293 **The Play of Interpretation** HU

300 **Nietzsche, Kant, Aristotle: Modes of Practical Philosophy** HU

301 **Hume** HU

303 **Advanced Mathematical Logic** HU

306 **Origins of Political Philosophy: China and Greece** HU

310 **Philosophy of Science** HU

314 **Existentialism** HU

316 **Philosophy of Mathematics** HU

319 **Philosophy of Mind** HU

321 **Greek Political Philosophy** HU

PHILOSOPHY

- 322 **Equality Theory** HU
- 325 **Philosophy of Music** HU
- 327 **Political Philosophy in the 20th Century** HU
- 329 **Wittgenstein** HU
- 330 **Kant** HU
- 338 **Phenomenology: Husserl and Heidegger** HU
- 341 **Pragmatism** HU
- 349 **Social and Political Theory: Freedom, Community, and Power in Modernity** HU
- 350 **Being and Good in Plato and Aristotle** HU
- 352 **Feminism and Philosophy** HU
- 372 **Introduction to Artificial Intelligence** HU
- 390 **The American Regime: Philosophical Foundations of American Politics** HU
- 399 **Senior Conference**

PHYSICS

The physics curriculum introduces students to concepts and methods which are fundamental throughout the sciences. It provides opportunities for first-hand experimental and theoretical investigations, together with the study of those basic principles that have led to profound scientific, philosophical, and technological developments in the 20th century.

The department offers several courses that can be taken with no prerequisites or prior experience in physics: Physics 108b covers applications of the physical sciences to modern medicine, 109b considers chaos and quantum physics, while 110b focuses on the many ramifications of the concept of time in physical science.

Prospective science majors are advised to study some physics in their freshman or sophomore year because all contemporary sciences rely heavily on basic physical principles. Physics 101a and 102b constitute a year-long, self contained treatment of all of physics. Physics 105a and 106b use calculus somewhat more intensively and are designed for students who expect to continue their study of physics in other courses, either in the physics or the chemistry department. Advice on course selection is provided on the department's Web site.

The normal sequence introducing both the major and the minor consists of 105a, 106b, 213a, 214b, and the 211f and 212i laboratories. However, students beginning their study in 101a and 102b may continue with 213a and join the major or minor as well. Physics 105a through 214b are also prerequisites for the astronomy major.

The remainder of the major program is quite flexible and, with an appropriate selection of upper-level courses, can accommodate students whose interests extend beyond physics to the interdisciplinary fields of astrophysics, biophysics, chemical physics, philosophy of science, biomedical science, or engineering.

The department emphasizes student participation in research with faculty members. Currently, active research programs are being pursued in the areas of fluid and nonlinear dynamics, structures of and phase transitions on solid surfaces, fluorescence microscopy and optical trapping in biological systems, and nanofabrication and scanning tunneling microscopy. Other research possibilities exist in astronomy. Courses numbered 412 to 417 provide majors with opportunities to participate in these research efforts for academic credit during their senior year. Paid summer research assistantship positions are often available.

In the Senior Seminar (399), majors learn about the wide range of careers related to physics, and prepare a colloquium and senior paper based on independent work.

Advanced students interested in teaching may participate in the instructional program by registering for Physics 459b or 460a. Physics majors may also take an area of concentration in education; see page 136. (Students interested in physics or science education in physics or science education at the secondary level should also consult the teaching certification information on page 132.)

A concentration in computer science is available for physics majors. This program is described on page 115.

Physics majors with biological interests may also qualify for the biophysics concentration, described on page 84.

Students interested in engineering can complete an individualized major program in preparation for graduate work in engineering. Detailed information is available through the department chair.

John Farnum Professor of Astronomy **Stephen P. Boughn**
John and Barbara Bush Professor in the Natural Sciences **Jerry P. Gollub**,
Chairperson
Bettye and Howard Marshall Professor of Natural Sciences **R. Bruce Partridge**
William H. and Johanna A. Harris Professor of Computational Science **Lyle D. Roelofs**, *Associate Provost*
Associate Professor **Suzanne Amador Kane**
Associate Professor **Walter F. Smith**
Visiting Assistant Professor **Fronoy Crawford**
Instructional Laboratory Associate **Scott Shelley**

MAJOR REQUIREMENTS

1. Physics 105a (or 101a), 106b (or 102b), 213a, 214b, 211f, and 212i (or Bryn Mawr equivalents). The last two are normally taken concurrently with 213a and 214b.
2. Mathematics 121 and 204b or Bryn Mawr equivalent. For students who are contemplating advanced work in mathematics, 216b can replace 121, and 215a can replace 204b.
3. Six upper-level courses in physics (which may include 230b) at Haverford or Bryn Mawr. One of these must be a laboratory course such as 316 or 326. All majors must take three of the four core theoretical courses: 302, 303, 308 and 309. Students considering graduate study in physics should take four of the following five courses by the end of their junior year: 302, 303, 308, 309, and 316 or 326 (or their Bryn Mawr equivalents).

Two of the six upper-level courses may be replaced by upper-level courses in a related department, with advanced approval from the major advisor. (The student will be asked to prepare a brief written statement explaining the relationship between the proposed courses and the physics major.) One of the six upper-level physics courses may be a 400-level research course. Either 459 or 460 may also be counted among the six upper-level courses.

4. The department requires one course outside the department at a level consistent with the student's background in either astronomy, biology, computer science, chemistry, or engineering (at Penn or Swarthmore). (This requirement is waived for double majors.)
5. Physics 399f and i, including a paper and colloquium based on independent work, and attendance at senior colloquia and distinguished lectures hosted by the department.

MINOR REQUIREMENTS

1. Physics 105a (or 101a) and 106b (or 102b); 213a, 214b, 211f and 212i labs (or Bryn Mawr equivalents).
2. Mathematics 121 and 204b or Bryn Mawr equivalent. For students who are contemplating advanced work in mathematics, 216b can replace 121 and 215a can replace 204b.
3. Two 300-level courses in physics at Haverford or Bryn Mawr; Astro 305 or another upper-level science course may be substituted for one of these with the advisor's approval.
4. Participation for two semesters in the public lectures and seminars hosted by the department.

REQUIREMENTS FOR HONORS

The award of Honors in Physics will be based upon the quality of performance in course work and the senior colloquium and paper. High Honors carries the additional requirement of demonstrated originality in senior research.

COURSES

101a **Classical and Modern Physics I** NA/QU

S. Amador Kane, F. Crawford, W. Smith, S. Shelley

Three class hours and one laboratory period. Newtonian mechanics, thermodynamics, fluid motion, and relativity. Applications to other fields, especially the life sciences, will be included. The combination of this course with Physics 102b constitutes a comprehensive, one-year

introduction to physics. *Prerequisite:* Calculus at the level of Mathematics 113a or equivalent should be taken prior to or concurrently with this course. A special section of this course (*limited to 12*) is designed for students whose preparation in physics and mathematics is weak, and/or who might benefit from extra discussion time and an exploration-based class format.

102b **Classical and Modern Physics II** NA/QU

F. Crawford, S. Shelley

Three class hours and one laboratory period. A continuation of Physics 101a, covering electricity and magnetism, optics, waves, sound, quantum ideas, and nuclear physics. Applications include topics such as nerve conduction, the optics of vision, and radioactivity. *Prerequisite:* Physics 101a. In addition, calculus at the level of Mathematics 114b or equivalent should be taken prior to or concurrently with this course.

105a **Fundamental Physics I** NA/QU

L. Roelofs, W. Smith, S. Shelley

Three class hours and one laboratory period. Newtonian mechanics and thermodynamics. Applications are drawn primarily from the physical sciences. This sequence (105a/106b) is meant as a one-year introduction suitable for students interested in the physical sciences. *Prerequisite:* Mathematics 113a or equivalent.

106b **Fundamental Physics II** NA/QU

W. Smith, F. Crawford, S. Shelley

Three class hours and one laboratory period. A continuation of Physics 105a, covering electricity and magnetism, optics, and special relativity. *Prerequisites:* Mathematics 114b or equivalent and Physics 105a or 101a.

108b **Physics of Modern Medicine** NA (Cross-listed as General Programs 108b)

S. Amador Kane

This course introduces the nonscientist to many of the technologies used in modern medicine and the basic physical principles which underlie them. Topics will include: laser surgery, ultrasound imaging, laparoscopic surgery, diagnostic X-ray imaging, nuclear medicine, computed tomography (CAT) scans, magnetic resonance imaging (MRI) scans, and radiation therapy. Safety issues involved in the use of each technique will be considered in depth, and discussions will include societal implications of the growing use of technology in medicine. Not intended for students majoring in the natural sciences. No prerequisites. *Offered in 2002-03 and alternate years.*

109b **Chaos and Quantum Physics: Predictability in Science** NA

J. Gollub

Two revolutions that both limit and extend the deterministic paradigm of modern science. Basic features of chaotic dynamics and quantum physics will be explored to understand the extent to which predictability is possible for physical systems that are either nonlinear or very small. Not open to students majoring (or intending to major) in physics, chemistry, or mathematics. No prerequisites. *Not offered in 2002-03.*

110b **About Time** (Cross-listed in General Programs) NA

J. Gollub

An in-depth exploration of the concept of time, including the counter-intuitive aspects of Einstein's theory of relativity, the time reversibility of some microscopic phenomena, the origin of irreversibility as a consequence of chaos and statistics, and the notion of time travel in science and science fiction. The problem of measuring time will be discussed, including the development of remarkable technologies such as the Global Positioning System. Applications

of time measurement to important scientific problems will be discussed. No prerequisites. Limited to 45 students. Not offered in 2002-03.

152i **Freshman Seminar in Astrophysics NA** (Also called Astronomy 152i)

S. Boughn

This half-credit course is intended for prospective physical science majors but will be primarily qualitative in nature with an emphasis on the conceptual aspects of the cosmos. Topics include black holes, quasars, neutron stars, supernovae, dark matter, the Big Bang, and Einstein's relativity theories. *Prerequisites:* Physics 101a or 105a and concurrent enrollment in Physics 102b or 106b (or Bryn Mawr equivalents).

211f **Laboratory in Electronics and Wave Physics NA**

F. Crawford, S. Shelley

The first half of this laboratory is an introduction to analog electronics and instrumentation. The second half includes experiments in waves and optics. Normally taken concurrently with Physics 213a, but can be taken independently. *Prerequisite:* Physics 102b or 106b.

212i **Laboratory in Quantum Physics NA**

J. Gollub, S. Shelley

Experiments related to quantum physics, including nuclear and optical spectroscopy, spin resonance, and laser amplification. Normally taken concurrently with Physics 214b but can be taken independently. *Prerequisite:* Physics 211f; *co-requisite:* Physics 214b or equivalent.

213a **Waves and Optics NA/QU**

W. Smith

Vibrations and waves in mechanical, electronic, and optical systems with an introduction to related mathematical methods such as functions of a complex variable and Fourier analysis. Topics include free and driven oscillations, resonance, superposition, coupled oscillators and normal modes, traveling waves, Maxwell's equations and electromagnetic waves, interference, and diffraction. Recent applications of wave optics (e.g., to astronomy) will be included. Physics 211f, a related laboratory half-course, is normally taken concurrently and is required for majors. *Prerequisites:* Physics 102b or 106b and Mathematics 114b or 120a or equivalent.

214b **Introductory Quantum Mechanics NA/QU**

S. Amador Kane

Introduction to the principles governing systems at the atomic scale. Topics include the experimental basis of quantum mechanics, wave-particle duality, Schrodinger's equation and solutions in one dimension, time dependence of quantum states, angular momentum, and one-electron atoms. Recent developments, such as paradoxes calling attention to the remarkable behavior of quantum systems, or recent experiments on single trapped atoms, will be discussed. Multi-electron atoms and nuclei will be considered if time allows. A computer-based project is included in the course. Physics 212i, a related laboratory half-course, is normally taken concurrently and is required for majors. *Prerequisites:* Physics 213a or consent of the instructor.

230b **Biophysical Applications in Medicine: Medical Imaging**

S. Amador Kane

Exploration of the scientific background necessary to understand modern medical imaging technologies, including diagnostic X-ray imaging, computed tomography (CT), positron emission tomography (PET) and magnetic resonance imaging (MRI). Students learn how to approach each problem from a highly interdisciplinary perspective, through consideration of topics ranging from the physics of ionizing radiation and the biology of cancer causation to

computational techniques for image reconstruction. Specific medical applications include mammography, osteoporosis screening, applications of PET and MRI brain scans in neuroscience, and the use of imaging techniques in cancer radiation therapy planning. (This course is appropriate for students planning on majoring in any of the natural science departments and considering careers in biomedicine.) *Prerequisites:* Physics 102 or 106, Math 114 or 121, and at least one course at the 200-level course in the natural sciences. *Not offered in 2002-03.*

302b **Advanced Quantum Mechanics** NA

L. Roelofs

A continuation of the study of quantum mechanics begun in 214b. Topics include matrix mechanics and spin, many-particle systems, perturbation theory, scattering theory and an introduction to relativistic quantum mechanics. A variety of physical systems will be treated as examples, including simple atoms and solids. *Prerequisite:* Physics 214b. *Offered in 2002-03 and alternate years.*

303a **Statistical Physics** NA

J. Gollub

Treatment of many particle systems using classical and quantum statistics and ensembles to derive the laws of thermodynamics and statistical mechanics. This course includes applications to the thermal properties of matter (solids, liquids and gases), photon, and phonon systems. Monte Carlo techniques are introduced through a computer project. *Prerequisite:* Physics 214b or consent of instructor. *Offered in 2003-04 and alternate years.*

308a **Advanced Classical Mechanics** NA

J. Gollub

Classical mechanics of macroscopic systems, including linear and nonlinear oscillations, chaotic dynamics, Lagrangian and Hamiltonian mechanics, central forces, the dynamics of systems of particles, motion in noninertial frames of reference, the dynamics of rigid bodies, and (if time allows) fluid motion. A numerical project is included in the course. *Prerequisites:* Physics 106b or 213a, or Bryn Mawr equivalent. *Offered in 2002-03 and alternate years.*

309b **Advanced Electromagnetism and Modern Optics** NA

S. Boughn

Boundary value problems, multipole fields, electromagnetic waves, optical properties of solids, radiating systems, diffraction, scattering, optical interferometry and Fourier optics. *Prerequisite:* Physics 106b or 213a or Bryn Mawr equivalent. *Offered in 2003-04 and alternate years.*

311a **General Relativity** NA

S. Boughn

Development and application of tensor calculus to the theories of special and general relativity; review of observational and experimental evidence; consideration of problems of astrophysics, particularly gravitational radiation, gravitational collapse and black holes. *Prerequisites:* Mathematics 121a and 204b or the equivalent, and Physics 214b. *Not offered in 2002-03.*

313a **Particle Physics** NA

Staff

Models of the structure and interactions of the fundamental particles. Topics include the current status of the conservation laws, characterization of the strong and weak interactions, unification of the fundamental forces, gauge theories and quark models. The primary goal is to understand the structure of matter on the most basic level. *Prerequisites:* Physics 214b and 302b. *Not offered in 2002-03.*

316b Electronic Instrumentation and Computers NA*W. Smith*

An introduction to modern electronic design, with an emphasis on scientific applications. Topics covered will include operational amplifier circuits, filters, electronic measurement and signal processing, digital electronics, and computer design and interfacing. *Prerequisite:* Physics 211f. *Offered in 2002-03 and alternate years.*

320b Introduction to Biophysics NA*S. Amador Kane*

A one-semester introduction to important topics in modern biophysics, drawn from the following list: single molecule techniques for measuring mechanical properties of proteins, DNA and other biopolymers, computational and experimental methods for determining the structure of proteins and nucleic acids, the physical chemistry of membranes, applications of statistical physics in neural networks, artificial evolution and bioinformatics, and the interplay between biology and nanofabrication. *Prerequisites:* Biology 200 and either Physics 214 or Chemistry 304, or the Bryn Mawr equivalent, or permission of instructor. *Offered in 2003-04 and alternate years.*

322b Solid State Physics NA*J. Gollub or Staff*

Structural and electronic properties of solids, including both crystalline and non-crystalline materials, band theory, semiconductors, optical properties, and elementary excitations. Applications of solid state phenomena in computer science and engineering will be explored to a limited extent. *Prerequisites:* Physics 214b and 303a. *Offered in 2003-04 and alternate years.*

326a Advanced Physics Laboratory NA*W. Smith*

Design, execution, and analysis of significant experiments, which change from year to year. Those presently available include studies of the properties of matter near absolute zero, non-linear optics, vacuum deposition of optical coatings, and chaotic dynamics. New experiments in development will explore a variety of biophysical techniques. The course emphasizes the effective use of contemporary experimental tools, including laboratory computers, vacuum techniques, and optical methods. *Prerequisite:* Physics 212i, or consent of instructor. *Offered in 2003-04 and alternate years.*

399f, i Senior Seminar NA 1/2*J. Gollub*

A senior seminar meeting biweekly throughout the year. An introduction to scientific writing and talks; preparation and presentation of senior papers and colloquia; attendance at lectures by distinguished visitors; and discussions of student and faculty research projects in the department. *Prerequisite:* Senior standing.

412a, b Research in Theoretical Physics NA*L. Roelofs*

Independent research on current problems in theoretical physics, with emphasis on the physics of condensed matter systems; extensive use is made of computer-based methods. *Prerequisite:* Physics 303 and consent of instructor.

413a, b Research in Biophysics NA*S. Amador Kane*

Experimental research on the functionality and the statistical mechanics of biophysical systems. Current experiments include mechanical measurements of biopolymers, biophysical

modeling of immunological systems, and computational studies of artificial evolution.

Prerequisite: Consent of instructor. Advanced laboratory experience is preferred.

415a, b Research in Nanoscale Physics NA

W. Smith

Experimental research on current problems in the structure and electronic properties of nanometer-scale devices and biological macromolecules. Projects presently underway include construction of atomic-width wires with the scanning tunneling microscope (STM), nanolithography using the atomic force microscope, and studies of DNA conductivity. *Prerequisite:* Consent of instructor. Advanced laboratory experience is preferred.

417a, b Research in Nonlinear Physics and Fluid Dynamics NA

J. Gollub

Experimental research on problems involving nonlinear phenomena, instabilities and pattern formation, chaotic dynamics, granular materials, and turbulence. *Prerequisite:* Consent of instructor. Advanced laboratory experience is preferred.

459b Teaching Laboratory Physics NA

Staff

Study of the principles and practices of laboratory instruction in physics through association with staff in the Physics 102b laboratory. The student will interact with students in the laboratory sessions, prepare and deliver a pre-laboratory lecture, critique the descriptive materials for at least one experiment, and develop a new experiment appropriate to the course. This development work will include both written materials and the design and construction of a working prototype. This experiment and the 102 laboratory program as a whole will be evaluated in a final paper. *Open to junior and senior physics and astronomy majors.*

460a Association in Teaching Basic Physics NA

Staff

Study of the principles and practices of lecture instruction in physics through association with staff in Physics 101a. The student will attend and critique course lectures; prepare, practice, and deliver a lecture; develop a lecture demonstration to be used in his or her lecture; participate in the preparation of examination problems and their evaluation; address student questions in the physics clinic; and write an evaluative final paper. *Open to senior physics and astronomy majors.*

COURSES AT BRYN MAWR COLLEGE

Many upper-level physics courses are taught at Bryn Mawr and Haverford in alternate years. These courses (numbered 302, 303, 308, 309) may be taken interchangeably to satisfy major requirements.

The political science curriculum is designed to give students an understanding of political organization and political forces in modern society, to provide knowledge and a basis for insight and judgment on the problems involved in the relationship of the individual to government, and of governments to one another. The broad areas of study include: analysis of political theory in relation to its institutional environment, comparison and appraisal of different types of governments and political organizations, American political behavior and institutions, and problems of international relations.

The courses are designed primarily for a liberal arts education and are intended to create intelligent and lasting interest and participation in the formulation of public policy.

Professor Robert A. Mortimer

Professor Sidney R. Waldman, Chairperson

Stinnes Professor of Global Studies Anita Isaacs

Assistant Professor Stephen J. McGovern

Assistant Professor Cristina Beltrán

MAJOR REQUIREMENTS

Courses fall into four subfields of the discipline of political science: American politics (A); comparative politics (C); international politics (I); and political theory (T). To enter the major, two one-semester courses are required from the following: 121, 123, 131, 141, and 151 at Haverford; 121, 131, 141, 151 at Bryn Mawr College. These courses should represent two different subfields.

Department Studies: Eight additional courses, of which one must be a senior research seminar and one must be a senior thesis, are required. The combination of introductory and elective courses is expected to include representation of three of the four subfields, with work at the intermediate or advanced level in at least two subfields, prior to taking the senior seminar. Some courses may count in either of two subfields but not in both. However, in consultation with a member of the department, students may substitute two or three intermediate or advanced courses from another department for those in the student's third subfield, where this serves to complement and strengthen the student's work within the political science department.

For example, a student concentrating in international politics might offer international economics courses as a subfield; or a student in political theory—social and political philosophy courses; or a student in comparative politics—courses in an area study; or a student in American politics—social policy courses, and so forth.

All senior majors write a thesis and take a general comprehensive examination through enrollment in 392.

Related Studies: Four courses outside political science at Haverford or Bryn Mawr College which are related to the major. Some examples of possible interests around which the courses could cluster are: American or other area studies; political and social theory; international affairs; environmental policies; urban affairs; intermediate and advanced foreign language work related to work in the major; or courses from one or more of the other social sciences.

REQUIREMENTS FOR HONORS

The award of Departmental Honors is determined on the basis of the thesis, the quality of course work, and performance in the general examination.

COURSES

121a American Politics and Its Dynamics (A) SO

S. Waldman

The dynamics of the political process as seen in the Congress, the Presidency, and the judiciary. The role of interest groups, public opinion, and the political culture are also examined.

123b American Politics: Difference and Discrimination (A) SO

S. McGovern

Introduction to American politics and government through the perspective of individuals who have experienced discrimination, including people of color, the poor, women, and gays and lesbians. Particular attention to how the political system maintains inequality with respect to race, class, gender, and sexual orientation and the extent to which it provides opportunities for empowerment. (Satisfies the social justice requirement.)

131a,b Comparative Government and Politics (C) SO

A. Isaacs

An introductory analysis, with case studies, of similarities and differences in contemporary institutions of government in their major forms around the world. Focus on constitutional democracy, its major modifications in liberal and social democracy, and major challenges, such as communism, nationalism, authoritarianism, and fascism.

141a,b International Politics (I) SO

R. Mortimer

An introduction to the major issues and trends in world politics, especially since World War II: realism and idealism, bi-polarity and multi-polarity, emergence of the "Third World," role of force and diplomacy, the post Cold War era, foreign policy-making, the United Nations, and humanitarian intervention.

151a,b Western Political Theory: Democratic Authority (T) SO

C. Beltrán

An introduction to central concepts of political life through exploring the questions and problems surrounding democratic freedom, power, authority and citizenship. Reading from ancient, modern, and contemporary sources, literary as well as philosophical, American as well as European, will be included.

211a The Soviet System and Its Demise (C) SO (Also called Economics 211a)

V. Kontorovich

The roots of the Soviet alternative models of the political system. Central planning, behavior of managers, workers, and consumers. Economic performance over time and compared to other economies. Causes of disintegration.

223b American Political Process: The Congress (A) SO

S. Waldman

Functional and behavioral analysis of the policy-making process in Congress, from the electoral process as it affects Congress to the distribution of power and influence in Congress, and the relations of Congress with the Executive Branch. *Prerequisite:* Political Science 121 or 123 or consent of the instructor.

224a,b The American Presidency (A) SO

S. Waldman

The institution of the Presidency in the past few decades; how the President relates 1) to Congress, 2) to others in the executive branch, 3) to his party, and to the public.

Prerequisite: Political Science 121 or 123.

225b Mobilization Politics (A) SO

S. McGovern

Explores how ordinary citizens have sought to advance their interests outside the normal institutions of politics and government. Emphasis on protest movements concerning issues such as civil rights, women's rights, the environment, taxation, and abortion. *Prerequisite:* Political Science 121 or 123 or consent of instructor.

226b Social Movement Theory (A) SO

S. McGovern

Theoretical analysis of origins and development of mass-based protest movements in the U.S. Scholarly explanations of recruitment of individuals, modes of organization and leadership, strategies and tactics, countermovements, and the impact of movements on policy and politics. *Prerequisite:* Political Science 121 or 123.

227a Urban Politics (A) SO

S. McGovern

Examines power and politics at the local level of government, particularly of large American cities. Analysis of alternative conceptions of the role of government in addressing urban problems, as well as the capacity of citizens to influence political decision making.

Prerequisite: Political Science 121 or 123 or consent of instructor.

228b Urban Policy (A) SO

S. McGovern

Analysis of public policies aimed at revitalizing U.S. cities following several decades of suburbanization and capital disinvestment. Focus on economic development, housing and community development, environmental development, transportation, education, and the management of regional sprawl. *Prerequisite:* One course in American politics or consent of the instructor.

229a Latino Politics in the U.S. (A,T) SO

C. Beltrán

Political thought and practice of Latinos and Latinas in the U.S.; ways in which ethnicity, gender, sexuality, and class affect quest for economic and political empowerment.

Prerequisite: One political science course or consent of instructor. (Satisfies the social justice requirement.)

232a Peace Building: Reintegration, Reconciliation, and Reconstruction (C,I) SO

A. Isaacs

Peace building in the aftermath of civil war. Combines theory with case studies in exploring triple challenges of reintegration (demilitarization and refugee repatriation); reconciliation (alternative approaches to dealing with wartime violations of human rights); and reconstruction (fostering democracy and socio-economic development). *Prerequisite:* One course in political science or peace studies, and field experience. (Satisfies the social justice requirement.)

234a Politics of Southern Europe (C) SO

A. Isaacs

Contemporary politics in Southern Europe focusing on Italy, Spain, Greece, and Turkey. Comparing and contrasting transitions to democracy. Subsequent process of democratic consolidation in the region, with particular attention to current challenges and threats to democratic rule. *Prerequisite:* One course in comparative politics or international relations, or consent of instructor.

237a Latin American Politics (C) SO

A. Isaacs

Processes of political change in selected Latin American countries. Theoretical approaches will be combined with case studies in assessing processes of revolutionary change, military rule, and democratization. *Prerequisite:* One course in comparative politics or consent of instructor.

238b Power and Protest in Latin America (C) SO

A. Isaacs

Concepts of political power and powerlessness and strategies of empowerment in light of their relevance for Latin America. Particular consideration will be given to the study of women, racial minorities, and indigenous peoples in selected Latin American countries. *Prerequisite:* one course in comparative politics, or international politics, or consent of instructor. (Satisfies the social justice requirement.)

239a The United States and Latin America SO

A. Isaacs

Introduction to the study of U.S.-Latin American relations through an exploration of key issues that shape relations between the United States and countries in Latin America. It examines the history of U.S.-Latin relations as well as the U.S. and Latin American perspective on each of the policy issues reviewed, and concludes with a consideration of new ways of managing hemispheric relations. *Prerequisite:* One course in comparative politics, or international politics, or consent of instructor.

240b Inter-American Dialogue (I) SO

A. Isaacs

Examines major issues in Inter-American Relations from United States and Latin American perspectives. Conference format: Working in sub-committees, contributing to a collective policy report and writing individual papers, students explore the history and current state of policy in select issue areas and formulate alternatives, with the objective of promoting better understanding and enhancing mutual cooperation between the United States and Latin America. An outside evaluator critiques the policy report. *Prerequisite:* One course in comparative politics or international relations, or one course in Latin American studies (the Latin American studies course can also be the comparative course), or consent of instructor. (Satisfies the social justice requirement.)

245a The State System (I) SO

R. Mortimer

Theoretical and policy issues growing out of the state system model of international politics. Selected case studies in foreign policy and international political economy and issues in regional sub-systems and North-South relations also are studied. *Prerequisite:* One course in international politics, or comparative politics, or consent of instructor.

246b The Politics of International Institutions (I) SO

R. Mortimer

The role of the United Nations and regional organizations in the settlement of international disputes; patterns of global bargaining in international institutions and regimes are considered. *Prerequisite:* One course in international politics, or comparative politics, or consent of instructor.

247b Managing Conflicts: Organizations and Nations (I or C) SO (Also called General Programs 247b)

Staff
Conflict resolution from interpersonal to international applications. Theories and methods for peaceful management of conflict in organizational conflicts, intergroup conflicts in U. S. cities and ethnic conflicts in the international arena (e.g., Israeli-Palestinian and Cypriot disputes). *Prerequisite:* One political science or peace and conflict studies course.

255a Democratic Theory: Membership, Citizenship, and Community (A or T) SO
C. Beltrán

Particular attention will be paid to questions of identity in the American context (Chicano/Latino, African-American, gay/lesbian, etc.) and the relationship between group identity and democracy in the critical examination of the relationship between democratic theory and practice. Topics include political freedom, civil disobedience and political obligation, civic and social equality, political legitimacy, and the relationship of the individual to the community. *Prerequisite:* One course in political theory or American politics or consent of instructor. (Satisfies the social justice requirement.)

326a,b Topics in American Politics (A) SO

S. Waldman
Selected problems in institutional, behavioral, and public policy analysis in the American political system. *Prerequisite:* One course in American government or consent of instructor.

338a Topics in Latin American Politics (C) SO

A. Isaacs
Selected topics in Latin American politics such as development, stable democracy, social and political movements, and issues of inter-American and Latin American international relations. Seminar format. *Prerequisite:* One course in Latin American studies.

346a, b Topics in International Politics (I) SO

R. Mortimer
Selected problems in international conflict and cooperation such as international relations in the Middle East and North Africa, North-South relations or detailed study of a selected state's foreign policy. *Prerequisite:* One course in international or comparative politics or consent of instructor.

391a Research Seminars in Political Analysis SO

Intended primarily for senior majors but open to others with consent of the instructor.

(1) Research Seminar in American Politics: I

S. Waldman
Topic: Public Policy Analysis

(2) Research Seminar in American Politics: II

Staff
Topic: To be announced

(3) Research Seminar in Political Theory

C. Beltran
Topic: Political Philosophy: From Theory to Practice

(4) Research Seminar in International Politics

R. Mortimer
Topic: Developing States in the State System

(5) Research Seminar in Comparative Politics

Staff

Topic: To be announced

392b **Research and Writing on Political Problems SO**

Staff

This course consists of tutorials and research projects, culminating in a senior thesis. *Open to political science senior majors.*

460a, b **Political Analysis: Association in Teaching SO**

Staff

Students in association with the staff in the Political Science 121-151 series.

Open to selected senior majors only.

480a, b **Independent Study**

Staff

This course is conducted through individual consultation; supervised independent reading and research is expected; research papers and oral reports on special topics are based upon the individual interests of advanced students. *Enrollment only by consent of instructor.*

COURSES OFFERED AT BRYN MAWR COLLEGE

121 **American Politics**

131 **Comparative Politics**

141 **International Politics**

151 **Western Political Philosophy (Ancient and Early Modern)**

205 **European Politics**

206 **Conflict & Conflict Management**

231 **Western Political Theory (Modern)**

241 **The Politics of International Law and Institutions**

243 **African and Caribbean Perspectives in World Politics**

251 **Politics and the Mass Media**

254 **Bureaucracy and Democracy**

284 **Modernity and its Discontents**

316 **Ethnic Group Politics**

321 **Technology and Politics**

333 **The Policy Making Process**

347 **Advanced Issues in Peace and Conflict**

348 **Culture and Ethnic Conflict**

362 **Environmental Policy in Comparative Perspective**

The psychology program is designed to help students understand the causes, functions, development, and evolution of behavior and experience. It aims to integrate this understanding with biological, sociocultural, and philosophical perspectives on behavior. The department also emphasizes the development of competence in all aspects of psychological research, ranging from the creation of research questions to the analysis and reporting of research findings.

Benjamin Collins Professor of Social Sciences **Douglas A. Davis**

Professor **Sidney I. Perloe**

Professor **Marilyn G. Boltz**

Associate Professor **Wendy F. Sternberg**, *Chairperson*

Assistant Professor **Rebecca J. Compton**, *on leave 2002-03*

Visiting Assistant Professor **Benjamin Le**

MAJOR REQUIREMENTS

Four of the following half-semester introductory courses—103d Biological Foundations of Behavior, 104e Foundations of Cognition, 105g Foundations of Personality, 106h Foundations of Social Behavior, and 107g Foundations of Emotion. The course suffix letters may change from year to year. 200a Experimental Methods and Statistics, or Bryn Mawr 205b. Two additional full semester courses with laboratory. These courses should be completed by the end of the junior year. Four additional psychology courses beyond the introductory level, with at least one taken from each of the following groups: a) Complex Human Behavior—214a, 220a, 224, 250a, 309a, 311a, 325; b) Biological Psychology—217b, 221a, 222b, 250a, 320b, 340b, 350b; c) Cognition—213b, 238b, 340b. Either of the following senior thesis options must also be completed: a) Two semesters of empirical senior research or b) A one-semester senior thesis and an additional psychology course beyond the introductory level. Students expecting to do graduate study in any area of psychology are strongly advised to choose the senior research option. Equivalent courses at Bryn Mawr or other institutions are accepted as fulfilling major requirements, with permission of the department.

MINOR REQUIREMENTS

The Haverford minor in psychology consists of six credits in psychology including: Four of the following half-semester introductory courses—103d Biological Foundations of Behavior, 104e Foundations of Cognition, 105g Foundations of Personality, 106h Foundations of Social Behavior, and 107g Foundations of Emotion. Four additional psychology courses beyond the introductory level, with at least one taken from two of the following groups: a) Complex Human Behavior-214a, 220a, 224, 250a, 309a, 311a; b) Biological Psychology-217b, 221a, 222b, 250a, 320b, 325b, 340b, 350b; c) Cognition-213b, 238b, 340b.

NEURAL AND BEHAVIORAL SCIENCE

Haverford psychology majors may also elect to do a concentration in neural and behavioral sciences, which is coordinated with Bryn Mawr's psychology and biology departments. See catalog entry for Neural and Behavioral Sciences Concentration for relevant requirements.

REQUIREMENTS FOR HONORS

Honors will be awarded to majors who show exceptionally high attainment in their course work and whose work in Senior Research or Senior Thesis and related research courses are of superior quality.

COURSES

103d **Biological Foundations of Behavior** NA 1/2

W. Sternberg

Selected core problems in the scientific study of how humans and other animals adapt to their environment. The course focuses on the evolutionary aspects and biological basis of behavior. Topics to be covered include nervous system anatomy and physiology, biological rhythms, and motivated behaviors.

104e **Foundations of Cognition** SO 1/2

M. Boltz

General overview to the study of knowing. This course examines how we perceive and attend to environmental events, how this information is stored in memory, and subsequently used for thinking, comprehension, and problem-solving activities. *Prerequisite:* Psychology 103d or consent of instructor.

105g **Foundations of Personality** SO 1/2

D. Davis

Theories of personality and psychopathology and their application to psychological development and individual differences.

106h **Foundations of Social Behavior** SO 1/2

B. Le

An introduction to the wide range of topics encompassed by empirical social psychology, including examinations of scientific studies illustrating the basic processes of human behavior and employed in applied settings. Topics include social-cognitive processes, intra-and inter-group dynamics, attitude formation, and interpersonal relationships.

107e **Foundations of Emotion** SO 1/2

R. Compton

General overview of the scientific study of emotional behavior. Topics include how basic dimensions of emotion are defined and measured; the relation between biology and the subjective experience of emotion; individual differences in emotion; emotional intelligence; and emotional development. *Not offered 2002-03.*

200a **Experimental Methods and Statistics** SO

W. Sternberg

Three hours lecture, one 90-minute lab/week plus time spent collecting data outside of scheduled lab hours. A general overview of the experimental method and its use in the psychological study of behavior, coupled with an in-depth treatment of statistics as applied to psychology research. Statistical topics include principles of probability, central tendency, variability, hypothesis testing, and statistical inference. Lab exercises focus on designing experiments, collecting data, applying statistical methods (using commercial data analysis software package), and presenting data through written assignments. *Prerequisite:* One semester of introductory psychology.

213b **Memory and Cognition** SO

M. Boltz

Examination of ways in which memory and other cognitive processes manifest themselves in everyday life. Topics addressed include memory for faces and geographical locations; advertising; eyewitness testimony; autobiographical memory; metacognition; mood and memory;

biological bases of cognition; human factors; decision-making; and cognitive diversity. A special emphasis is placed on evolutionary factors and an interdisciplinary perspective.

Prerequisite: Psychology 104e or consent of instructor. *Not offered in 2002-03.*

214b **Psychology of Adolescence** SO

D. Davis

An introduction to the psychology of adolescence, with emphasis on personality development and socio-cultural issues in the period from puberty to adulthood. Topics include theoretical discussions of adolescence by psychologists, psychoanalysts, anthropologists and sociologists, personal and literary accounts of adolescent experience, and cross-cultural studies of the transition from childhood to adulthood. May be counted as one of the required courses for the bi-college teacher certification program. *Prerequisite:* Psychology 105g or consent of the instructor.

217b **Biological Psychology** NA (Also called Biology 217b)

W. Sternberg

Interrelations between brain, behavior, and subjective experience. The course introduces students to physiological psychology through consideration of current knowledge about the mechanisms of mind and behavior. *Prerequisite:* An introductory course in psychology (103d) or biology, or consent of instructor.

221a **The Primate Origins of Society** SO (Also called Biology 221a)

S. Perloe

Social systems formed by monkeys and apes examined as a means of understanding the origins of human societies. The course considers the relations among sexual behavior, dominance, territoriality, kinship, and socialization in a variety of species as well as the influence of ecology and phylogeny on non-human primate social systems. Satisfies an advanced requirement for the neural and behavioral sciences concentration. *Prerequisite:* An introductory course in one of the following: anthropology, biology, psychology, or sociology, or consent of instructor.

222b **Evolutionary Human Psychology**

S. Perloe

An examination of the influence of natural selection on the patterning and mechanisms of human behavior and experience. The course begins with a comparison of alternative approaches to studying the impact of evolution on human behavior and then turns to consideration of research and theory in the following areas: mating, kinship, altruism, intergroup cooperation and conflict, power relationships, conformity, and the reliance on culture as a mode of adaptation. Satisfies an advanced requirement for the neural and behavioral sciences concentration. *Prerequisites:* Any course with substantial examination of evolution (e.g., Psychology 103d, 221a; BMC Anthropology 101, 236); or permission of the instructor.

224a **Social Psychology**

B. Le

This course is designed as an in-depth exploration into the field of social psychology. Topics including impression formation, perceiving groups, social identity, attitudes/persuasion, social influence, group processes, aggression/altruism, and interpersonal attraction will be discussed. In addition to these specific topic areas, overarching themes and theoretical issues within the field of social psychology will be emphasized throughout the course. Students will become familiar with the research that has contributed to the current social psychology knowledge base. *Prerequisites:* Psychology 106h or Psychology 107e.

238a **Psychology of Language** SO

M. Boltz

An interdisciplinary examination of linguistic theory, language evolution, and the psychological processes involved in using language. Topics include speech perception and production, processes of comprehension, language and the brain, language learning, language and thought, linguistic diversity, and conversational interaction. *Prerequisite:* Psychology 104e or consent of instructor.

250a **Biopsychology of Emotion and Personality** SO

R. Compton

Investigates the biological underpinnings of emotional behavior and personality. Topics include philosophical issues in relating biology and emotion; the functional adaptiveness of emotion; brain systems involved in fear, depression, and pleasure; the influence of hormones on mood; the roles of the left and right hemispheres in emotion; and biological contributions to individual differences in traits such as shyness and happiness. May satisfy an advanced requirement for the neural and behavioral sciences concentration. *Prerequisite:* Psychology 103d or 107g consent of the instructor. *Not offered 2002-03.*

311a **Advanced Personality Psychology** SO

D. Davis

Three hours of lecture/discussion. Psychoanalytic and other theories of personality as the basis for interpreting personal data in cultural perspective. Thematic emphasis will vary from year to year depending on instructor and student interests. *Prerequisite:* Psychology 105g or consent of instructor. *Not offered in 2002-03.*

314i **Laboratory in Adolescent Psychology** 1/2 SO

D. Davis

This laboratory introduces methods and computer tools for the conduct of cross-cultural studies on adolescent identity, leisure use, and computer-mediated communication. Course topics will be developed in part through Internet discussion and chat with youth and with researchers in other cultural settings. Data-collection projects will be designed and completed collaboratively with students at collaborating institutions. Students will be taught statistical techniques for analysis of social data and will present their results on the Web. One planned focus of the spring 2003 course will be on Muslim youth coming of age in Muslim and non-Muslim societies. *Prerequisite:* Psychology 214 must have been taken previously or be taken concurrently.

317i **Biological Psychology Laboratory** NA 1/2

Staff

One 90-minute lab/week plus time spent collecting data outside of scheduled lab hours. An overview of the methodologies used in biological psychology research. Lab exercises include detailed brain anatomy, and conducting experiments on human sensory processing and animal learning. *Prerequisite:* Psychology 200 and prior or concurrent enrollment in Psychology 217.

324b **Laboratory in Social Psychology** SO

B. Le

Students will become familiar with the methodological and measurement practices that are commonly employed in social psychological research. Both experimental and survey methodologies will be explored, with students completing activities and projects to gain relevant research experience. *Prerequisites:* Concurrent enrollment in (or completion of) Psychology

224; Psychology 200 (concurrent enrollment in Psychology 200 may be allowed with consent of instructor).

340b Human Neuropsychology SO

R. Compton

Investigates the cognitive and emotional consequences of damage to the human brain, and analyzes how such investigation can advance our understanding of the normally functioning mind/brain. Overarching themes include problems in neuropsychological assessment, localization of function, and reorganization and plasticity of the brain. Topics include disorders of the motor systems (e.g., Parkinson's disease), disorders of perception, language, memory, and consciousness (e.g., agnosia, aphasia, amnesia, neglect), developmental disorders (e.g., autism), and neurodegenerative disorders (e.g., Alzheimer's disease). *Not offered 2002-03.*

350b The Biopsychology of Stress NA

W. Sternberg

The biological aspects of psychological and physiological stress. The history of the stress concept, stress as a scientific discipline, nervous system mediation of stress, stressors throughout the lifetime, hormonal and neural concomitants of sympathetic arousal, the relationship between stress and immune-related (e.g., AIDS, cancer) and non-immune related (e.g., psychiatric, cardiovascular, and gastrointestinal) disease. Open to juniors and seniors who have taken Psychology 103d and 217b or their equivalents. Satisfies an advanced requirement for the neural and behavioral sciences concentration. Limited enrollment. *Not offered 2002-03.*

351a, b Experimental Research and Fieldwork Projects in Psychology SO

Staff

Advanced-level problems of hypothesis formation and definition, data collection, analysis, and report writing in laboratory and field settings. Before taking the course, students must have selected the problem on which they wish to work. *Prerequisite:* Consent of instructor.

390a,b Senior Thesis

Staff

Open to senior psychology majors.

391a,b Senior Research Tutorial in Cognition

M. Boltz

Open to senior psychology majors.

392a,b Senior Research Tutorial in Personality

D. Davis

Open to senior psychology majors. *Not offered 2002-03.*

393a,b Senior Research Tutorial in Social Psychology

B. Ie

Open to senior psychology majors.

394a, b Senior Research Tutorial in Biological Psychology

W. Sternberg

Open to senior psychology majors. Required for those enrolled in the neural and behavioral science program.

395a, b Senior Research Tutorial in Emotion

R. Compton

Open to senior psychology majors. *Not offered 2002-03.*

460a, b Teaching Assistance

Leading discussion sections or helping with other course work in introductory psychology.

Open to selected majors.

480 Independent Study

Staff

Students should normally plan to take this course for half-credit.

COURSES OFFERED AT BRYN MAWR COLLEGE

The following courses at Bryn Mawr count toward the major at Haverford:

Psychology 101, 102 Experimental Psychology

Complex Human Behavior Courses:

Psychology 208 **Social Psychology**

Psychology 209 **Abnormal Psychology**

Psychology 305 **Psychological Testing**

Psychology 351 **Developmental Psychopathology**

Cognitive Psychology Courses:

Psychology 212 **Human Cognition**

Psychology 323 **Cognitive Neuroscience**

Biological Psychology Courses:

Psychology 201 **Learning Theory and Behavior**

Psychology 218 **Behavioral Neuroscience**

Psychology 395 **Psychopharmacology**

The following courses offered at Bryn Mawr may be counted as the fourth advanced course in the Haverford major:

Psychology 203 **Educational Psychology**

Psychology 206 **Developmental Psychology**

Psychology 312 **History of Modern American Psychology**

Psychology 350 **Developmental Cognitive Disorders**

Psychology 398 **Cognitive Issues in Personality and Social Psychology**

The religions of the world are as diverse, complex, and fascinating as the individuals, communities, and cultures of which they are comprised. Religions propose interpretations of reality and shape very particular forms of life. In so doing, they make use of many aspects of human culture, including art, architecture, music, literature, science, and philosophy—as well as countless forms of popular culture and daily behavior. Consequently, the fullest and most rewarding study of religions is interdisciplinary in character, drawing upon approaches and methods from disciplines such as anthropology, comparative literature and literary theory, gender theory, history, philosophy, psychology, political science, and sociology.

The department's overall goal is to enable students to become critically informed, independent, and creative interpreters of some of the religious movements that have decisively shaped human experience. In their coursework, students develop skills in the critical analysis of the texts, images, beliefs, and performances of religions. Like other liberal arts majors, the religion major is meant to prepare students for a broad array of vocational possibilities. Religion majors typically find careers in law, public service (including both religious and secular organizations), medicine, business, ministry, and education. Religion majors have also pursued advanced graduate degrees in anthropology, history, political science, biology, Near Eastern studies, and religious studies. For more information, see the department Web site at <http://www.haverford.edu/relg/index.html>

Provost and Constance and Robert MacCrate Professor in Social Responsibility **J. David Dawson**

Professor of Religion and Emily Judson Baugh and Marshall Gest Professor in Comparative Religion **Michael A. Sells**

Associate Professor **Anne M. McGuire**, chairperson

Assistant Professor **Tracey Hucks**

Assistant Professor **Kenneth Koltun-Fromm**

Assistant Professor **Naomi Koltun-Fromm**

MAJOR REQUIREMENTS

Eleven courses are required for the major in religion. The exact structure of the student's program must be determined in consultation with the major advisor, whom the student chooses from among the regular members of the department. All majors should seek with their advisors to construct a program that achieves breadth in the study of various religious traditions, as well as concentration in one of the department's three areas of concentration.

The major program must satisfy the following requirements:

a. Six courses within one of the department's three areas of concentration:

A. Religion Traditions in Cultural Context. The study of religious traditions and the textual, historical, sociological, and cultural contexts in which they develop. Critical analysis of formative texts and issues that advance our notions of religious identities, origins, and ideas.

B. Religion, Literature, and Representation. The study of religion in relation to literary expressions and other forms of representation, such as performance, music, film, and the plastic arts.

C. Religion, Ethics, and Society. The exploration of larger social issues such as race, gender, and identity as they relate to religion and religious traditions. Examines how moral principles, cultural values, and ethical conduct help to shape human societies.

These six courses within the area of concentration must include the department seminar in

the major's area of concentration: Religion 301 for Area A; Religion 303 for Area B; Religion 305 for Area C.

b. Senior Seminar and Thesis, Religion 399b.

c. At least four additional half-year courses drawn from among outside the major's area of concentration.

d. At least six of each major's 11 courses must be taken in the Haverford religion department. Students planning to study abroad should construct their programs in advance with the department.

e. Where appropriate and relevant to the major's program, up to three courses for the major may be drawn from outside the department, subject to department approval.

f. In some rare cases, students may petition the department for exceptions to the major requirements. Such petitions must be presented to the department for approval in advance.

g. Final evaluation of the major program will consist of written work, including a thesis, and an oral examination completed in the context of the Senior Seminar, Religion 399b.

REQUIREMENTS FOR HONORS

Honors and High Honors in religion are awarded on the basis of the quality of work in the major and in the Senior Thesis (399b).

COURSES

INTRODUCTORY COURSES

101a **Introduction to the Study of Religion** [A] HU

Staff

An introduction to the study of religion from three perspectives: overviews of several religions with classroom discussion of primary sources; cross-cultural features common to many religions; theories of religion and approaches to its study and interpretation.

110a **Sacred Texts and Religious Traditions: Hinduism and Islam** [A, B] HU

M. Sells

An introduction to Hinduism and Islam through close reading of selected texts in their historical, literary, philosophical, and religious contexts.

118b **Hebrew Bible: Literary Text and Historical Context** [A, B] HU

N. Koltun-Fromm

The Hebrew Bible, which is fundamental to both Judaism and Christianity, poses several challenges to modern readers. Who wrote it, when, and why? What was its significance then and now? How does one study the Bible from an academic point of view? Using literary, historical, theological, and archeological interpretive tools, this course will address these questions and introduce students to academic biblical studies.

120a **Jewish Thought and Identity** [B, C] HU

K. Koltun-Fromm

An introduction to selected thinkers in Jewish history who are both critical and constructive in their interpretations of Jewish texts and traditions. The course examines how readings of the Hebrew Bible generate normative claims about belief, commandment, tradition and identity. Readings may include the Hebrew Bible, Rashi, Maimonides, Spinoza, Heschel, and Plaskow.

121a Varieties of Judaism in the Ancient World [A] HU*N. Koltun-Fromm*

From Abraham to Rabbi Judah the Prince, Judaism has been transformed from a local ethnic religious cult to a broad-based, diverse religion. Many outside cultures and civilizations, from the ancient Persians to the Imperial Romans, influenced the Jews and Judaism through language, culture and political contacts. Absorbing and adapting these various and often opposing influences, the Israelite, and then Jewish, community re-invented itself, often fragmenting into several versions at once. After the destruction of the temple, in 70 CE, one group, the rabbis, gradually came to dominate Jewish life. Why? This course will study those changes and developments which brought about these radical transformations.

122b Introduction to the New Testament [A, B] HU*A. McGuire*

An introduction to the New Testament and early Christian literature. Special attention will be given to the Jewish origins of the Jesus movement, the development of traditions about Jesus in the earliest Christian communities, and the social contexts and functions of various texts. Readings will include non-canonical writings, in addition to the writings of the New Testament canon.

124a Introduction to Christian Thought [C] HU*D. Dawson*

An examination of some central concepts of the Christian faith, approached within the context of contemporary theological discussion. Basic Christian ideas will be considered in relation to one another and with attention to their classic formulations, major historical transformations, and recent reformulations under the pressures of modernity and postmodernity.

132b Varieties of African American Religious Experience [A] HU*T. Hucks*

This course will examine the history of religion in America as it spans several centuries. Each week lectures, readings, and discussions will explore the phenomenon of religion within American society. The goal is to introduce students to American religious diversity as well as its impact in the shaping of larger historical and social relationships within the United States. This study of American religion is not meant to be exhaustive and will cover select traditions each semester.

INTERMEDIATE COURSES**201a Introduction to Buddhism [A] HU (Also called East Asian Studies 201a)***H. Glassman*

This course is an introduction to Buddhism with a focus on the East Asian Buddhist tradition. Students will learn the basics of Buddhist philosophy and doctrine and will also be exposed to old and current debates in the field of Buddhist Studies. We will examine Buddhism both as a textual tradition and as a lived religion. There are no prerequisites.

203b The Hebrew Bible and Its Interpretations [A, B] HU*N. Koltun-Fromm*

This course will critically study select Hebrew Biblical passages (in translation) as well as Jewish and Christian Biblical commentaries in order to better understand how Hebrew Biblical texts have been read, interpreted and explained by ancient and modern readers alike. Students will also learn to read the texts critically and begin to form their own understandings of them.

204b Women and Judaism [C] HU

N. Koltun-Fromm

Women's roles in Judaism and Jewish life have been defined by the religious precepts and civil laws described in the Bible and interpreted by the rabbis in a patriarchal age. These interpretations have led to an institutionalized hierarchy within the religion, which has limited women's access to religious ritual and education. Nevertheless, throughout the ages, women have carved out areas for themselves within the Jewish religious, social and political systems as well as fulfilled the roles prescribed to them. In the modern era, however, many women have challenged the institutions that define these roles. This course will study the development of these institutions and the women of Jewish history who have participated in and shaped Jewish religious, social and cultural life. (Satisfies the social justice requirement.)

206b History and Literature of Early Christianity [A, B] HU

A. McGuire

The history, literature and theology of Christianity from the end of the New Testament period to the time of Constantine.

209a Anti-Semitism and the Christian Tradition [A, C] HU

A. McGuire

An examination of social, religious and cultural features of Christian anti-Judaism and anti-Semitism. Topics include the representation of Judaism, the Jewish people, and the Jewish scriptures in the New Testament and later Christian literature, as well as theoretical models for the analysis of Christian anti-Semitism. (Satisfies the social justice requirement.)

215a The Letters of Paul [A, B] HU

A. McGuire

Close reading of the thirteen letters attributed to the apostle Paul and critical examination of the place of Paul in the development of early Christianity.

216a Images of Jesus [A, B] HU

A. McGuire

Critical examination of the varied representations of Jesus from the beginnings of Christianity through contemporary culture. The course will focus primarily on literary sources (canonical and non-canonical gospels; prayers; stories; poems; novels), but artistic, theological, academic, and cinematic images of Jesus will also be considered.

221a Women and Gender in Early Christianity [A, C] HU

A. McGuire

An examination of the representations of women and gender in early Christian texts and their significance for contemporary Christianity. Topics include interpretations of Genesis 1-3, images of women and sexuality in early Christian literature, and the roles of women in various Christian communities.

222a Gnosticism [A, B] HU

A. McGuire

The phenomenon of Gnosticism examined through close reading of primary sources, including the recently discovered texts of Nag Hammadi. Topics include the relation of Gnosticism to Greek, Jewish, and Christian thought; the variety of Gnostic schools and sects; gender imagery, mythology and other issues in the interpretation of Gnostic texts.

231a Religious Themes in African American Literature [B] HU

T. Hucks

This course will explore African American literary texts as a basis for religious inquiry. Throughout the course we will examine African American novelists and literary scholars using their works as a way of understanding black religious traditions and engaging important themes in the study of religion. Authors discussed may include Zora Neale Hurston, James Baldwin, Ishmael Reed, Maryse Conde, and others.

240b History and Principles of Quakerism [A] SO (Also called General Programs 240b and History 240b)

E. Lapsansky

The Quaker movement in relation to other intellectual and religious movements of its time and in relation to problems of social reform. The development of dominant Quaker concepts is traced to the present day and critically examined. The course is designed for non-Friends as well as for Friends. The course is open to first year students with consent of the instructor.

242a Topics in African American Religious History [A, C] HU

T. Hucks

This course will investigate various traditions of the black religious experience from slavery to the present. Religious traditions examined within the course may include slave religion, black Christianity, Gullah religion, Santeria, and Islam. We will examine the relationship of these religious traditions to American social history as well as explore how they adapted over space and time.

251a Comparative Mystical Literature [B] HU

M. Sells

Readings in medieval Jewish, Christian and Islamic mystical thought, with a focus on the Zohar, Meister Eckhart, the Beguine mystics Hadewijch of Antwerp and Marguerite Porete, and the Sufi Master Ibn 'Arabi. The texts are a basis for discussions of comparative mysticism and of the relationship of mysticism to modern critical theories.

255a Anthropology of Religion [C] SO (Also called Anthropology 255a)

For course description see Anthropology 255b.

256a Zen Thought, Zen Culture, Zen History [A] HU (Also called East Asian Studies 256a)

H. Glassman

For course description see East Asian Studies 256a

262a Islamic Literature and Civilization [B] HU (Also called Comparative Literature 262a)

M. Sells

Islam refracted through its diverse cultural expressions (poetic, Sufi, Shar'ia, novelistic, architectural) and through its geographic and ethnic diversity (from Morocco to Indonesia, focusing on Arab and Persian cultures).

263a The Middle East Love Lyric [B] HU (Also called Comparative Literature 263a)

M. Sells

The love lyric of the Middle East within the Arabic, Hebrew, Persian, and Turkish traditions. This course will give special attention to the "remembrance of the beloved" as a cross-cultural symbol from medieval Andalusia to India. Poems will be read in modern English translations.

264b Religion and Violence [C] HU

M. Sells

The role of religions in motivating, justifying, channeling, and mobilizing violence. The course will also examine the role of religion in violence prevention, conflict resolution, and the fostering of human rights.

269b Culture and Religion in Modern Fiction [B] HU

M. Sells

The encounter of traditional religious and cultural values with the modern West as reflected in novels, short stories and folk tales.

277a Modern/Postmodern Christian Thought [C] HU (Also called Philosophy 277a)

D. Dawson

The impact of modernity and postmodernity on traditional Christian thought in the West. Readings may include Hume, Kant, Schleiermacher, Hegel, Feuerbach, Nietzsche, Kierkegaard, Barth, Rahner, von Balthasar, Segundo, Tracey, Frei, McFague, Irigaray, Cone, Lindbeck, Marion, Milbank.

279a Tradition, Identity, Textuality [B, C] HU

D. Dawson, K. Koltun-Fromm

A critical analysis of three interrelating themes that inform contemporary studies of religious thought. Notions of tradition, identity, and the "text" have been challenged by contemporary subversions of historical continuity, narrative structure, and textual meaning. We will enter the debate by examining readings that undermine these paradigms, as well as readings that seek to reconceive tradition, identity, and textuality in the face of postmodern attacks.

280a Ethics and the Good Life [C] HU

D. Dawson, K. Koltun-Fromm

This course examines how ethical theories, both secular and religious, inform notions of the good. We begin by tracing the impact of classical conceptions of justice and the good life through close readings from Plato, Aristotle, and the tragedians, together with medieval and modern accounts that draw heavily from these sources. We conclude by investigating how some contemporary Christian and Jewish ethical thinkers rely on, revise, or subvert the perspectives of classical ethics.

281a Modern Jewish Thought [C] HU (Also called Philosophy 281a)

K. Koltun-Fromm

Jewish responses to modern philosophy and science that challenge traditional Jewish religious expression and thought. The course examines how Jewish thinkers engage modern debates on historical inquiry, biblical criticism, existentialism, ethics, and feminism. Our goal will be to assess those debates, and determine how these thinkers construct and defend modern Jewish identity in the face of competing options. Readings may include Spinoza, Mendelssohn, Cohen, Rosenzweig, Heschel, Buber, and Adler.

286a Religion and American Public Life [C] HU

D. Dawson

The place and role of religion in American public life as reflected and constructed in U.S. Supreme Court rulings on the religion clauses of the First Amendment, ethical and philosophical writings on religion and the liberal tradition of public reason, historical studies of religious and political influences on the formulation of the U.S. Constitution and its subsequent interpretations, and contemporary debates about the public character of theology.

SEMINARS AND INDEPENDENT STUDY

301a,b Seminar in Religious Traditions in Cultural Context [A] HU*Staff*

Advanced study of topics in the department's concentration in Religious Traditions in Cultural Context. Religious traditions and the textual, historical, sociological and cultural contexts in which they develop. Critical analysis of formative texts and issues that advance our notions of religious identities, origins, and ideas.

303a,b Seminar in Religion, Literature, and Representation [B] HU*Staff*

Advanced study of topics in the department's concentration in religion, literature, and representation. The study of religion in relation to literary expressions and other forms of representation, such as performance, music, film, and the plastic arts.

305a,b Seminar in Religion, Ethics, and Society [C] HU*Staff*

Advanced study of topics in the department's concentration in religion, ethics, and society. Examination of larger social issues such as race, gender, and identity as they relate to religion and religious traditions. Examines how moral principles, cultural values, and ethical conduct help to shape human societies.

310a, b Gender and Religion in Premodern Japanese Literature [B, C] HU*H. Glassman*

For course description see East Asian Studies 310a.

330a, b Seminar in the Religious History of African American Women [C] HU*T. Hucks*

This seminar will examine the religious history of African American women in the United States. Using primary and secondary texts from the 19th to the 20th centuries, this course will explore the various religious traditions, denominations, sects, and religious movements in which African American women have historically participated. The course will also analyze the ways in which specific social conditions such as slavery, migration, racial segregation, and class and gender discrimination have historically influenced the religious lives of African American women. (Satisfies the social justice requirement.)

331b Theoretical Approaches to the Study of Black Religion [C] HU*T. Hucks***343a,b Seminar in Religions of Antiquity and Biblical Literature [A, B] HU***A. McGuire*

Advanced study of a specific topic in the field. The course may be repeated for credit with change of content. *Prerequisite*: Consent of instructor.

348a,b Seminar in Ancient Judaism [A] HU*N. Koltun-Fromm*

Advanced study of the development of Judaism from the biblical period to the talmudic period. What constitutes Israelite religion? By what processes does it become rabbinic Judaism? What were its various manifestations along the way? Readings will be drawn from the Bible, the Apocrypha, the Dead Sea Scrolls, Hellenistic Jewish literature, and rabbinic literature.

353a,b Seminar in Islamic Philosophy and Theology [B] HU

M. Sells

Selected topics and figures in Islamic philosophy, scholastic theology (kalam) or mystical philosophy. The relation of Islamic philosophy to Greek, Jewish, and Indian thought are also discussed. *Prerequisite:* Consent of instructor.

360a,b Seminar in Modern Religious Thought [B, C] HU (Also called Comparative Literature 360a,b)

D. Dawson or K. Koltun-Fromm

Advanced study of a specific topic in the field. May be repeated for credit with change of content. *Prerequisite:* Consent of instructor.

399b Senior Seminar and Thesis HU

Staff

Research and writing of the senior thesis in connection with regular meetings with a thesis advisor from the department. *Prerequisite:* At least 6 courses in religion including 101 and 398.

480a,b Independent Study

Staff

Conducted through individual tutorial as an independent reading and research project.

ROMANCE LANGUAGES

The Departments of French, Italian and Spanish cooperate in offering a major in Romance languages that requires advanced work in at least two Romance languages and literatures. Additional work in a third language and literature is suggested.

Professor of Italian Nancy Dersofi, Coordinator

Professor of French Grace M. Armstrong, Coordinator

Associate Professor of Spanish María Cristina Quintero, Coordinator

MAJOR REQUIREMENTS

The requirements for the major are a minimum of nine courses, including the Senior Conference or Senior Essay, described below, in the first language and literature (if Italian is chosen as the first language, only eight courses are required) and six courses in the second language and literature, including the Senior Conference in French. Students should consult with their advisers no later than their sophomore year in order to select courses in the various departments that complement each other.

The following sequence of courses is recommended when the various languages are chosen for primary and secondary concentration, respectively (see the departmental listings for course descriptions).

First Language and Literature

French

French 101, 102 or 101, 105.

Four courses chosen among:

French 201, 202, 203, 204, 205, 206, 207, 213, 216, 248, 250 251, 252, 255 or 299.

French 212 or 260.

Two other courses at the 300 level.

Italian

Italian 101, 102.

Italian 201 or 205.

Italian 207 or 301.

Italian 303 or 304.

Two other literature courses at the 200 or 300 level.

Spanish

Spanish 110 or 120.

Spanish 204 or 206.

Four courses at the 200 level.

Two courses at the 300 level.

Second Language and Literature

French

French 101, 102 or 101, 105.

Two literature courses at the 200 level.

French 212 or 260.

One other course at the 300 level.

Italian

Italian 101, 102.

Italian 201 or 205.

Italian 207 or 301.

One other literature course at the 200 or 300 level.

Spanish

Spanish 110 or 120.

Spanish 204 or 206.

Two courses at the 200 level.

Two courses at the 300 level.

In addition to the coursework described above, when the first language and literature is Spanish, majors in Romance languages must enroll in Spanish 399 (Senior Essay). When French is chosen as either the first or second language, students must take one semester of the Senior Conference in French in addition to the coursework described above. When Italian is chosen, students must either select an additional literature course in Italian at the 200 or 300 level or take Italian 399, offered in consultation with the department. An oral examination (following the current model in the various departments) may be given in one or both of the two languages, according to the student's preference, and students follow the practice of their principal language as to written examination or thesis.

Interdepartmental courses at the 200 or 300 level are offered from time to time by the cooperating departments. These courses are conducted in English on such comparative Romance topics as epic, romanticism or literary vanguard movements of the 20th century. Students should be able to read texts in two of the languages in the original.

RUSSIAN AT BRYN MAWR COLLEGE

The Russian major is a multi-disciplinary program designed to provide the student with a broadly based understanding of Russian literature, thought, and culture. The major places a strong emphasis on the development of functional proficiency in the Russian language. Language study is combined with a specific area of concentration, to be selected from the fields of Russian literature, history, economics, language/linguistics, or area studies.

Professor Emeritus **George L. Kline**

Professor **Dan E. Davidson**

Professor **George S. Pahomov**

Associate Professor **Elizabeth C. Allen**, *Chairperson*

Assistant Professor **Timothy C. Harte**

Lecturer **Marc Boots-Ebenfield**

Lecturer **Jeanette Owen**

At Haverford College:

Professor of History **Linda G. Gerstein**

Associate Professor of Economics **Vladimir Kontorovich**

MAJOR REQUIREMENTS

A total of 10 courses are required to complete the major: two in Russian language at the 200 level or above; four in the area of concentration, two at the 200 level and two at the 300 level or above (for the concentration in area studies, the four courses must be in four different fields); three in Russian fields outside the area of concentration; and either Russian 398, Senior Essay, or Russian 399, Senior Conference.

The senior conference is an interdisciplinary seminar offered in the spring semester. Recent topics have included Pushkin and his times, the decade of the 1920s, and the city of St. Petersburg. In addition, all Russian majors take senior comprehensive examinations which cover the area of concentration and Russian language competence. The exams are administered in late April.

Majors are encouraged to pursue advanced language study in Russia on summer, semester, or year-long academic programs. Majors may also take advantage of intensive immersion language courses offered during the summer by the Bryn Mawr Russian Language Institute. Students are encouraged to live in the Russian house and to participate in weekly Russian tables, film series, and Russian Club.

Students wishing to minor in Russian must complete six units at the 100 level or above, two of which must be in Russian language.

REQUIREMENTS FOR HONORS

All Russian majors are considered for departmental honors at the end of their senior year. The awarding of honors is based on a student's overall academic record and all work done in the major.

COURSES

001, 002 **Elementary Intensive Russian** HU

D. Davidson, T. Harte and Staff

Study of basic grammar and syntax. Fundamental skills in speaking, reading, writing, and oral comprehension. Nine hours a week including conversation sections and language laboratory work. Both semesters are required for credit; three units of credit are awarded upon completion of Russian 002.

101, 102 **Intermediate Russian** HU

J. Owen and Staff

Seven hours a week. Continuing development of fundamental skills with emphasis on vocabulary expansion in speaking and writing. Readings in Russian classics and contemporary works.

201, 202 **Advanced Russian** HU

T. Harte

Five hours a week. Intensive practice in speaking and writing skills using a variety of modern texts and contemporary films and television. Emphasis on self-expression and increased understanding of grammar and syntax.

210 **19th Century Russian Literature in Translation I** HU

E. Allen

A survey of major works from the first half of the 19th century. Covers narrative poetry, drama, short stories, and novels by such authors as Pushkin, Lermontov, Gogol, Dostoevsky, Turgenev, and Tolstoy. All readings, lectures, and discussions in English.

211 **19th Century Russian Literature in Translation II** HU

G. Pahomov

A survey of major works from the second half of the 19th century by such authors as Turgenev, Chekhov, Dostoevsky, Tolstoy, Goncharov, and Gorky. All readings, lectures, and discussions in English. *Not offered in 2002-03.*

212 **The Silver Age of Russian Literature** HU

E. Allen

Survey of novels, short stories, plays, and poetry associated with the "Silver Age" of Russian literature. Contemporaneous works of dance, music, and painting are also examined. Readings include: Bely's *Petersburg*, Chekhov's *The Cherry Orchard* and *Three Sisters*, Gorky's *Mother*, Sologub's *The Petty Demon*, Blok's *The Twelve*, Mayakovsky's *A Cloud in Trousers*, and stories by Chekhov, Andreyev, and Bunin. All readings, lectures and discussions in English. *Not offered in 2002-03.*

213 **Russian Literature from Revolution to Glasnost** HU

J. Owen

Survey of the major trends in Russian literature after the 1917 revolution: revolutionary literature, utopian and ornamental prose, proletarian writings, socialist realism, satire "for the desk drawer," émigré works, records of the purges, WWII, post-Stalinist Thaw and prison camps, and glasnost stories. Readings include Pilnyak's *Naked Year*, Zamyatin's *We*, Olesha's *Envy*, Sholokhov's *Quiet Flows the Don*, Gladkov's *Cement*, Bulgakov's *Master and Margarita*, Akhmatova's *Requiem*, Panova's *The Train*, Ginzburg's *Into the Whirlwind*, Pasternak's *Dr. Zhivago*, Solzhenitsyn's *Ivan Denisovich*, and stories by Nabokov and Tolstaia. All readings, lectures, and discussions in English.

230 **Introduction to Russian Linguistics** HU

J. Owen

Examines the structure of modern Russian, concentrating on the sound system and word formation. In-depth study of vowel reduction, consonant assimilation, and vowel/zero alternation, as well as the historical and contemporary mechanisms of noun, verb, and adjective formation. Agreement, gender, and related issues are also discussed. No previous knowledge of linguistics required. *Prerequisite:* Two years of Russian. *Not offered in 2002-03.*

RUSSIAN AT BRYN MAWR COLLEGE

235 **The Social Dynamics of Russian**

J. Owen

This course will use contemporary Russian media (films, TV, and Internet documents) to examine social factors which influence the language of Russian conversational speech. Students will analyze the basic social strategies which structure a conversation as well as the implications of gender and education on the form and style of discourse. *Prerequisites:* Russian 201-202 or taking concurrently. *Not offered in 2002-03.*

254 **Russian Culture and Civilization in Translation** HU

G. Pahomov

A history of Russian culture—its ideas, its value and belief systems—from the origins to the present, which integrates the examination of works of literature, art and music. *Not offered in 2002-03.*

260 **Russian Women Authors** HU

Staff

A study of works in various genres, tracing women's contributions throughout the history of Russian literature. An examination of thematic and formal characteristics of works by Catherine the Great, Durova, Kovalevskais, Aktmotova, Tsvetaeva, Panova, Baranskaia, Tolstaia, and others. All readings, lectures, and discussions in English. *Not offered in 2002-03.*

261 **The Russian Anti-Novel** HU

E. Allen

A study of 19th- and 20th-century Russian novels focusing on their strategies of opposing or circumventing European literary conventions. Works by Pushkin, Dostoevsky, Tolstoy, Bulgakov, and Nabokov are compared to Jane Austen's *Pride and Prejudice* and other exemplars of the western novelistic tradition. All readings, lectures, and discussions in English. *Not offered in 2002-03.*

301, 302 **Fourth-Year Russian** HU

G. Pahomov, J. Owen

Intensive practice in speaking, reading, writing, and oral comprehension. Advanced language training through the study of literary and other texts.

313, 314 **Fifth Year Russian** HU

Staff

Focuses on stylistic variations in oral and written Russian. Examples drawn from contemporary film, television, journalism, fiction, and non-fiction. Emphasis on expansion and refinement of speaking and writing skills. *Not offered in 2002-03.*

380 **Seminar in Russian Literature** HU

G. Pahomov

An examination of a focused topic in Russian literature such as a particular author, genre, theme, or decade. Introduces students to a close reading and detailed critical analysis of Russian literature in the original language. Readings in Russian. Some discussions and lectures in Russian. Topic for 2002-03: Pastevnak. *Prerequisites:* Russian 201 and one 200-level Russian literature course.

398 **Senior Essay**

Staff

Independent research project designed and conducted under the supervision of a departmental faculty member. May be undertaken in either fall or spring semester of senior year.

399 Senior Conference

E. Allen

Exploration of an interdisciplinary topic in Russian culture. Topic varies from year to year. Requirements may include short papers, oral presentations, and examinations.

403 Supervised Work

Staff

310/510 Old Russian

D. Davidson

This advanced undergraduate/graduate seminar introduces students to the language and literary activities of Kyivan Rus' (11th-14th century). Students will gain a reading knowledge of Old Church Slavonic and Old Russian sufficient for close reading and analysis of such seminal texts as the earliest translations of the Gospels, the Primary Chronicle, Ilarion's Sermon on Law and Grace, the legend of Boris and Gleb, etc. Political and cultural background of the period will be addressed. Graduate students will be expected to complete additional assignments. Conducted in Russian and English. *Not offered in 2002-03.*

370/570 The Acquisition of Russian as a Second Language

D. Davidson

This seminar introduces advanced undergraduate and graduate students to current theoretical and practical issues of Russian second language acquisition. Topics to be discussed include formal and informal learning, measurement of competencies, standards and assessment issues, and cultural aspects of second language acquisition. Graduate students will be expected to complete additional assignments. Conducted primarily in Russian. *Not offered in 2002-03.*

RELATED COURSES AT BRYN MAWR COLLEGE

Economics 206 **International Economics**

Economics 216 **International Finance and Economic Policy**

Economics 306 **Advanced International Economic Policy**

General Studies 104 **Learning Foreign Languages: An Introduction**

General Studies 112 **The Great Questions of Russian Literature**

RELATED COURSES AT HAVERFORD COLLEGE

Economics 211a **The Soviet System and Its Demise**

History 244 **Russian History**

History 245 **Russia in the 20th Century**

History 246a **Literature and Society in Modern Russia**

History 356a **Topics in Modern European History: St. Petersburg**

RELATED COURSES AT SWARTHMORE COLLEGE

Russian 11 **The Russian Novel**

Russian 24 **Introduction to Russian Culture**

Russian 70R **Translation Workshop**

Russian 114 **Seminar: Folklore in Russian Literature**

Sociology courses help students learn how to “do sociology” by exposing them to exemplars of what sociology has been and by asking them to study micro- and macro-aspects of the “social world.” We believe that there are a variety of legitimate ways to “do sociology” and we do not seek to privilege any one of them. Our individual courses construct arguments for students to consider, to develop, and to argue against and they provide the analytical and methodological training students need to formulate theoretical arguments and to evaluate those arguments empirically. We want an active engagement from our students as they find their own points-of-view within the discipline, and we expect from them a theoretical and methodological rigor and sophistication within the approaches that they study and adopt.

Professor Mark Gould, Chairperson
Associate Professor William F. Hohenstein
Assistant Professor Suava Zbierski-Salameh
Visiting Instructor Jenny Godley

MAJOR REQUIREMENTS

A total of at least eleven courses, including 155a and 155b (two semesters of Foundations in Social Theory); 215a, Economics 203, or the equivalent (quantitative methods, statistics); 450a and 450b (senior thesis); plus 6 additional courses in sociology. Students should consult their advisor about the possibility of receiving major credit for sociology courses taken at other campuses, including, but not limited to, Bryn Mawr, Swarthmore, and the University of Pennsylvania. Such credit will normally be granted if the courses enhance the integrity of a program grounded in the Haverford curriculum.

MINOR REQUIREMENTS

A total of at least six courses, including 155a and 155b (Foundations in Social Theory); 215a (Quantitative Methods, or the equivalent), plus at least three 200 and/or 300-level courses in the department. No more than four courses may be taken with a single professor.

COURSES

101a **Sociology and Philosophy** SO

M. Gould

An examination of the relationship between normative and empirical theory, focusing on the contribution of empirical theory to the resolution of normative questions.

120b **FYWIS Inequality in Society** SO

J. Godley

A sociological examination of four forms of inequality in American life: economic class; race and ethnicity; gender; and physical ability. (Satisfies the social justice requirement.)

155a, b **Foundations in Social Theory** SO

M. Gould, W. Hohenstein, S. Zbierski-Salameh

An examination of classical and Marxian sociological theory as an exemplification of how we might do sociology today. Students may take either semester for credit, but majors must take both semesters of the course. 155a focuses on social structure, emphasizing the work of Marx and Weber. 155b deals primarily with the interrelationships between social structure, personality and culture, focusing on the work of Durkheim, Freud, Mead, Parsons, Gramsci, Foucault, Goffman, and MacKinnon. There is some variation between different sections of the course.

207a Internal Disorder: Deviance and Revolution SO

M. Gould

Theories of deviance and revolution. The generating conditions of disorder; why some groups participate in deviant and others in revolutionary actions.

215a Quantitative Methods SO

W. Hohenstein; 2002-03: J. Godley

An introduction to the use of statistics in sociological research.

225a Comparative Transitions to Capitalism: Post-Socialist Societies, China, and Latin America SO

S. Zbierski Salameh

An analysis of post-socialist transformations in Eastern European societies after the 1989 “negotiated revolutions.” A comparison of the rise of capitalism in Eastern Europe with contemporary changes in economic and political structures in socialist China and in selected Latin American societies. (Satisfies the social justice requirement.)

233a Topics in Sociology SO

Fall: W. Hohenstein; Spring: S. Zbierski-Salameh

Topic for fall 2002: Life in the Shadows: Gambling and the Protestant Ethic. This course will examine legal and illegal gambling in the United States. Readings will include Weber, Freud, Dostoevsky, and Hohenstein. Topic for spring 2003: Visual Sociology, Picturing Labor. The use of visual ethnography in exploring labor processes under global capitalism.

235b Class, Race, and Education SO

M. Gould

An examination of the effects of class and race on educational and occupational outcomes, emphasizing the contemporary United States. (Satisfies the social justice requirement.)

237a Topics in Historical Sociology SO

M. Gould

Topics for fall 2002: Religion in Political Movements. Seventeenth Century English Puritanism, The Civil Rights Movement in the USA, Contemporary Islamic Movements.

245a East European Societies and Politics: Continuity and Change SO

S. Zbierski-Salameh

An examination of East European societies in three periods—the presocialist, the state socialist, and the transition eras. Special attention is given to state/society relations, to patterns of control and resistance, and to the exogenous and endogenous causes of the state socialist disintegration. An examination of the “transition” period—the nature of the social, political, and economic changes underway in the region, and (possible) historical parallels with the presocialist period.

251a Sociology of Crime SO

W. Hohenstein

Students are asked to generate theoretical analyses of violent male behavior, using case histories from literature. Readings include *Crime and Punishment* and *In Cold Blood*. *Prerequisite*: Sociology 155a or b. (Satisfies the social justice requirement.)

252b Social Change SO

W. Hohenstein

The connection between social class and gender discrimination, with a focus on the recent history of the women’s movement. Upper-level women majors in sociology are given much of the responsibility for organizing the course. *Prerequisite*: Sociology 155a or b, or consent of instructor.

265b Peasants and Agrarian Transformations: Rural Backroads to Modernity SO

S. Zbierski-Salameh

An examination of the centrality of peasants in social transformations into modernity and their continued role in the reproduction of modernity-capitalism in the West and socialism and postsocialism in the East. The revolutionary potential of the peasantry is emphasized, contrary to arguments that view peasants as a repository of conservatism and tradition.

275b Sociology of Formal Organizations SO

S. Zbierski-Salameh

An exploration of organizations from the inside and of the relationship between organizations and their social environments, both domestic and international.

277a Political Sociology SO

Fall: S. Zbierski-Salameh; Spring: M. Gould

An introduction to the study of political systems and interrelationships between the polity and other societal subsystems. Transnational linkages between modern states are examined within the context of the contemporary global economy. *Fall only for 2002-03.*

297b Economic Sociology SO (Also called Economics 297b)

M. Gould

The sociological analysis of economic systems and the sociological reconstruction of micro-economic theory. *Prerequisite:* Sociology 155a or b, Economics 101, or consent of instructor.

298b Law and Sociology SO

M. Gould

An examination of the jurisprudential consequences derived from the sociological reconstruction of microeconomic and philosophical theories.

354a Sociology of Knowledge SO

W. Hohenstein

Topic for fall 2002: This course investigates the concepts of space and time. *Prerequisite:* Sociology 155a or b, or consent of instructor.

356b Seminar in Social Theory SO

Spring: W. Hohenstein

Topic for spring 2003: Experiential Knowledge. This course will explore the problems encountered while trying to connect Hegel's Bondsman to women, African Americans and the working class. Readings will include Hegel, Marx, Nietzsche, Sartre, de Beauvoir, hooks, and Hohenstein. *Prerequisite:* One 200-level course in sociology or consent of instructor.

450a, b Senior Departmental Studies

Staff

Thesis work, two semesters required of majors in their senior year.

460a, b, f, i Teaching Assistance

Staff

Students may act as assistants in certain courses that they themselves have already completed. Responsibilities may include the opportunity to lead discussions, informal teaching assistance, a short list of advanced reading and a paper on an agreed topic.

480a, b, d Independent Study

Staff

Research papers and reading courses on special topics related to the individual interests of advanced students. *Prerequisite:* The instructor's approval of a research or reading proposal.

SPANISH

The Department of Spanish aims to give students a thorough knowledge of the Spanish language and the ability to understand and interpret Spanish and Spanish American texts and cultures. In order to accomplish these general goals, the department offers a broad range of courses:

1) Elementary and Intermediate language courses, which introduce and develop the basics of the language and emphasize the active use of Spanish for communication and understanding of the cultures that use it. Please note that language courses taught in the Spanish department require attendance to all classroom sessions and all tutorials. Successful language learning demands continuous study and practice, and tutorials provide crucial complementary activities to fulfill this goal.

Classroom and tutorial participation are integral parts of the coursework and therefore will be part of the final grade (Spanish 001, 101, and 102):

2) Language instruction is followed by courses in literature, film, and culture and civilization that introduce writers and significant themes as well as further develop Spanish language skills in reading, writing, speaking, and oral comprehension (Spanish courses at the 200 level).

3) Advanced offerings that explore in greater depth a specific line of inquiry, literary, cultural or historical issue, or theme in Spanish and Spanish American writing and thought (Spanish courses at the 300 level).

4) Courses taught in English, with readings in English or English translation, which aim to bring to a wider audience and across disciplinary boundaries important themes, issues, and accomplishments of the Spanish-speaking world (e.g., Spanish/General Programs 220: Contemporary Spanish-American Literature, Spanish/General Programs 240: Latin American and Iberian Culture and Civilization, Spanish/Comparative Literature 250: Quixotic Narratives). All students are expected to enroll in Spanish department courses at the level of placement as determined by the department at the beginning of every academic year. On occasion, requests by individual students to be moved to a higher or lower placement level will be considered, after close and detailed consultation with the instructor and the department chairperson. Placement test results are otherwise mandatory. For updated information on courses, please visit our Web site: <http://www.haverford.edu/span/spanish/docs/spanishhome3.htm>

Barbara Riley Levin. Professor of Spanish **Israel Burshatin**
Associate Professor **Roberto Castillo Sandoval**, *Chairperson*
Associate Professor **Ramón García-Castro**
Assistant Professor **Graciela Michelotti**
Visiting Instructor **Aydé Pérez**

REQUIREMENTS FOR THE MAJOR

Six courses in Spanish and Spanish American literature or film, are required for a major in Spanish, along with enrollment in the senior seminar, Spanish 490, in which students write a senior essay. Of the six required courses, three should be at the 200 level and three at the 300 level (two of these must be taken at Haverford or Bryn Mawr). Students who qualify by pre-college training or study abroad may substitute 300-level courses for the 200-level offerings. The program must include at least two courses at the 200 or 300 level that focus substantially on literature prior to 1898.

REQUIREMENTS FOR HONORS

Students who are considered qualified will be invited to become candidates for Departmental Honors during the second semester of their senior year. Honors candidates will be expected to do superior work in upper-level literature and culture courses (3.7 average). Honors and High Honors are awarded on the basis of the quality of the senior thesis.

REQUIREMENTS FOR THE MINOR

Six courses at the 200 or 300 level, with a minimum of one course at the 300 level to be taken at Haverford or Bryn Mawr. One of the six courses should focus substantially on literature prior to 1898.

COURSES

001 Elementary Spanish HU

Staff

Development of basic phonetic and structural skills. Greatest emphasis is placed on spoken Spanish, with grammar and written exercises, to develop oral proficiency. This is a two-semester course. You need both semesters to receive credit. *Enrollment limited to 18 students.*

101a Intermediate Spanish HU

Staff

Review of conversational skills and grammar and development of writing abilities. Literature readings are combined with materials from magazines, newspapers, and films from Spain and Spanish America. *Prerequisite:* 001, or consent of the instructor. *Enrollment limited to 18 students.*

102a,b Advanced Intermediate Spanish HU

Staff

Refinement of writing and communicative skills. Readings are drawn from a variety of literary genres. Students are expected to involve themselves with Hispanic culture in order to improve and test their ability to use Spanish. *Prerequisite:* 101, or consent of the instructor. *Enrollment limited to 18 students.*

203a Writing the Jewish Trajectories in Latin America HU

G. Michelotti

"Jewish Gauchos," "Tropical Synagogues," "Poncho and Talmud," "Matza and Mate." This course will examine the native and diasporic worlds described in the apparent dichotomies that come together in the Latin American Jewish literature. The class will trace the different trajectories of time, space, and gender of the Jewish experience in Latin America, where issues of migration, memory, and hybridization come to life through poetry, narrative, and drama. *Prerequisite:* Spanish 102 or consent of the instructor. *Enrollment limited to 25 students.*

205a Studies in the Spanish-American Novel HU (Also called Comparative Literature 205a)

R. García-Castro

Introduction to selected 20th-century Spanish-American novelists. *Prerequisite:* Spanish 102 or consent of the instructor. *Enrollment limited to 25 students. Not offered in 2002-03.*

207b The Fictions of Spanish-American History HU (Also called Comparative Literature 207)

R. Castillo Sandoval

The relationship between history and literature in Spanish America through examination and comparison of selected historiographical and literary texts. Particular attention will be paid to the ways in which historical and literary genres have interacted and influenced one another

from the Discovery and Conquest through the Independence and national formation periods and the 20th century. *Prerequisite:* Spanish 102 or consent of the instructor. *Enrollment limited to 25 students.*

210b Spanish and Spanish-American Film Studies HU

G. Michelotti

Exploration of films in Spanish from both sides of the Atlantic. The course will discuss approximately one movie per class, from a variety of directors, including Luis Buñuel, Carlos Saura, Pedro Almodóvar, María Luisa Bemberg, Miguel Littin, etc., focusing on the cinematic discourse as well as the cultural and historic background of each film. The course will also provide advanced language training with particular emphasis in refining oral and writing skills. *Prerequisite:* Spanish 102 or consent of the instructor. *Enrollment limited to 25 students.*

214a Writing the Nation: 19th-Century Literature in Latin America HU

R. Castillo Sandoval

An examination of seminal literary texts written in Latin America in the 19th century. Novels, essays, travelogues, short stories, miscellaneous texts, and poetry will be analyzed and placed in the context of the process of nation-building that took place after Independence from Spain. A goal of the course will be to establish and define the nexus between the textual and ideological formations of 19th-century writings in Latin America and their counterparts in the 20th century. *Prerequisite:* Spanish 102 or consent of instructor. *Enrollment limited to 25 students. Not offered in 2002-03.*

220b Spanish-American Contemporary Literature HU (Also called General Programs and Comparative Literature 220b)

R. García-Castro

Study of 20th-century Spanish-American writers in translation, including García Márquez, Parra, Puig, Cardenal and Borges. Course taught in English.

230a Medieval and Golden Age Spain: Literature, Culture, and Society HU

I. Burshatin

Introduction to the culture and literature of medieval and early modern Spain: Castilian expansion, religious diversity, and cultural transformations, from the Reconquest to the Habsburgs. *Prerequisite:* Spanish 102 or consent of the instructor. *Enrollment limited to 25 students.*

235a Spanish American Theater HU (Also called Comparative Literature 235)

G. Michelotti

An exploration of various plays produced during the 20th century in different Latin American countries and the U.S. in the context of major theatrical movements and central themes in Latin American culture and history. The readings will include works by female and male playwrights. When possible, there will be a correlation with films, based on the plays discussed in class. The students will also be encouraged to perform in class one or more of the plays analyzed during the semester. *Prerequisite:* Spanish 102 or consent of the instructor. *Enrollment limited to 25 students.*

240b Latin American and Iberian Culture and Civilization HU

R. Castillo Sandoval

An interdisciplinary exploration of Latin America, Spain, and Portugal. Topics will include imperial expansion, colonialism, independence, and revolution. This course is designed to serve as the introduction to the area of concentration in Latin American and Iberian Studies. Course taught in English.

248b Poetry and Politics in Spain HU*I. Burshatin*

This course examines the different ways in which poetry and poets are in the "world." Study of the relationships between poetics and power will guide a close reading of works written since 1898: poetry and national renewal after the collapse of empire, avant-garde aesthetics, the Spanish Civil War, and post-war generations (Machado, García Lorca, Cernuda, Hernández, Fuertes). *Prerequisite:* Spanish 102 or consent of the instructor. *Enrollment limited to 25 students.*

250a Quixotic Narratives HU (Also called Comparative Literature 250)*I. Burshatin*

Study of Cervantes, Don Quixote, and of some of the works of fiction, criticism, philosophy, music, art, and film which have drawn from Cervantes's novel or address its formal and thematic concerns, including self-reflexivity, nation and narration, and constructions of gender, class, and "race" in narrative. Other authors read include Borges, Foucault, Laurence Sterne, Graham Greene, Vladimir Nabokov, and Kathy Acker. Course taught in English. *Enrollment limited to 25 students.*

307b Taller Literario: Writing Short Fiction in Spanish*R. Castillo Sandoval*

A fiction-writing workshop for students whose Spanish-writing skills are at an advanced level. The class will be conducted as a combination seminar/workshop, with time devoted to discussion of syllabus readings and student work. The course will focus on essential matters of craft and technique in creative writing (point of view, voice, dialogue, narrative structure, etc.). Principally, we will be concerned with how stories work rather than what they mean. This perspective can prove a useful lens for reconsidering works long accepted as "great," and a practical method for developing individual styles and strategies of writing. *Prerequisite:* A 200-level course or consent of the instructor. *Enrollment limited to 14 students.*

310 The Family in the Novels of the Past 40 Years in Spanish America*R. García-Castro*

This course examines the representation of the family and family relations in some Spanish-American novels of the past 40 years. The novels have been selected to show the effects of the family among adolescents in José Agustín's *De perfil*, Isabel Allende's *El plan infinito*; *La flor de Lis*, by Elena Poniatowska, and *Elogia de la madrastra*, by José Donoso, and *La ciudad anterior*, by Gonzalo Contreras. This course will finish with a reading on the role of the elderly in the configuration of family, as in Manuel Puig's *Cae la noche tropical*. *Prerequisite:* A 200-level course or consent of the instructor.

313a Literature of the Caribbean HU*R. García-Castro*

A selection of short stories and novels from Puerto Rico and Cuba, including Luis Rafael Sánchez, Magaly García Ramis, Rosario Ferré, Emilio Díaz Valcárcel, Senel Paz, Alejo Carpentier, Guillermo Cabrera Infante and others. *Prerequisite:* A 200-level course or consent of instructor.

315b Novísima literatura hispanoamericana HU (Also called Comparative Literature 315a)*R. García-Castro*

Intended to show the latest developments in Spanish-American prose as seen in recent works by García Márquez, Isabel Allende, Laura Esquivel, José Leandro Urbina, and others. *Prerequisite:* A 200-level course or consent of instructor.

317b Novels of the Spanish-American “Boom” HU (Also called Comparative Literature 317a)

R. García-Castro

Study of the novels that brought Spanish American literature to world attention: Readings include García Márquez, *Cien años de soledad*; Vargas Llosa, *La ciudad y los perros*; Fuentes, *La muerte de Artemio Cruz*; Carpentier, *Los pasos perdidos*; and others. *Prerequisite:* A 200-level course or consent of instructor.

320a Spanish-American Colonial Writings HU

R. Castillo Sandoval

Representative writings from the textual legacy left by Spanish discovery, conquest, and colonization of the New World. Emphasis will be placed on the transformation of historical and literary genres, and the role of Colonial literature in the formation of Latin-American identity. Readings include Columbus, Bernal Díaz, Gómara, Ercilla, Inca Garcilaso de la Vega, Cabeza de Vaca, Sor Juana Inés de la Cruz, and Sigüenza y Góngora. *Prerequisite:* A 200-level course or consent of the instructor. *Not offered in 2002-03.*

324b Sexual Minorities in the Spanish-Speaking World HU (Also called Comparative Literature 324b)

R. García-Castro

Sexual minorities as presented by the Spanish-speaking world. Readings include works by Puig, Cortázar, Vargas Llosa, Ferré, and Lugo Filippi; and films by Almodóvar. *Prerequisite:* A 200-level course or consent of the instructor. (Satisfies social justice requirement.)

325a The Female Voice in Spanish and Spanish-American Writing HU

G. Michelotti

Examination of the work of women writers in Spain and Spanish America; how women have voiced their struggles in different times, spaces, and genres. Authors studied include Sor Juana, María de Zayas, Emilia Pardo Bazán, Alfonsina Storni, Domitila Barrios de Chúngara, Victoria Ocampo, Carmen Martín Gaité, Griselda Gambaro, and Laura Esquivel. *Prerequisite:* A 200-level course or consent of the instructor.

334b Gender Dissidence in Hispanic Writing HU (Also called Comparative Literature 334)

I. Burshatin

Study of the dissenting voices of gender and sexuality in Spain and Spanish America and US Latino/a writers. Interrogation of “masculine” and “feminine” cultural constructions and “compulsory heterosexuality,” as well as exemplary moments of dissent. Texts to be studied include Hispano-Arabic poetry, Fernando de Rojas’s *Celestina*; Tirso de Molina’s, *Don Gil de las calzas verdes*; Teresa of Avila, Gloria Anzaldúa, and Reinaldo Arenas. *Prerequisite:* A 200-level course or consent of the instructor. (Satisfies social justice requirement.)

340a The Moor in Spanish Literature HU

I. Burshatin

The discourse concerning Spain’s Muslims and their descendants: the Moor as “other” (sensual, fanatical or exemplary but flawed) and as a metaphor of power, from the Christian Reconquest and the expulsion of the Moriscos to Juan Goytisolo’s *Reivindicación del conde don Julián*. *Prerequisite:* A 200-level course or consent of the instructor. (Satisfies social justice requirement.)

352a Evita and Her Sisters HU (Also called Comparative Literature 352a)

G. Michelotti

The representation of female historical and mythical figures in Latin-American writings. Women have been writing and written about since the beginning of times in Latin America. It is the intention of this course to explore how the female subject, with an historical and/or mythical presence, is portrayed, manipulated or rewritten by authors and other cultural agents of either gender. The course will investigate how female figures of the historical, political or religious sphere are constantly being reshaped to conform with the cultural demands of each particular historical moment. Besides the above-mentioned Evita, other female subjects would include, among others: Malinche, Virgen de Guadalupe, La Llorona, Ochún/Virgen de la Caridad del Cobre, Sor Juana Inés de la Cruz, The Amazons, Testimonial literature: Alicia Kosameh, Domitila Barrios de Chungara, Rigoberta Menchú, Jesusa Palancares/Josefina Bórquez, Carlota (Mexican Empress), Madama Sui, Isabel de Guevara, Mothers of Plaza de Mayo, Frida Kahlo. *Prerequisite:* A 200-level course or consent of the instructor. *Not offered in 2002-03.*

380a Just Wars and Utopias: The Indian, National Identity, and Ideology in Spanish America HU (Also called Comparative Literature 380)

R. Castillo Sandoval

Examining the figure of the Indian from colonial times to the present—the ways in which Europeans, their descendants (criollos or mestizos), and Indians themselves have produced those images in order to legitimize or challenge political and social order. Study of literary texts and other writings, such as historical narratives and ethnographic texts. *Prerequisite:* A 200-level course in Spanish, or consent of the instructor. (Satisfies social justice requirement.)

385a Popular Culture, Cultural Identity and the Arts in Latin America HU (Also called Comparative Literature 385)

R. Castillo Sandoval

This course will examine the interaction among mass, elite, traditional, and indigenous art forms and their relationship with the dynamics of national/cultural identity in Latin America in the 19th and 20th centuries. Among the forms of expression to be studied are oral poetry and narrative, the “folletín” (19th-century melodramas by installment) to 20th-century “fotonovelas,” “radionovelas,” and “telenovelas,” broadsides, comics, musical and political movements such as “neo-folklore,” “New Song,” and “Nueva Trova,” artistic movements such as Mexican Muralism, traditional and popular crafts, cookbooks, popular dance, and the cinema. *Prerequisite:* A 200-level course in Spanish or consent of the instructor.

480a,b Independent Study HU

Staff

490 Senior Departmental Studies

Fall: R. Castillo Sandoval. Spring: Staff

The course will consist of two one-semester parts. The first, taken in the fall semester, will have the format of a seminar under the supervision of one Spanish department faculty member. The purpose of this seminar will be to prepare students for the research and writing their Senior Theses by 1) enhancing and refining the reading tools and critical approaches to texts in Spanish acquired in previous courses; 2) elucidating and contextualizing relevant aspects of literary history, theory, and culture; 3) determining the thesis topic, key secondary sources and approach to be deployed in writing the thesis; and 4) polishing the skills and methods for successful research and proper use of available resources. Problems in literary and cultural analysis—selected with a view to their pertinence in relation to the group’s interests—will be presented through close readings of works from various periods and genres and through

selected works of criticism or theory. The second semester will involve the process of writing the thesis. Seminar meetings will continue—albeit in a more sporadic schedule—for progress reports while students work under the supervision of individual professors.

COURSES OFFERED AT BRYN MAWR COLLEGE

- 110 Estudios culturales de España e Hispanoamérica**
- 120 Introducción al análisis literario**
- 206 Composición (nivel superior)**
- 208 Drama y sociedad en España**
- 240 Hispanic Culture and Civilization**
- 260 Ariel/Calibán y el discurso americano - *Not offered in 2002-03.***
- 270 The Picaresque in Spain and Beyond - *Not offered in 2002-03.***
- 307 Cervantes**
- 308 El teatro del Siglo de Oro - *Not offered in 2002-03.***
- 309 La representación de la mujer en la literatura española del Siglo de Oro - *Not offered in 2002-03.***
- 310 La condición post mortem: Pos/Modernidad periférica en la narrativa y la producción cultural mexicana**
- 320 Surrealismo español: poesía, arte y cine**
- 351 Tradición y revolución: Cuba y su literatura**

WRITING PROGRAM

The Writing Program supports the development of versatile and reflective writers who can communicate with a range of audiences, construct cogent arguments, and craft effective prose. By administering a Writing Center and collaborating with faculty across the disciplines, the Writing Program also encourages quality writing in all aspects of campus life.

Writing Seminars, taken by all incoming students, are the mainstay of the Writing Program. Taught by faculty from across the College, first-year seminars are offered in three varieties. WS-D sections are taught out of the perspective of a particular academic discipline, WS-T sections are organized around a particular topic and WS-I sections offer individualized study. In the process of exploring a particular theme or field of study, seminars emphasize writing as a means of inquiry, reflection, communication, and persuasion. To help students negotiate the demands of critical reading and academic writing, most courses include practice in analytical strategies, topic development, research, arrangement, style, and editing.

Advanced courses in writing and related fields, such as rhetoric, literacy and cultural studies, are offered on a limited basis.

*Assistant Professor **Thomas A. Deans**, Director of College Writing*

*Professor **Julio C. de Paula***

*Professor **C. Stephen Finley***

*Elizabeth Ufford Green Professor in the Natural Sciences **Judith A. Owen***

*John R. Coleman Professor of Social Sciences **Paul Jakob Smith***

*Associate Professor **M. Kaye Edwards***

*Associate Professor **Jennifer Punt***

*Associate Professor **James C. Ransom***

*Associate Professor **Christina Zwarg***

*Assistant Professor **Duane W. Kight***

*Assistant Professor **Laura McGrane***

*Assistant Professor **Maud McInerney***

*Assistant Professor **Theresa Tensuan***

*Visiting Associate Professor **William di Canzio***

*Visiting Assistant Professor **Christopher Devenney***

***Kristin Lindgren**, Acting Director of the Writing Center*

*Visiting Instructor **Ruth Anolik***

*Visiting Instructor **Jenny Godley***

Writing Requirement

As an essential tool for academic study, personal expression, and civic life, writing deserves concerted attention in a liberal education. A one-semester writing seminar, a general degree requirement of the College, must be taken by all first-year students. Writing seminars are courses that integrate writing instruction with intellectual inquiry into particular disciplinary or topical foci. They devote attention to strategies for performing critical analysis, constructing sound arguments, and crafting effective prose. WS-T (topically organized) and WS-D (academic discipline based) seminars are offered in both semesters. WS-I sections, taught in the fall semester, do not alone fulfill the writing requirement, but serve as preparation for WS-T or WS-D courses in the spring semester. Students are advised to take other courses as well in which writing receives substantial attention.

WRITING SEMINARS

WRPR 103a **Perspectives on Social Justice** [WS-I]

T. Deans

A first-semester course with individual tutorials that prepares students for a second-semester topical or discipline-based writing seminar. The theme for this section is social justice. By responding to readings and researching local community organizations, participants will develop a framework for comparing approaches to social justice and community action. Students work at their own pace toward strengthening all aspects of the writing process, from generating ideas and doing research, to developing a focus, organizing ideas, and editing for style and correctness. *Enrollment limited to 10 students.* (Satisfies the social justice requirement.)

WRPR 105a **(Mis)Education: Teaching Oppression, Learning Freedom** [WS-I]

R. Anolik

A first-semester course with individual tutorials that prepares students for a second-semester topical or discipline-based writing seminar. We will consider education as a powerful social tool with competing possibilities: as a force for repression or as a force for liberation. We will read texts that explore the deployment of institutions of education to perpetuate social inequity and texts that trace the appropriation of these systems in the cause of social equality. Students work at their own pace toward strengthening all aspects of the writing process, from generating ideas and doing research, to developing a focus, organizing ideas, and editing for style and correctness. *Enrollment limited to 10 students.* (Satisfies the social justice requirement.)

WRPR 106b **Children of the Night and Their Music** [WS-T]

D. Kight

An examination of monstrosity in literature, film, culture and theory. By focusing on three monster figures that have drawn the attention of a number of authors and film makers—the Vampire, the Creature, and the Double—this course seeks to discover what monsters are, what kinds of fears they embody, how they can be read against each other, and why these figures and their relatives continue to fascinate us. Readings include three novels and a number of other texts (short stories, poems, films, theoretical essays).

WRPR 108b **The Plague** [WS-T]

R. Anolik

An exploration of the ways in which social inequity is revealed by the pattern of epidemic diseases which, like other cataclysmic events, tend to fall more harshly upon those who are marginalized by society. We will also examine how plagues present an opportunity to blame the less fortunate and an excuse to tighten social control. This writing intensive seminar will feature class discussions of the texts and regular small group tutorials focusing on writing. (Satisfies the social justice requirement.)

WRPR 112b **Metamorphosis and Metaphor** [WS-D] (Also listed as General Programs 112b)

K. Edwards

An interdisciplinary exploration of literary, visual, and scientific representations of metamorphosis. Beginning with scientific descriptions of metamorphic transitions during insect and amphibian life cycles, we will move to explore metamorphosis as a metaphor for psychological and social change. This writing intensive seminar will feature class discussions of the texts and regular small group tutorials focusing on writing.

WRITING PROGRAM

WRPR 120b Chinese Perspectives on the Individual and Society [WS-D] SO (Also listed as History 120b)

P. Smith

An investigation of Chinese views on the relationship between the individual, the family, and society from the classical to the modern eras. This writing intensive seminar will use Confucian and Buddhist texts, literature and drama, and autobiography to explore the perennial challenges that confront men and women in China, past and present as they seek to adhere to social norms without sacrificing their sense of individual identity. The format includes class discussion of the readings as well as collective and individual discussion of the writing assignments.

WRPR 121a,b The Marginal and Mainstream in Theater [WS-T]

W. di Canzio

A study of contemporary and classical plays. We will explore how theater makes insiders of those despised as outsiders, often because of race, religion, or gender: their marginal stories become the mainstream stuff of drama. When these characters take center stage, they expose structures of inequality and prejudice in the society that would exclude them. Through reading, discussion, and writing, this course will address the questions these plays raise. (Satisfies the social justice requirement.)

WRPR 123a Community, Race, and Xenophobia in Film [WS-T]

W. di Canzio

A consideration of exemplary films and their screenplays in which characters of different races, religions, sexualities, and economic means are made to live together. How does the movie imagine this world? At war, at peace? With justice or inequality? How do children fare in such a world? Through viewing, reading, discussion, and writing, this course will explore these questions. (Satisfies the social justice requirement.)

WRPR 126b Passion, Proof and Persuasion: The Nature of Scientific Inquiry [WS-D] NA (Also listed as Biology 126b)

J. Owen and J. Punt

An exploration of the narratives underlying scientific discovery. Using select scientific memoirs and biographies as a guide, we will explore motivations that drive scientists and scientific breakthroughs. We will then analyze the work of a single biologist from multiple perspectives and examine how scientific controversy is portrayed in the media and in fiction. Finally, by evaluating the writings of scientists and journalists, we will work together to determine the most effective models of communication of scientific advances.

WRPR 130b Inequality in Society [WS-D] SO (Also listed as Sociology 130b)

J. Godley

A sociological examination of four forms of inequality in American life: economic class; race and ethnicity; gender; and physical ability. We will focus first on defining and quantifying these inequalities, and the intersections between them. Reading both empirical sociological works and autobiographies, we will analyze how cultural and institutional factors contribute to social inequality. In this writing intensive seminar, students will be encouraged to write sociologically about their own and their classmates' experiences of social inequality, and to develop proposals for working towards social equity in their own lives. (Satisfies the social justice requirement.)

WRPR 131a Writing the “Real:” Literature as Cultural Testimony [WS-T]

C. Devenney

An exploration of the relationship between literature and the subject of postcolonial cultural experience in a broad range of writing from Ireland, South Africa, Algeria, and India. Our readings and inquiries will emphasize differing forms of testimony within postcolonial narratives, and the varying ways postcolonial writing bears witness both to an unjust and unspeakable history and a traumatized cultural present. Ultimately, we will be concerned with the ways these “testimonies” alter conventional understandings of the relation between language, identity, history, and cultural experience. (Satisfies the social justice requirement.)

WRPR 135a,b Writing for Change [WS-T]

T. Deans

This course pairs academic inquiry with community-based writing. After examining several competing ideas about the nature of community and the ethics of social action, participants will work in teams on writing projects that directly contribute to non-profit/social justice organizations. (Satisfies the social justice requirement.)

WRPR 145b Light and the Colors of Life [WS-D] NA (Also listed as Chemistry 145b)

J. de Paula

An interdisciplinary examination of light and color in art, science, and technology. We will understand the scientist's assertion that, without light from the Sun, our planet would be a cold and sterile rock incapable of sustaining life on a grand scale. We will also examine the chemistry of pigments used in art and medicine. This writing intensive seminar will feature class discussions of the texts and regular small group tutorials focusing on writing.

WRPR 150a,b Introduction to Literary Analysis [WS-D] (Offered in seven sections; also listed as English 150a,b)

C. Devenney, S. Finley, M. McInerney, L. McGrane, J. Ransom, T. Tensuan, and C. Zwarg
Approaches to the literary traditions of the English language through critical reading and intensive writing. The powers and limits of language; ideas of “character” and “community,” and the relation between person and place; heroic endeavor and the mystery of evil; loss and renovation—these are among the themes to be tracked through various strategies of literary representation and interpretation in a variety of genres (epic, narrative, and poetry) and modes (realism, allegory, and romance), and across a range of historical periods. Our goal is to develop the vocabulary, skills, and knowledge necessary to understand not only how we decide what literary texts “mean,” but also how literary texts generate and contemplate “meaning.” Introduces and carries credit toward the English major.

COURSES AT BRYN MAWR

(These courses do not fulfill the writing requirement of Haverford College)

English 125 **Writing Workshop**

English 126 **Writing Workshop for Non-Native Speakers of English**

English 220 **Writing in Theory/Writing in Practice: The Study of the Teaching of Writing** (Also listed as Education 220)

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STUDENT SERVICES AND ACTIVITIES

RESIDENCE HALLS

Haverford College has always been essentially a residential institution, and it is expected that students other than those living at home or who are married will take advantage of the opportunities for full participation in college life provided by dormitory living at either Haverford or through the Residence Exchange program at Bryn Mawr College. Haverford has no fraternities or sororities. First-year students, including transfers, are expected to live on campus and must obtain their dean's permission to live off campus. New students are notified of their housing assignments before they arrive on campus in late August; upperclass students obtain their housing through a series of lotteries known collectively as Room Draw which is held each spring. (A smaller draw is held annually in December for second semester openings.)

It is assumed that students will treat College property with care and keep their room, as well as any adjacent common areas, reasonably clean and in good order. If it comes to the College's attention that a student's lifestyle is creating unsanitary and/or hazardous conditions, she/he will be expected to cooperate with college staff to correct any problems to the College's satisfaction. Failure to do so may result in a cleaning charge and may also jeopardize her/his right either to remain in current college housing or to obtain such housing in the future. Students are financially responsible for any damage to their room or to other college property. The cost of repairing public areas that cannot be allocated to individual students will be prorated among all residents of a floor, a wing, or in some instances, the entire building. Should damage occur as a result of a dorm-wide event, such as a party, costs will be prorated among all residents of the dorm.

First year students are required to be on the full board plan both semesters of their first year at the College. Upperclass students are required to be on the full board plan unless they are living at 710 College Avenue, the Ira Reid House or the Haverford College Apartments—all dormitory housing where there are full kitchens. Residents in these dormitories may choose either to be on the partial plan or go off the board plan entirely. Those who want to choose one of these options should provide written notification to Barbara Wilson in the Business Office.

Exceptions to the above rules may be made by the Senior Associate Dean of the College under the following conditions:

(a) For medical reasons known prior to Room Draw, no excuse from the meal plan is permitted: the student should exercise her or his option at room draw time for meal-plan-exempt housing. For medical reasons that arise after Room Draw, the student's family physician must send a letter to the Director of Health Services specifying the illness, when it appeared, how long it is expected to last, and detailing the prescribed diet. This letter should be on the physician's official stationery. In the event that the Dining Center cannot provide the required diet, the student will be permitted to remain off of the meal plan, but he or she will have to move into HCA, Reid House, or 710 as soon as a space becomes available. Such students will receive top priority for room openings.

(b) For members of Havurat Shabbat who sign an agreement that they will not eat food prepared in the Dining Center because they are observing the laws of

Kashruth and are therefore obliged to eat only kosher foods. The agreement is available at the Housing Office, and it must be signed in accordance with the Honor Code.

(c) For religious, philosophical, or other grounds held prior to Room Draw, no excuse from the meal plan is permitted; the student should exercise his or her option at room draw time for meal-plan-exempt housing. For a conversion to such a position after Room Draw, the student may be excused from the meal plan, but he or she will have to move to 710, Reid House, or HCA as soon as space becomes available. Such students will receive top priority for room openings.

Any student committed to following a strict vegan diet needs to be aware of the fact that the Dining Center cannot guarantee that vegan items are always 100 percent pure. The kitchen prepares food for hundreds of persons at every meals, and both communication and execution are not always flawless. Any student committed to following a strict vegan diet should take this into consideration before deciding to eat in the Dining Center.

Students who are eligible to go off of the meal plan, and decide to do so, are reminded that they will incur a financial penalty if they notify the Business Office after the semester begins. Please contact Barbara Wilson, who handles Student Accounts in the Business Office, for particulars. The Business Office may waive the penalty under certain circumstances.

HEALTH PROGRAM

The Haverford College Health Service provides confidential primary health care for students. The student health professional staff consists of certified nurse practitioners, registered nurses, board certified physicians, a registered dietician, and a substance abuse educator.

Clinic hours: Monday through Friday 8:30 a.m. - 8:30 p.m. during the academic year.

Walk-in clinic hours with the registered nurse are 8:30 a.m. to 12 noon, 1 p.m. to 6 p.m., and 6:30 p.m. to 8:30 p.m. To speak to a registered nurse after regular hours or on weekends, students can call (610) 896-1111.

The physicians, women's health coordinator, nurse practitioner, registered dietician, and substance abuse educator may be seen by appointment. Bryn Mawr Hospital is located one mile from campus for emergencies.

Health Insurance: The College requires that all students arrange insurance coverage for medical expenses. Students have two options regarding health insurance: (1) coverage may be purchased through the College Insurance Plan; (2) the student may provide proof of other adequate health insurance coverage.

Medical Records: The College requires each entering student to complete a health questionnaire and physical examination prior to matriculating. This information is part of the student's medical record and is absolutely confidential. Students failing to comply with this policy will not be permitted to register.

COUNSELING AND PSYCHOLOGICAL SERVICES (CAPS)

Haverford College's psychological service, composed of four part-time clinical psychologists and one consulting psychiatrist, offers counseling for personal, edu-

cational, or vocational problems. Many students who seek help see a counselor a few times, while some students see the counselor for a more extended series of interviews. When appropriate, students are referred for outside treatment in metropolitan area clinics or with private therapists. Except in some situations assessed to be life-threatening, all counseling contacts with the staff are held in strict professional confidence, as well as the names of students counseled.

The counselors have two additional functions: to develop or encourage programs and policies which foster an atmosphere in which personal problems are less likely to develop, and to encourage and offer programs that contribute to the general emotional well-being of students.

OFFICE OF DISABILITIES SERVICES (ODS)

ODS provides resource information about disabilities to the college community. Persons also consult with the office when they have specific questions about what accommodations and services students with disabilities might receive and about what the procedures are for obtaining them. While ODS does not evaluate students for the purposes of documenting a disability, the office can provide referral to off-campus professionals who can. For students with disabilities, the office coordinates the provision of support services and serves as a communication hub for students wishing to connect with other students with disabilities. Information provided to the ODS about an individual student's disability is held in confidence in accordance with the Americans With Disabilities Act of 1990.

Location: Third Floor, Rm. 317, Founders Hall

Phone: 610-896-1290

Staff: Rick Webb, Ph.D., Coordinator

rwebb@haverford.edu

Pat Rawlings, Secretary-Receptionist

prawling@haverford.edu

BI-COLLEGE CAREER DEVELOPMENT OFFICE

The Bryn Mawr-Haverford Bi-College Career Development Office is designed to aid students in career exploration; to teach students how to make career or employment choices; to enable them to understand the strength of a liberal arts education as preparation for a career; to help create employment opportunities; and to give similar support to alumni. The staff is specifically qualified to counsel students in analyzing personal skills and values as they prepare for careers or employment.

The Colleges maintain up-to-date resource libraries of career literature; an online internship database with over 2,500 active records; full-time, part-time and summer job listings; and a wide range of other materials pertaining to summer, part-time, and full-time employment.

The Recruiting Coordinator arranges employment interviews on the campuses, resume referrals for off-campus recruitment, and a year-long series of information sessions conducted by employers and graduate and professional school programs. Additionally, students may interview with employers participating in Off-Campus Recruiting Days co-sponsored with a consortium of selective liberal arts colleges.

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Conducted in January, these events are located in Boston, Chicago, New York City, Philadelphia, and Washington, D.C.; additionally, the consortium sponsors a Coast to Coast Virtual Fair.

In the spring, not-for-profit/public service career fairs are held in New York City, Boston, and on campus for Philadelphia-area organizations. Co-sponsored by the "Seven Sister Colleges," Haverford, and several other schools, the career fairs offer the opportunity to learn about employment and career opportunities in a broad spectrum of not-for-profits, most of which are represented at the fair by alumni of the sponsoring institutions.

Workshop Week, offered twice yearly, addresses topics as career research, job search strategies, summer jobs and internships, resume writing and interview skills. Video equipment is available for taping mock interviews and for viewing employer information tapes.

The Bi-College Career Development Office co-sponsors a Graduate and Professional School Admissions Panel. Throughout the year, seminars, conferences and informal meetings with alumni in a variety of fields are presented.

Students may also investigate careers of interest by speaking to alumni, parents and friends of the College who volunteer to host students in their workplaces during January or Spring Break observing a field and/or executing short-term projects on site in our Extern Program.

A monthly bulletin, carrying news items, job and internship listings, and a schedule of career development events on both campuses, is e-mailed to each student at Bryn Mawr and Haverford. Seniors also receive the *Senior Supplement* bi-weekly. *Network News*, a bi-weekly job listing newsletter, is available on-line to alumni seeking entry level positions or a job change at more advanced levels. To assist the application process for employment or graduate/professional study, a full credentials service provides a centralized file for letters of recommendation and the mailing of those letters at the candidate's request. Visit our Web page at: <http://www.haverford.edu/cdo>

WRITING CENTER

The Haverford College Writing Center, located on the lower level of the Dining Center, is staffed by specially trained student writing advisors and directed by a member of the English Department faculty. Open on a drop-in basis Sunday from 5:00 to 11:00 p.m. and Monday through Thursday 8:00 to 11:00 p.m., the Center is equipped with a small library and computers to facilitate the revising process. The Center offers Haverford students assistance with all stages of the writing process, from formulating ideas to final editing, and with writing assignments from all disciplines. For more information, see our Web site: <http://www.haverford.edu/writingctr/>

WOMEN'S CENTER

The Women's Center, staffed by Haverford students, is open to the bi-college community as the arena where informational discussions, educational, and cultural events are provided to help alleviate the myths and judgments made about each other based on gender. The center and its library's principal interest is information

for, by, and about women. The center is available to groups as a meeting place to further explore these options.

EIGHTH DIMENSION

The Eighth Dimension Program was named when Haverford's curriculum consisted of seven academic dimensions. The program provides off-campus opportunities for many types of community service. Students participate as volunteers in tutorial projects, hospitals, legal and health service agencies, peace and social action groups, homeless shelters, AIDS organizations, and environmental groups.

Student-chaired projects include housing renovation groups, homeless street outreach, tutorial projects, work with the elderly, a Spring Break project, hunger/homeless awareness groups, and AIDS projects. A student volunteers a minimum of four hours a week, after the student and director of the program mutually agree on the right agency. The community service schedule is carefully planned around the course load and academic priorities.

OFFICE OF MULTICULTURAL AFFAIRS

Under the guidance of the associate dean and director, the Office of Multicultural Affairs carries out the following responsibilities: provides leadership to the College's efforts to realize its commitment to diversity; advocates for and supports the interests and needs of students of color; works with faculty and administration to recruit and retain students, faculty, and administrators of color; develops varied learning opportunities designed to increase the community's understanding of and sensitivity to issues related to cultural pluralism, toward the goal of improving the quality of life with regard to cultural issues for the campus community.

STUDENT GOVERNMENT

The Students' Association is made up of all students enrolled at Haverford College and all Bryn Mawr College students living on the Haverford campus. The College has delegated to the Students' Association—and the Association has accepted—the responsibility for nearly all aspects of student conduct and of student organizations on the campus. The Students' Association in turn delegates authority to the Students' Council and to the Honor Council to carry out its executive, legislative, and judicial functions.

Students' Council supervises many extracurricular activities and allocates to each organization a percentage of the student activity fee. Through its several committees, and as the representative body of the Students' Association, the council is involved in every aspect of student life and campus governance. The council cooperates extensively with the Self-Government Association of Bryn Mawr College on all matters that affect the interests of the two colleges. The two student governments meet together on a regular basis, and the student body presidents cooperate closely.

Committee System

The Students' Council appoints students to serve as members of faculty committees responsible for all aspects of college life. The major committees include: (1) the Educational Policy Committee, which is responsible for the contents of the cur-

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riculum and curricular requirements; (2) the Administrative Advisory Committee, which helps to develop the College budget and advises the College administration; (3) the Committee on Student Standing and Programs, which examines cases of students in academic difficulty and responds to requests for flexibility. Other students, appointed by Students' Council, advise the Physical Education department on general policies, participate in the selection and funding of invited speakers, serve on all search committees for new faculty and administrators, and, in general, participate in the total life of the College at all levels.

An internal Students' Council committee reviews the student budget. Another committee, chaired by the Second Vice-President, makes all committee appointments. Numerous bi-college clubs and committees direct the social life and keep the arts active on both campuses.

A junior and a senior, selected in their respective sophomore years for two-year terms, serve as representatives to the Haverford College Board of Managers, which also forms subcommittees on which students may serve.

The Honor Council administers all aspects of the Honor System and has the responsibility of interpreting specific matters pertaining to the Honor Code. The chairperson of the Honor Council also serves as First Vice-President of the Students' Association, and is a member of the Students' Council.

Honor System

The Honor System at Haverford is based on the belief that students can successfully take the responsibility of establishing and maintaining standards in social and academic life. It is founded on the principle of collective responsibility whereby each individual shares in a mutual concern for others within the College community. In the academic area the Honor Code stipulates that one should distinguish clearly between original work and material from any other source. Under Haverford's Honor Code, hour-examinations and semester-examinations have not been supervised by proctors since 1897, and since 1962 students have been free to schedule semester-examinations at times most convenient to themselves. In the social realm, it is expected that students will show concern for others and that problems, when they arise, will be dealt with in a spirit of mutual respect.

The Honor Pledge is called to the attention of each applicant for admission to Haverford College:

"I hereby accept the Haverford College Honor System, realizing that it is my responsibility to uphold the Honor System and the attitude of personal and collective honor upon which it is based."

Prospective students must feel confident before entering Haverford that they can give their active support to the Honor System and subscribe to this pledge.

Specifically, students who enter Haverford pledge themselves to fulfill three responsibilities: (1) to govern their own conduct according to the principles which have been adopted by the Students' Association; (2) in case of a breach of the Honor Code, to report themselves to Honor Council; (3) if a student becomes aware of a violation by another student, to ask the offender to fulfill the Honor Pledge by reporting to a member of the Honor Council; if the offender refuses, to report the matter to the Honor Council directly. In this manner each individual

becomes personally responsible for the successful operation of the entire Honor System.

The following statement has been prepared by the Honor Council:

"The Honor Code is an ethical system of order which affects all aspects of the Haverford environment. The Honor Code is administered by a Council of 16 students who are elected by their peers. This Council's purpose is to interpret the spirit of the Code in order to foster reflection and bring about constant evaluation of community values and standards.

"As with any set of ideals, there are instances when practice does not measure up to the established standards. At these times Honor Council serves to mediate the discrepancies between ideals and practice. This process of mediation is called confrontation. Confrontation under the Honor Code means subjecting one's beliefs and those of others to re-examination.

"The Code represents an attempt by students to mediate the tensions between themselves as free individuals and the restrictions imposed on them by their living together, and their commitment to academic work. If a student believes that another's actions may be in conflict with the principles of responsibility and respect inherent in the Code, the matter must be discussed with the individual concerned. Confrontation takes the form of a dialogue between persons with different standards. If, after discussion, either student finds the actions or beliefs in question to be in possible conflict with the Code, the matter must be presented to a member of Honor Council. When a social concern is brought before Honor Council, a mediated dialogue is almost always a first step towards resolving the issue. If the mediated dialogue is unsuccessful, or if the matter involves suspected academic dishonesty, then it goes before a jury composed of six members of Honor Council and six members of the community. The Code also prescribes guidelines for integrity in social relationships. Upon entering the College, the student pledges to uphold these principles of confrontation, respect and concern.

"The Honor Code often undergoes serious reevaluation by the student body. Such a reevaluation may bring about basic changes in the Code, its ideals, and the way its ideals are put into practice. This is not undesirable; a healthy Code must prompt constant evaluations of individual and group interrelations within the College as well as a reevaluation of the Code itself, since it both defines and reflects these interrelations. Indeed, an absence of individual and group confrontations is viewed as an indication that the Code is unimportant to the College. Confrontations are taking place, and the College is attempting to respond. The quality of that response will be, as always, the best indicator of the possibility of an Honor System working successfully at Haverford. An Honor System is a very complex and challenging form of self-government; we are confident that individuals at Haverford College can rise to it."

EXTRACURRICULAR ORGANIZATIONS AND PUBLICATIONS

The Haverford community supports a wide variety of social and cultural organizations in which students have an opportunity to participate. The Students' Council funds more than 50 organizations and clubs, most of which function year after year

STUDENT SERVICES AND ACTIVITIES

while others flourish only when there is sufficient interest. The Students' Council encourages interested students to organize themselves and apply for an appropriate budget. Recent appropriations have covered everything from the Ultimate Frisbee Club to the Outing Club.

Most of the student organizations are sponsored and funded jointly with Bryn Mawr College. Most student publications—the weekly *Bi-College News* and the literary magazine—are joint productions. The same is true of extracurricular music activities. Ad hoc groups are formed for jazz, a cappella, rock performances and, with the Drama Club, for musicals. Certain curricular musical organizations accept participants on an extracurricular basis. Drama, dance, and a film series also enjoy extensive followings.

Four-fifths of all students participate in sports, with extensive intramural as well as intercollegiate competition. All students have access to all athletic facilities as described on page 17.

Several religious organizations initiated by students reflect various traditions, faiths and practices. The College makes facilities available to them. In addition, a Friends Meeting open to the College community is held every Thursday on campus. The Quaker Activities Committee meets every other Sunday evening for dinner and discussion and serves as a place where the Quaker concerns of the student body are considered and, on occasion, acted upon.

The Catholic Campus Ministry, or Newman Association, meets at both Haverford and Bryn Mawr. The Ministry conducts Mass on Sundays and Holy Days. In addition, campus ministers spend several hours a week at each campus and are available by appointment. Catholic Campus Ministry sponsors religious programs, lectures, social activities, and community outreach programs. The Newman Association is open to all students regardless of religious background.

The Haverford-Bryn Mawr Christian Fellowship meets regularly at Haverford and Bryn Mawr. While there are adult advisors, the Fellowship is completely run by students who sponsor a retreat each semester as well as speakers, movies and an occasional social function.

Bryn Mawr/Haverford Hillel is a bi-college student-run organization. Social, educational, political, and religious programs are planned by the student organization, the Jewish Student Union, and other interested students. Among the numerous programs sponsored by the Hillel are weekly Friday night Shabbat Services and kosher Shabbat dinners, and observances for all the Jewish holidays. Hillel also sponsors cultural and social events, such as an opening barbecue, parties, speakers, and performances. Students also participate in citywide programming coordinated by both Hillel board members and interested Jewish students.

The Bisexual, Gay, and Lesbian Alliance (BGALA) holds weekly meetings and maintains an office with a library. The group publishes a newsletter and sponsors lectures and social events for the whole College community.

Students are active in an extensive array of community service projects, including Kids Connection, an off-campus tutoring program for students in low income neighborhoods of Philadelphia, and a Big Sister/Big Brother Program for children in the local neighborhood.

Students of color have formed organizations to address their specific needs and interests: Black Students' League, Latin American Students' Organization, La Casa, East Asian Cultural Organization, and the South Asian Students' Association. All of these groups have a cultural space (Black Cultural Center, La Casa Hispanica, and the Asian Cultural Living Group) which have meeting facilities. All these organizations sponsor cultural, educational, and social events for the entire College community. Additionally, each organization provides one representative to a Student Advisory Board which serves as a liaison among the student of color groups, and the Director of Multicultural Affairs.

There are no fraternities or sororities at Haverford.

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ADMISSION

ADMISSION

The policy of Haverford College is to admit to the first-year class those applicants who, in the opinion of the College, are best qualified to profit by the opportunities which Haverford offers and at the same time to contribute to undergraduate life. Due regard is given not only to scholarly attainment as shown by school record and examination, but also to character and personality, plus interest and ability in extracurricular activities. Applicants compete for admission to a carefully selected and comparatively small student body of approximately 1,100 men and women.

Haverford does not discriminate in education or employment on the basis of sex, sexual orientation, race, color, age, religion, national origin, physical disability or handicap.

A candidate's preparatory course should include a minimum of: four years of English; three years of mathematics, including two years of algebra; three years of one foreign language, in preference to two years in each of two languages; a laboratory science; and a year of history or social studies. Personal interests dictate additional courses in foreign language, mathematics, science, social studies and history. *Most candidates will have taken more than the minimum requirements, including honors, enriched, Advanced Placement or International Baccalaureate courses if offered.*

Interviews and campus visits are helpful to all prospective students, but students who live within 150 miles of the campus are required to arrange personal interviews. An appointment should be made well in advance of the student's visit. For more information about the College, students are invited to access the Haverford Web site: <http://www.haverford.edu>.

Haverford offers two application plans: Early Decision and Regular Decision. Criteria for admission are the same under both plans; students may not choose more than one plan.

A candidate for first-year admission should apply early in the senior year of secondary school. The application should be accompanied by a check or money order for \$50, drawn to the order of Haverford College. This application fee is not refundable.

First-year applicants must take the College Board Scholastic Assessment Test (SAT I) or the ACT Assessment (ACT) and three SAT II Subject Tests *before the deadline* for the decision plan chosen. One of the Subject Tests must be the Writing Test; the other two may be in subjects of the student's choice. Results of tests taken in the junior year are acceptable. Applicants should request the College Board to report the scores directly to Haverford; score reports from the high school transcript are helpful but not sufficient.

Arrangements to take the examinations may be made through the student's high school guidance office or through the Web at <http://www.collegeboard.org>.

First-year applicants may apply for Early Decision after investigating Haverford carefully and *making a commitment to enroll if admitted*. If applying under Early Decision, students may apply to other colleges with the understanding that they will withdraw those applications if admitted to Haverford. APPLICATION FOR

EARLY DECISION CARRIES A COMMITMENT TO ENROLL AT HAVERFORD, IF ADMITTED.

Many candidates who are not admitted under Early Decision will be transferred to the Regular Decision group where they will receive full consideration in the spring. Some candidates whose credentials do not indicate a possibility of admission in the spring will receive a final negative decision in December.

Early Decision applications must be filed by November 15 along with all supporting credentials. Decisions will be announced by December 15. Students admitted under Early Decision are expected to enroll the following September; they are not eligible for Deferred Matriculation.

Applications for regular decision must be filed by January 15. If offered admission to Haverford, *the College expects a firm commitment about each student's plans by May 1*, the date used by many colleges to give students ample opportunity to weigh all their choices before making a commitment.

When a candidate's application is approved, admission is offered for September of the same year. Some students may want to work, to travel, or to have some other non-academic experience before starting at Haverford. On request, an admitted student may postpone matriculation at Haverford for one year, reserving a place in the class starting in September of the next year.

Applicants wishing to enter Haverford after three years of secondary school should follow the regular application procedure. Early Admission candidates may not apply for Early Decision. All candidates for Early Admission are required to have an on-campus interview with a member of the admission staff.

Transfer Students

Haverford welcomes transfer students whose academic credentials are very strong. In addition to filing an application, a transfer candidate may be asked to submit a secondary-school transcript, the results of College entrance examinations, a college transcript, and a letter of recommendation from a responsible official of the college currently or last attended. The Admission Committee will notify each student regarding the required credentials. Transfer students must be eligible to enter the sophomore or junior class and must spend a minimum of two years at Haverford. The application deadline is March 31 for September admission; decisions are usually announced in May. New students may not start in January.

International Students

Students who are not U.S. citizens may apply for first-year or transfer admission. Applicants must submit a regular application form and fee, and official transcripts (in English) of all academic work since beginning secondary school. First-year students should sit for the SAT I (Scholastic Assessment Test); TOEFL (Test of English as a Foreign Language) is suggested for those whose first language is not English, both first-year and transfer students. The deadline for first-year application is January 15 (decisions announced by mid-April); the transfer deadline is March 31 (decisions announced in May). A very limited amount of financial aid may be available.

Honor Code

In order to accept admission all candidates are required to subscribe to the Haverford College Honor Pledge (see page 294).

Advanced Standing

Qualified first-year students may be permitted to omit one of the introductory courses in a given department and proceed directly to intermediate courses in that department. Some departments give placement examinations during Customs Week to determine a student's qualifications; other departments use less formal criteria.

Students who have taken high school courses under the Advanced Placement Program may take the tests in these subjects offered by the College Board each May. One credit will be awarded for a score of 5 and one-half credit will be awarded for a score of 4. Advanced credit does not necessarily involve placement nor does placement necessarily involve credit.

For students entering the College from the International Baccalaureate Program, credit may be granted only for IB Higher Level courses completed with a grade of 5.0 or above. Each case will be reviewed separately before credit is approved.

Credit may also be granted for work a student does at another college before entering Haverford. To be considered for such credit, a transcript of that work must be sent to the dean of the College.

A maximum of four course credits altogether may be granted to entering first-year students on the basis of the Advanced Placement Examinations, International Baccalaureate Higher Level, or for courses taken at another college.

EXPENSES

The tuition charge for all regular students is \$27,006 for the 2002-03 academic year. The residence fee is \$8,590 for the academic year. There is also a Students' Association fee of \$254 per year. These fees—tuition, residence and Students' Association (but excluding the College's optional Accident and Health Insurance Plan, for which see page 289)—total \$35,850 for the year.

The residence fee covers room and board charges when the College is in session. This includes heat, electric light, and the use of bedroom furniture including bureau, table, chair, and a bed. Students supply any other desired furniture, plus blankets, towels, and bed-linen. The Students' Association fee covers the student activities fee and admission to a series of entertainment and cultural events.

A student carrying two or more credits on campus is charged full tuition.

Students are charged full tuition for each of the first eight semesters they are in attendance at the College, or until 32 credits have been earned in the seven-semester program, or 30 credits have been earned in a six-semester program. Six- and seven-semester programs allow students to reduce both the number of semesters and the financial costs required for a Haverford degree (see page 35). Students who finish seven semesters without completing all degree requirements will be required to enroll for a final semester at full tuition even if the number of credits needed is only one or two.

A ninth-semester student is charged at the Special Student rate of \$3,450 per credit.

A student carrying only Non-Collegiate Supervised Academic Work (see page 35), referred to as “off campus” or “OC credits,” is charged at the Special Student rate of \$3,450 per credit.

A student carrying one or more on-campus credits and one or more OC credits is charged full tuition for that semester.

A non-resident student carrying one or more independent study credits is charged for each credit at the rate for Special Students.

The vacation recesses scheduled during the school year are fall, midyear, and spring. During the fall and spring recesses the residence halls are open, but with specified hours when hot water is available and with some reduction in heat. The Dining Center is closed during the fall and spring recesses; all residence and food facilities are closed during the midyear recess.

A \$400 deposit is billed, payable in full, before the beginning of each semester, to cover the cost of books charged at the Bookstore and any other incidental charges that arise during the school year. Any unspent deposit is refundable at the end of the academic year.

Bills for the following semester’s tuition, room, board, Students’ Association fee, and deposit are rendered in July and December. Tuition and fees must be paid in full before the beginning of the semester and, to avoid last-minute congestion, preferably by mail in advance. Students whose fees are not paid are subject to dismissal from the college. Unpaid accounts are also subject to a 1% per month late fee, cancellation of bookstore privileges and participation in the meal plan, exclusion from the room draw, and withholding of transcripts. If there are any outstanding charges at the end of the semester, no diploma or official transcript will be issued. Transcripts may be withheld at any time for nonpayment.

First-year students and other new students are charged a one-time fee of \$155 to cover the cost of their orientation period, called *Customs Week*.

Payment Plans

Students who prefer to pay tuition and other fees in monthly installments may do so through a payment plan provided by Academic Management Services (AMS). Deferred payment options are available through the Teri Alternative Loan Program and Key Education Resources. Details of these plans may be obtained from the Business Office.

Refunds

Student withdrawals must have the approval of the dean. A full refund of tuition, fee, room and board will be made during the first week of classes each semester. Thereafter, refunds are subject to the following schedule:

During week two	90%
During week three	80%
During week four	70%
During week five	60%
During week six	50%
During week seven	40%

During week eight	30%
During week nine	20%
During week ten	10%

For academic year 2002-03, no refunds will be made after Nov. 10, 2002 and April 2, 2003. For purposes of these calculations, each week ends on a Friday and excludes spring break week.

The refund will then be made to federal loan and grant programs in which the student was involved that semester, in accordance with federal regulations. Any Haverford grant will be reduced by at least the percentage of the tuition refund. If a refund is due to state, institutional and/or private aid programs, this will be made before any refund is made directly to the student and/or family.

Students who decide to drop from the room or board plans after the first day of classes (without withdrawing from the College) will receive a pro-rata refund less a withdrawal penalty. No such refund is made during the last six weeks of the semester.

College Responsibility

The College is not responsible for loss because of fire, theft, or any other cause. For regulations governing accident and health insurance see page 289.

FINANCIAL AID

Financial aid decisions are made solely according to a need-based allocation formula developed by the College. In other words, Haverford does not offer any financial aid on the basis of academic, musical, athletic, or any other measure of merit. Aid is provided to all admitted students who were judged eligible according to the College's formula and procedures. Although no aid is awarded for more than one year at a time, it is normal practice to continue to meet a student's need as reassessed annually according the College's allocation formula.

New Students

The Admission staff admits students without regard to their financial need. An application for financial aid will have no bearing on your admission decision. There are limitations to College-funded aid; principles and procedures used to award College aid and instructions and deadlines for aid applications are outlined in the brochure "Financial Aid at Haverford," which is included in the Haverford College Admission Application Packet and all electronic versions of our admission application. All students applying for admission to Haverford and interested in College financial aid must read this brochure before they apply and make sure both of their parents do so, too.

Returning Students

A student who is currently enrolled at the College and who wishes to apply or reapply for aid must file application materials by April 20 preceding the year for which aid is requested. Instructions, deadlines, and forms are contained in materials available each year before the end of the first semester in a display just outside the Admission Office in the Whitehead Campus Center.

FURTHER INFORMATION

There is more and more information available every day at the Haverford College World Wide Web site (<http://www.haverford.edu>). We think it is important that all prospective and current students rely on our Web site for up-to-date information about the College in general and admission and financial aid in particular. We know that not everyone has access to the World Wide Web at home, but we think this source of information is important enough that you should seek out free access to the Web at a library, school, or community center. Of course, current students who do not have their own computers can easily gain access to the Web at any of the campus computer centers or the Library. We still print and distribute just as much information about the College as ever, but there is more available on the Web than we could ever put into print. In addition, students and parents may contact the Haverford Admission Office via Internet e-mail (admitme@haverford.edu) as well as the Financial Aid Office (finaid@haverford.edu).

Rate of Graduation

In compliance with the federal Student Right-to-Know Act of 1990 (Public Law 101-542), Haverford College provides the following information to prospective and currently enrolled students.

Class entering Fall 1995 (Class of 1999)

Size at entrance	306
Graduated 3 years later	1
Graduated 4 years later	268
Graduated 5 years later	8
Graduated 6 years later	5
Total graduated	282, 92.2%

SCHOLARSHIP FUNDS,
FELLOWSHIPS, AND PRIZES

<i>Scholarship Funds</i>	305
<i>Phi Beta Kappa</i>	315
<i>Endowed Fellowships for Haverford Graduates</i>	316
<i>Prizes and Awards</i>	316

SCHOLARSHIP FUNDS

The financial aid program principally rests upon a large number of endowed scholarships created by a wide variety of persons with faith in youth and in Haverford College, often to memorialize or honor a member of the College community. Where appropriate, these have been combined into a single fund from which grants are made and to which additions are welcomed.

Since all scholarships are awarded solely on the basis of financial need, these endowed scholarship funds used to meet students' needs by funding the College Grant portion of the aid packages. Students do not apply for specific funds but are automatically considered for scholarships when they file the usual aid applications for College aid. Conversely, a student determined to have financial need according to the College's need-based allocation formula does not have to qualify for one of these endowed scholarship funds to receive financial aid.

African American Scholarship Fund, established to provide financial aid to students of color.

M. A. Ajzenberg Scholarship Fund, established in 1962 in memory of M. A. Ajzenberg, for students majoring in or planning to major in physics or astronomy, preferably graduates of public schools in New Jersey or New York City.

George I. Alden Scholarship Fund, established to assist students with financial need.

Carl and Barbara Alving Scholarship Fund, established to provide scholarships to students in Access and Achievement in the Sciences. At least one scholarship is to be dedicated to a woman.

William W. Ambler '45 Memorial Scholarship Fund, established by alumni and friends in memory of William W. Ambler, who began his career in the admission office in 1956 and was named director in 1965 and served until 1987. This scholarship is awarded to the student who embodies Bill's Quaker values and on the basis of character, leadership and scholarship.

Robert P. Apmann '55 Scholarship Fund, established in 1988 by Arthur Apmann in memory of his son. Preference is given to a science major.

Manuel J. and Elisa P. Asensio Scholarship Fund, established to assist a qualified student from Spain or who is Spanish speaking with preference for Spanish majors.

George F. Baker Scholarship Fund, established to provide scholarship assistance to students interested in business careers.

Baltimore Scholarship Fund, established to provide scholarship assistance to students from the Greater Baltimore area.

Charles M. Bancroft '34 Memorial Scholarship Fund, established by his spouse and his classmates, with preference given to international students.

Charles G. and Barbara M. Beever Scholarship Fund, established by Charles G. Beever '74 to assist students with financial need.

Alphonse N. Bertrand Scholarship-Loan Fund, established in 1966 by a bequest from Alphonse N. Bertrand. This fund is to be used to make non-interest bearing loans to students with good intellectual promise.

Howard S. and Matilda C. Bevan Memorial Fund, established in 1983 by Emma B. Bevan, M.D., David C. Bevan '29, Howard S. Bevan, Jr. '35, and Thomas R. Bevan '36 in memory of their parents, to assist deserving students in pursuing their education.

Helen and Jules Bingham Scholarship Fund, established in 1980 by Jules Bingham '47 to assist one student who ranks high in scholarship, character and personality.

Joseph C. and Anne N. Birdsall Scholarship Fund, established in 1947 by Joseph C. Birdsall '07 to assist students who plan careers in medicine. The selection is to be on the basis of character, scholarship and financial need.

C. Walter Borton Scholarship Fund, established in 1978 by Emil Halonen in appreciation and admiration of his friend C. Walter Borton. Preference is given to children of members of the Society of Friends and graduates of Westtown School.

Norman and Mildred Bramall Scholarship Fund, established in 1991 by a bequest from Norman Bramall, forty-year tennis and racquetball coach at the College, for students who are actively engaged in tennis.

Robert J. F. Brobyn Scholarship Fund, established in 1991 by Robert Brobyn '61 to give an award to a highly motivated first-year student on the basis of character, scholarship and personality. Recipients in good academic standing will be eligible for successive awards as long as they qualify and are enrolled full-time.

William Henry Chamberlin Scholarship Fund, established in 1969 by a bequest from William H. Chamberlin '17.

Caroline Chase Scholarship Fund, established in 1951 by Caroline Chase, daughter of Thomas Chase, one-time president of the College. This fund is an expression of Thomas Chase's enthusiastic appreciation for its high standards of scholarship in Greek, Latin, and English literature.

The Class of 1890 Memorial Scholarship Fund, established in 1950 by a member of the class of 1923 in memory of his father, a member of the Class of 1890, and in recognition of his father's friendship with members of the class.

Class of 1904 Scholarship Fund, established in 1954 by the Class of 1904 at its 50th reunion.

Class of 1912 Scholarship Fund, established in 1962 by the Class of 1912 at its 50th reunion. Preference is given to African or Asian students when possible.

Class of 1913 Scholarship, established by the Class of 1913. Preference is given to descendants of members of the Class of 1913 who may apply and who meet the usual requirements of the College.

Class of 1917 Scholarship, established by the Class of 1917. Preference is given to descendants of members of the Class of 1917 who may apply and who meet the usual requirements of the College.

Class of 1926 Scholarship Fund, established in 1977 by the Class of 1926 after its 50th reunion.

Class of 1936 Scholarship Fund, established in 1961 by the Class of 1936 at its 25th reunion.

SCHOLARSHIP FUNDS, FELLOWSHIPS AND PRIZES

Class of 1937 Memorial Scholarship Fund, established in 1983 by members of the Class of 1937.

Class of 1941 Scholarship Fund, established to provide scholarship assistance to students with financial need.

Class of 1949 Campaign Scholarship Fund, established by the Class of 1949 to maintain the quality and increase the diversity of the student body.

Class of 1949 Memorial Scholarship Fund, is awarded at the end of a student's sophomore year for academic excellence, participation in extracurricular activities and in community service to promote social and racial justice.

Class of 1950 International Student Scholarship Fund, established to provide financial assistance to international students with demonstrated need.

Class of 1955 Scholarship Fund, established in 1980 by the Class of 1955 at its 25th reunion in honor of Archibald MacIntosh.

Class of 1970 Scholarship Fund, established by the class in 1971 on the occasion of its 10th reunion.

Class of 1973 Scholarship Fund, established in 1998 by the Class of 1973 at its 15th reunion.

Howard M. Cooper Scholarship Fund, established in 1966 by a Deed of Trust created by Emily Cooper Johnson, with preference for members of the Religious Society of Friends and especially for those affiliated with Newton Monthly Meeting of Friends of Camden, New Jersey, of which Howard M. Cooper was a lifelong member.

Thomas P. Cope Fund, established in 1842 by Thomas Cope to assist students who plan to become teachers.

Charles A. Dana Scholarship Fund, established in 1981 by a challenge grant from The Charles A. Dana Foundation. This scholarship is to be used to identify and to encourage students of academic promise and good character who have completed at least one year of college. Preference is to be given to those students having traits of potential leadership. In addition to the scholarship recipients, nine students are selected from the sophomore, junior, and senior classes solely in recognition of outstanding leadership on campus.

Daniel E. Davis, Jr. Memorial Scholarship provides assistance to a student on the basis of character and scholarship.

Margaret and Peter Donchian '21 Scholarship Fund, established in 1995 by a bequest from Margaret and Peter Donchian '21 to assist students with financial need.

Durling Asian Scholarship Fund, established by Linda and James Durling '80 to benefit students interested in studying Asian history, culture, and language and who demonstrate financial need.

Audrey Dusseau Scholarship Fund, established in 1980 by John Dusseau '34 in memory of his late wife, Audrey, to assist students who rank high in scholarship, character, and personality.

David P. Earhart Memorial Scholarship Fund, established in 1975 by the Anna M. Earhart Trust to assist students who are between the ages of 16 and 21 and who are members of the Society of Friends, or non-Friends who hold pacifist beliefs.

Hugh Exton Scholarship Fund, established to provide scholarship assistance to students with financial need.

The F of X Scholarship, established by a bequest from Legh Wilber Reid, professor of mathematics at the College from 1900 to 1934. The scholarship is to be awarded to a student in the sophomore, junior, or senior class who has successfully completed the freshman course in mathematics and who has given promise of future work in that subject.

Christian Febiger Memorial Scholarship, established in 1946 by Madeleine Seabury Febiger in memory of her husband, Christian Febiger, of the Class of 1900.

Fleischmann Family Scholarship Fund, established to assist students with financial need.

Peter B. Flint '50 Memorial Scholarship Fund, established by Marianne Flint in memory of Peter B. Flint '50 for deserving students of principled character and personality who display leadership qualities and conscientiousness. Preference is given to either history or political science majors.

John Sharpless Fox '02 Scholarship Fund, established by his sons, John P. Fox '29, William T. R. Fox '32, and David S. Fox '42 to honor their father and other family members and friends.

Montgomery Furth '54 Scholarship Fund, established in 1991 in memory of Montgomery Furth, Professor of Philosophy at the University of California, Los Angeles, by members of his family, classmates, and friends.

Calvin Gooding, Jr. '84 Memorial Scholarship Fund, established in 2002 by classmates and friends, will provide assistance to minority students who exhibit superior drive and demonstrated financial need. Calvin's many admirers and friends will continue to add to this fund.

Merrill and Phoebe Goodman Scholarship Fund, established to provide scholarship assistance for pre-med students in need of financial assistance.

Marshall G. Greenberg '56 Scholarship Fund, established to provide financial assistance to students with financial need. Preference is given to students with a strong quantitative orientation, majoring in psychology.

Stanley B. Gould '49 Premedical Scholarship Fund, established in 1996 by Stanley B. Gould '49 to provide financial aid to either a junior or a senior based on character and scholarship and who is pursuing a recognized pre-medical discipline or who is majoring in natural sciences.

Elihu Grant Memorial Scholarship Fund, established in 1944 by Dr. and Mrs. Elihu Grant to commemorate the service to the College of Dr. Grant, professor of biblical literature from 1917 to 1938. This fund is to be used to assist students in humanistic studies, primarily those specializing in the study of biblical literature and oriental subjects.

Roy Thurlby Griffith Memorial Fund, established in 1952 by Grace H. Griffith in memory of Roy Thurlby Griffith '19.

SCHOLARSHIP FUNDS, FELLOWSHIPS, AND PRIZES

Maud Doebelin Grimes Scholarship Fund, established in 1973 by a bequest from G. Randle Grimes '23 in memory of his wife, Maud Doebelin Grimes.

Adam J. Gutstein Scholarship Fund, established in 1991 by Adam Gutstein '84 and his parents to help future undergraduates.

E. Berkeley Harris '55 Scholarship Fund, established in 1985 by his family, friends and classmates to assist students with financial need who display talent and interest in pursuing a career in theater and theater arts.

Alan W. Hastings '21 Scholarship Fund, established by James B. Hastings '50 in memory of Alan W. Hastings to assist students with financial need.

William K. Hartzell Scholarship Fund provides aid to students who rank high in scholarship, character, and personality.

William Randolph Hearst Foundation Scholarship Fund, established in 1992 for minority students who reside in the United States after their studies.

Eric L. Henderson '86 Memorial Fund, established in 1997 in memory of Eric L. Henderson '86 to assist minority students with financial need.

Samuel E. Hilles Memorial Scholarship, established in 1935 by Mina Colburn Hilles in memory of her husband, Samuel E. Hilles, Class of 1874.

Sarah Tatum Hilles Memorial Scholarship Fund, established in 1954 by a bequest from Joseph T. Hilles of the Class of 1888, in memory of his mother, Sarah Tatum Hilles. This fund is to be used for scholarships to deserving students.

Eugene F. Hogenauer Memorial Scholarship Fund, established to provide scholarship assistance to students with financial need.

Herbert and Virginia H. Howard Scholarship Fund, established in 1978 by a bequest from Herbert Howard to assist students who have earned an average grade of at least "B" or its equivalent during the preceding semester.

Hughes Scholarship Fund, established in 1968 by a bequest from James E. Hughes of the Class of 1894.

Richard Humphreys Foundation Scholarships provide assistance to students of African descent.

J. Quincy Hunsicker III '28 Memorial Scholarship Fund, established to provide aid to one or more students from the New York metropolitan area.

John B. Hurford Fund, established in 1982 by John B. Hurford '60 in honor of his father, James Rayner Hurford, to assist students who have a special interest in economics, with preference for students who are economics majors.

Arland I. Innes '27, Kathryn Innes, and Lois J. Sexton Scholarship Fund, established in 1995 by a bequest from Lois Sexton in memory of Arland I. Innes '27, Kathryn Innes, and Lois Sexton to assist students with financial need.

A. Clark Johnson, Jr. '52 Scholarship Fund, established in 1995 by Union Texas Petroleum in honor of its former chairman and chief executive officer, A. Clark Johnson, Jr. '52, a member of the College's Board of Managers since 1986.

Isaac Thorne Johnson Scholarship, established in 1916 by Isaac Thorne Johnson of the Class of 1881 to assist students from the Wilmington (Ohio) Yearly Meeting or from the Central West.

Mary M. Johnson Scholarship Fund, established in 1897 by a bequest from Mary M. Johnson.

Richard T. Jones Scholarship Fund, established in 1885 by a bequest from Jacob P. Jones in memory of his son, Richard T. Jones, of the Class of 1863.

Rufus Matthew Jones Scholarship Fund, established in 1959 by Clarence E. Tobias Jr. '30 as a testimonial to Rufus Jones 'and in gratitude for the excellent educational facilities Haverford provided for me and my son.' This fund is to be used for scholarships or loans to students majoring in philosophy. Preference is given to seniors.

Thomas O. Jones Memorial Fund, created through the efforts of the Class of 1942 in memory of Thomas O. Jones who was a central member of the Haverford College Chemistry Department and a well-known figure on the campus for 19 years. The fund provides income to fund undergraduate research in chemistry.

Wilmot R. Jones Fund, established in 1970 by a bequest from Wilmot R. Jones '23 to increase endowment funds for scholarship purposes.

The Kafker Scholarship Fund, established in 2000 by Roger Kafker 1984, to provide financial aid for students with superior drive and potential from economically disadvantaged families.

Russell "Rusty" King '76 Scholarship Fund, established in 2001 by the Class of 1976 at the time of their 25th reunion, provides financial assistance to students interested in journalism or the humanities, who exhibit superior drive and demonstrated financial need.

C. Mahlon Kline Memorial Fund, established in 1969 by a gift from the C. Mahlon Kline estate. A portion of this fund is to be used to assist students enrolled in the bio-medical disciplines.

C. Prescott Knight Jr. Scholarship, established in part by the Haverford Society of New England to assist a student from the New England area based on character, personal qualities and scholarship.

Louis B. Kohn II International Studies Scholarship Fund, established in memory of Louis B. Kohn, II, of the Class of 1938, to provide assistance to students with financial need while pursuing international research, an international internship or international study in a foreign country.

Roger Lane Scholarship Fund, established in 1998 to assist Haverford minority students with financial need who are alumni of A Better Chance Program.

Deborah Louise Landau '84 Scholarship Fund, established by her parents, Dr. and Mrs. Bernard R. Landau, family members, and classmates in her memory. Scholarship aid will be awarded to students who best exemplify qualities of determination, perseverance and concern for others, and who intend to pursue a career in medicine.

SCHOLARSHIP FUNDS, FELLOWSHIPS, AND PRIZES

Ben Z. Leuchter Scholarship Fund, established in 1949 in memory of Max Leuchter by his wife, Cecelia P. Leuchter, and his sons Ben Z. Leuchter '46 and Joel C. Leuchter. This scholarship is awarded on the basis of character and scholarship.

Jonathan Levin Scholarship Fund, established to provide scholarship assistance to students with financial need.

Clinton H. Longshore Fund, established in 1976 by the bequest of Helen B. Longshore in memory of Clinton H. Longshore.

The Jane and Solomon Lutnick Memorial Scholarship Fund, established in 1990 by Howard Lutnick '83 in memory of his parents. This fund provides financial assistance to students majoring in history, economics, art history, fine arts, English literature and political science.

Archibald MacIntosh Scholarship Fund, established in 1959 by Gilbert F. Marquardt, father of John Marquardt '56, as a testimonial to Archibald MacIntosh '21, former director of admissions and vice president. This fund has been added to by admirers and friends of MacIntosh over the years.

The Magill-Rhoads Scholarship Program, established in 1973 by James P. Magill '07, an emeritus manager of the College, to honor Dr. Jonathan E. Rhoads '28, an internationally prominent surgeon and medical educator. This fund is awarded on the basis of academic excellence, plus significant achievement in the arts, athletics, or school or community service.

Joseph L. Markley Memorial Scholarship Fund, established in 1949 by Mary E. B. Markley in memory of her husband, Joseph L. Markley. This scholarship is awarded to students on the basis of character and scholarship.

Bettye and J. Howard Marshall II Scholarship Fund, established in 1981 by Bettye and J. Howard Marshall II '26 to assist students who rank high in scholarship, character and personality.

Sarah Marshall Scholarship Fund, established in 1897 by the bequest from Sarah Marshall.

Slavica S. Matacic Scholarship Fund, established in 1999 for minority students interested in science.

William Maul Measey Trust, established in 1952 by William Maul Measey, a neighbor and friend of the College, to assist students who live on campus.

Mary and J. McLain King '28 Scholarship Fund, established in 1994 by a bequest from Mary Wheeler King in memory of her husband. The scholarship is to assist students with financial need, with a preference for students majoring in mathematics.

The Robert E. Miller and Sons American History Scholarship Fund, established to promote the study, appreciation, and preservation of American History and its finest traditions and leadership by providing scholarship assistance to deserving, eligible Haverford students. The fund honors the lives of six Miller family Haverfordians and their service to the United States of America in the 20th century.

Stephen R. Miller '49 Scholarship Fund, established through an estate gift and through the support of friends and family. The fund provides scholarship aid each year to an entering member of the freshman class who attended the Bronx High School of Sciences.

Minority Student Scholarship Fund, established by an anonymous donor to assist minority students.

J. Kennedy Moorhouse Memorial Scholarship, established in 1926 by members of the Class of 1900 in memory of their classmate J. Kennedy Moorhouse. This scholarship is awarded to a freshman who appears best fitted to uphold the Haverford standard of character and conduct as typified by J. Kennedy Moorhouse.

Native American Fund, established to provide resources for activities related to Native American issues, including support of students who work on projects involving Native American programs, and financial aid to Native American students.

Paul B. Moses Scholarship Fund, established in 1982 by an anonymous donor to assist students who exemplify the character, talent and qualities of Paul Moses '51, who was assistant professor of art at the University of Chicago before his death in 1966.

Natural Sciences Scholarship Fund, established to support students interested in the natural sciences and mathematics, with a preference for assisting under-represented students.

George W. Neel, III Scholarship Fund, established to provide scholarship aid to students in need majoring in either French or German.

W. LaCoste Neilson Scholarship, established in 1957 in memory of W. LaCoste Neilson '01 by his family and friends. Preference is given to those taking scientific or practical courses rather than those in the field of the arts.

Paul W. Newhall Memorial Scholarship Fund, established in 1931 by the bequest from Mary Newhall in memory of her father, Paul W. Newhall, a manager from 1844 to 1848.

NISEI Scholarship Fund, established in 1992 by Anna and Walter Kato '46 to assist students who have completed their sophomore year and who are majoring in political science or physical science.

Inazo Nitobe Scholarship Fund, established in 1955 by a bequest from Anna H. Chace to provide scholarship assistance to students with demonstrated need. Preference will be given to a Japanese student who shall be a resident of Japan at the time of his/her appointment to such scholarship and for his/her traveling expenses from and to Japan and his/her living expenses during the period he/she shall hold such scholarship.

Bobby Nofer Scholarship Fund, established in 1980 by George H. Nofer '49 in memory of his late son, Bobby. This fund provides assistance to students who rank high in scholarship, character and personality.

Martin Norr Memorial Scholarship Fund, established in 1981 by David Norr in memory of his brother, Martin Norr '30.

Leonard Folsom Norsworthy Fund, established in 1983 by Leonard F. Norsworthy '38. Preference is given to members of the Society of Friends.

Janet Orttung-Morrow Memorial Scholarship Fund, established in 1998 to provide financial aid to a needy student who embodies Janet Orttung-Morrow's positive values for constructive social change.

Armand R. Ouellette '50 Scholarship Fund, established in 1985 by Jane Y. Ouellette in memory of her husband, Armand R. Ouellette '50.

SCHOLARSHIP FUNDS, FELLOWSHIPS, AND PRIZES

PQ Corporation Scholarship Fund, established in 1977 by a gift from the Philadelphia Quartz Company to provide two scholarships to students planning on careers in business and/or majoring in economics. While the College is free to make these awards at any level, it is understood that under normal circumstances one junior will be named each year as a Philadelphia Quartz Scholar, to hold the award for two years.

The José Padín Puerto Rican Scholarship Fund, established in 1966 by Paulina A. Padín in memory of her husband, Dr. José Padín '07. This fund provides assistance to students from Puerto Rico.

Louis Jaquette Palmer Memorial Scholarship Fund, established in 1928 by the Triangle Society in memory of Louis Jaquette Palmer of the Class of 1894. This scholarship is awarded on application, preferably to a member of the freshman class who, in the opinion of a committee representing the donors and the president of the College, shall give evidence of possessing the qualities of leadership and constructive interest in student and community welfare which his friends observed in Louis Jaquette Palmer.

Parachini Family Fund, established in 1998 to provide financial aid to international and minority students at Haverford.

Richard Allen Post '84, this scholarship was created to celebrate Richard's extraordinary life and was established by his family, friends and classmates. It is awarded to a junior or senior philosophy major.

Quaker Student Scholarship Fund, established to benefit Quaker students.

R & R Foreign Student Scholarship Fund, established in 1979 by graduates of the Relief and Reconstruction program of the early 1940's at Haverford. This fund provides aid to foreign students.

Reader's Digest Endowed Scholarship Funds, established in 1965 and substantially increased in later years by grants from the Reader's Digest Foundation, the DeWitt Wallace Fund, Inc., and the Lakeview Fund. They provide scholarship aid to students who are at least sophomores, from professional families, teachers, preachers, businessmen, engineers, etc.

William Heartt Reese Music Scholarship Fund, established in 1977 to honor William Heartt Reese, professor of music and conductor of the glee club and orchestra at Haverford from 1947 to 1975. This fund provides assistance to students for applied music lessons.

Ira DeA Reid Scholarship, established in 1979 in memory of Ira De Augustine Reid, professor of sociology at Haverford from 1946 to 1966. This fund provides assistance to minority students who have strong academic and extracurricular records.

Elizabeth and Elisha Roberts Scholarship Fund, established to provide scholarship assistance to students with financial need.

Alan & Rene Rogers '43 Scholarship Fund, awarded to an upper class student who intends to practice medicine in a rural area with preference to those living in Maine or New Jersey.

C. Townsend Ruddick, Jr. '54 Memorial Fund, established in memory of C. Townsend Ruddick, Jr. Class of 1954, by his cousin Shaler Stidham, Jr. Preference is given to those students majoring in classics.

Amy Sacks '78 Memorial Scholarship Fund, provides scholarship assistance to students who are interested in film or other media outlets with preference given to women students.

J. Henry Scattergood Scholarship Fund, established in 1976 by the Friends' Freedmen's Association to provide financial aid and other supportive services to black students.

September 11th Scholarship Fund, established to provide financial assistance for children of victims of that day's tragic events.

James R. Shuster '56 Memorial Scholarship Fund, established to provide scholarship assistance to students with preference to those majoring in sociology or who have serious interest in the study of sociology at Haverford.

Daniel B. Smith Scholarship Fund, established in 1943 by Mrs. Henry Wood, granddaughter of Daniel Smith, on the centenary of his appointment as Principal. Preference is given to descendants of Benjamin R. Smith.

The W. W. Smith Charitable Trust, established to supplement existing levels of student aid for lower income and middle income students who could not otherwise attend college.

The Sondra Lee Spar Scholarship Fund for International Students, established in 2000 by Elon D. Spar 1983 in memory of his mother, will provide scholarship aid to international students.

John K. Spatz Memorial Scholarship Fund, established in 1996 by Richard and Jeanne Spatz in memory of their son, John.

Stanton Family Scholarship Fund, established in memory of John Curtis Stanton and William Stanton.

C. V. Starr Scholarship Fund, established in 1980 by the Starr Foundation in memory of their founder, C. V. Starr, to provide aid to foreign students, based on merit and need.

Jonathan M. Steere Scholarship Fund, established in 1948 by Jonathan M. Steere of the Class of 1890. This scholarship is intended primarily for a graduate of Moses Brown School, Providence, who is a member of the Society of Friends.

Herman K. Stein Scholarship, established in 1969 by a bequest from Herman K. Stein '05 to provide two scholarships annually to juniors and seniors in the science departments.

Summerfield Foundation Scholarship Fund, established in 1956 by a grant from the Summerfield Foundation to provide aid to students based on character and scholarship.

Dudley W. Summers Scholarship Fund, established in 1970 by an anonymous donor in memory of Dudley W. Summers '61.

J. Spottswood Taylor '24 Memorial Scholarship Fund, established in 1997 to assist students with financial aid with preference for students majoring in physics or chemistry.

Raymond M. Thomas '25 Scholarship Fund, established by Lydia Thomas in memory of her husband. The fund assists a Haverford student with financial need who is interested in horticulture and the environment.

W. Burr Totten '27 Scholarship Fund, established in 1996 by a bequest from W. Burr Totten '27.

SCHOLARSHIP FUNDS, FELLOWSHIPS, AND PRIZES

W. Keith Tunnell '66 Memorial Scholarship, established to assist students displaying exceptional academic and leadership ability, and may be extended for both undergraduate and post graduate study.

William Graham Tyler Memorial Scholarship, established in 1949 in memory of William Graham Tyler of the Class of 1858. Preference is given to students from Oskaloosa, Iowa, or from William Penn College, on the basis of character and scholarship.

James G. Vail Scholarship Fund, established in 1980 by Ruth Russell Vail in memory of her husband, James G. Vail.

George Vaux, Jr. Memorial Scholarship Fund, established in 1973 by George Vaux '30 in memory of his father, of the Class of 1884, and a member of the Board of Managers from 1891 until 1927. This fund provides aid to students pursuing a course of instruction in the liberal arts or the exact sciences.

The Miles Hodsdon Vernon Foundation Endowed Scholarship Fund, established to provide scholarship assistance to students with financial need.

Theodore Whittelsey, Jr. '28 Memorial Scholarship Fund was created by members of his family, classmates, and friends.

A. Clement Wild Scholarship, established in 1951 by Mrs. Gertrude T. Wild in memory of her husband, A. Clement Wild, of the Class of 1899. Preference is given to an English exchange student or someone in a similar category.

Juan Williams '76 Scholars Fund, established to provide scholarship assistance to minority scholars in the sciences.

Isaiah V. Williamson Scholarships, established in 1876 and increased in 1883 by gifts of sundry ground rents from Isaiah Williamson. Caspar Wistar Memorial Scholarship Fund, established by Edward M. and Margaret Wistar, parents of Thomas Wistar of the Class of 1898, in memory of his brother and their son Caspar Wistar '02. Preference is given to students with parents engaged in Christian service.

Thomas Wistar, Sr. 1898 Memorial Scholarship Fund, established by family and friends in memory of Thomas Wistar, Sr.

D. Robert Yarnall Fund provides aid to foreign and domestic students.

Edward Yarnall Scholarship, established in 1860 by a bequest from Edward Yarnall.

Robert Martin Zuckert Memorial Scholarships, established in 1935 by Harry M. Zuckert, in memory of his son, Robert Martin Zuckert '36. Preference is given to students who are natives of New York or Connecticut and who now reside in one of these states.

PHI BETA KAPPA

The Haverford College Chapter of the Phi Beta Kappa Society of America was chartered in 1898 as Zeta of Pennsylvania. Phi Beta Kappa is the oldest undergraduate academic honors society in the USA, founded in 1776. The Haverford chapter is one of 262 nation-wide, housed at colleges and universities with academic programs in liberal arts and sciences acknowledged as sufficiently rigorous and intellectually challenging by standards maintained by the Phi Beta Kappa national society.

Individual selection reflects excellence in the liberal arts and sciences and distinction in a broad array of undergraduate courses. At Haverford College undergraduate members of good character are selected primarily based on the basis of academic performance, as expressed in their course grades. The selection committee of alumni and faculty members of Phi Beta Kappa also considers to the extent possible, the degree of originality, creativity and imagination of thought, the range and depth of intellectual interests, and the precision and elegance of a student's work. The number of students selected ordinarily does not exceed 10 percent, and in no case does it exceed 15 percent.

The Phi Beta Kappa Society supports programs that significantly advance scholarship and academic excellence by awards, lectures, and outreach activities to schools. Individual membership is now more than 600,000 men and women.

Chapter President, Paul Smith '50; Vice-President and Treasurer, Howard Sacks '78; Secretary, Robert Mortimer.

ENDOWED FELLOWSHIPS FOR HAVERFORD GRADUATES

Clementine Cope Fellowships, established in 1899 by Clementine Cope, granddaughter of Thomas P. Cope, member of the Board of Managers from 1830 to 1849.

These fellowships are to "assist worthy and promising graduates of Haverford College in continuing their studies at Haverford or at some other institute, in this country or abroad, approved by the Board of Managers."

First and Second Cope Fellows are nominated by the faculty on recommendation of the Committee on College Honors and Fellowships and ratified by the Board of Managers. Individual stipends are determined by the board.

Letters of application, accompanied by relevant statements of extracurricular activities, transcript and two letters of reference must be in the hands of the Committee on College Honors and Fellowships, care of the dean's office, by April 1.

Augustus Taber Murray Research Fellowships, established in 1964 by two anonymous friends "in recognition of the scholarly attainments of Augustus Taber Murray, a distinguished alumnus of Haverford College of the Class of 1885."

These fellowships are for further study in English literature or philology, the classics, or German literature or philology in other institutions, toward the degree of doctor of philosophy or its future equivalent. Only unmarried students are eligible. Further considerations are the candidate's promise of success in graduate work and the availability of other financial assistance in the proposed field of study.

Usually one Augustus Taber Murray Research Fellow is nominated by the faculty on recommendation of the Committee on College Honors and Fellowships. The same student may be awarded the fellowship for two or three years.

Letters of application, transcript and two letters of reference must be in the hands of the Committee on College Honors and Fellowships, in care of the dean's office, by April 1.

PRIZES AND AWARDS

American Institute of Chemists Award is an award presented annually to an outstanding senior in chemistry.

American Chemical Society Scholastic Achievement Award is given annually to the senior who is judged to have made the most significant advance in the study of chemistry and who shows promise for continued excellence in chemical research.

Manuel J. and Elisa Pi Asensio Prize Fund is awarded annually to the best senior essay submitted for the major in Spanish or the concentration in Latin American and Iberian Studies.

SCHOLARSHIP FUNDS, FELLOWSHIPS, AND PRIZES

William W. Baker Prize in Greek was established in 1954 in memory of William W. Baker, professor of Greek at Haverford College from 1904 to 1917, is given in the study of Greek and is administered by the classics department.

The Stephen G. Cary Award, presented in recognition of outstanding achievement and dedication in women's athletics.

Class of 1896 Prizes in Latin and Mathematics: Two prizes in books, to be known as the Class of 1896 Prizes in Latin and Mathematics, were established by the bequest of Paul D. I. Maier of the Class of 1896. They are awarded at the end of the sophomore year to the students who have done the best work in the departments concerned.

Class of 1902 Prize in Latin: A prize in books is offered annually by the Class of 1902 to the freshman whose work in Latin recitation and examinations combined is the most satisfactory. At the discretion of the chairperson of the classics department, this prize may be omitted in any year.

Howard Comfort Prize in Latin in books established in 1999 in memory of Howard Comfort, professor of Latin at Haverford College from 1931 to 1969, is given in the study of Latin and is administered by the classics department.

John H. Davison '51 Fund for Student Composers, established in memory of John H. Davison '51 to recognize his 40 years of teaching and musical creativity at Haverford, will support new works by student composers.

Emerson L. Darnell '40 Prize, established in memory of Emerson L. Darnell, a Quaker alumnus, who dedicated his life's work to advocating peaceful social change and defending the civil rights and liberties of the individual. The prize is awarded to the student who presents the best paper demonstrating an appreciation for the Bill of Rights as the foundation of American Law and the very fabric of American society. The papers will be judged by a faculty committee.

Department Prize in Mathematics: First prize and a second prize are awarded on the basis of a three-hour examination on selected topics in Freshman Mathematics. The examination is held annually on a date in April announced by the mathematics department. It is open to freshmen only.

Martin Foss Award, presented by the Students' Council to that member of the Haverford College community whose life speaks directly to the lives of others by its powerful harmony of intellect, compassion and courage.

John B. Garrett Prizes for Systematic Reading: First prize and a second prize will be given at the end of the sophomore, junior or senior year to the two students who, besides creditably pursuing their regular course of study, shall have carried on the most profitable program of reading in a comprehensive topic during a full college year. Candidates for these prizes must register with the chairperson of the department under whose supervision the work will be performed. The department is responsible for guiding the work and, not later than April 15, for reporting the achievement to the committee on College Honors and Fellowships for final judgment. Either or both of these prizes may be omitted if, in the judgment of the Committee, the work does not justify an award. Interested students should apply directly to a relevant department for information.

Louis Green Prize Fund in Astronomy and Physics, established in memory of Louis Green, Professor of Astronomy from 1941 to 1976, to recognize students in the departments who demonstrate excellence in departmental work and in undergraduate research.

Lyman Beecher Hall Prize in Chemistry: An annual prize was established by the Class of 1898 on the 25th anniversary of its graduation in honor of Lyman Beecher Hall, Professor of Chemistry at Haverford College from 1880 to 1917. This prize may be awarded to a student who has attained a high degree of proficiency in chemistry and who shows promise of contributing substantially to the advancement of that science. It may be awarded to a junior, senior, or graduate of Haverford College within three years after graduation. It may be awarded more than once to the same student, or it may be withheld.

Gertrude Albert Heller Award: Stipends for research or volunteer service on behalf of the developmentally disabled, including work done during the summer, are awarded to one or more students each semester.

Mark Hepps Prize: In memory of Mark Larry Hepps, Class of 1979, a prize book is offered annually by the Department of Classics for diligence in the study of Elementary Latin.

History Department Fund, established by Gerald M. Levy to provide summer internships in the history department.

The History Prize is awarded to a senior selected by the history department in recognition of achievement in the study of history.

The Kaye Prizes in Theatre Arts are awarded to two students who have, through excellence of their extracurricular work in theatre arts during the current year, done the most to make theatre arts an important part of the Haverford/Bryn Mawr community. These prizes were established by Laurence Kaye '83 and his parents, Cynthia and William Kaye '54.

Kessinger Family Fund provides support of individual students or groups of students undertaking community service projects or internships, either during the academic year or during summer vacation.

Marian E. Koshland Prize Fund in Biology, established in 1997 by biology faculty, college administrators and board members for a graduating senior who, in the judgment of the department, demonstrated outstanding contributions to biology.

The Terry M. Krieger '69 Memorial Prize was established by members of his family for the graduating senior demonstrating the greatest achievement in writing during the junior and senior years, to be chosen by the English department.

Kurzman Prize in Political Science: A prize, established in 1958 by Harold P. Kurzman, is awarded annually for the senior who has performed best and most creatively in political science, except when in the judgment of the department no student has done work of sufficient merit to warrant such award.

Deborah Lafer-Scher Internship in International Relations: Established by Deborah Lafer-Scher '80, the internship is open to any Haverford junior who has an interest in international issues. The internship provides a summer stipend to assist the intern with living and travel expenses associated with pursuing a relevant international experience.

The Lambda Alumni Internship Program, established in 2000, will be used to encourage Haverford students who have completed their freshman year to engage in a summer work experience with charitable organizations, societies, associations, or groups that focus on causes, concerns and issues that affect the gay, lesbian, bisexual and transgender communities.

SCHOLARSHIP FUNDS, FELLOWSHIPS, AND PRIZES

Edmund J. Lee Memorial Award: Classmates of Edmund Jennings Lee, Class of 1942, who lost his life in the service of his country, have established in his memory a fund, the income of which is to be given annually to that recognized undergraduate organization which has contributed most toward the furtherance of academic pursuits, extracurricular activities, spiritual growth, or College spirit in individuals or in the College as a whole during the year. The award is made by the Students' Council and is to be used in continuing to render such service.

Barbara Riley Levin Prize in Comparative Literature is awarded annually to the senior major whose work, in the judgment of the Bi-College Faculty Advisory Committee in Comparative Literature, merits recognition for intellectual achievement.

S. P. Lippincott Prize in History: A prize is offered annually for an essay of not less than 5,000 words on a subject approved by the history department. Typewritten copy shall be deposited with the chairperson of the history department not later than May 1.

The Ariel G. Loewy Prize for Senior Research in Biology, established in 2001 in memory of Ariel G. Loewy, Professor of Biology from 1953 to 2000, is given to a graduating senior in biology, whose efforts and accomplishments incorporate the rigor and diligence of experimental science. The winner is chosen by the biology department.

Loewy-Santer-Finger Scholars Fund, established in honor of Ariel G. Loewy, Melvin Santer and Irving Finger to provide stipends to rising juniors and seniors pursuing research in the sciences, who have demonstrated strong motivation and aptitude for laboratory research.

Wyatt MacGaffey Fellowship in Anthropological Research, established to provide summer internships and independent research by majors in anthropology at Haverford.

Colin F. MacKay, Professor of Chemistry, Student Fund provides support of a student to conduct research in Chemistry.

The Colin F. MacKay Prize, endowed in honor of Colin F. MacKay by Garth R. Parker, Jr. '81 and the Rohm and Haas Company to recognize that member of the senior class majoring in chemistry who has shown the greatest intellectual growth over four years of work in the chemistry department.

Stephen H. Miller Memorial Award: Friends of Stephen H. Miller, Class of 1962, have established in his memory an award given to that graduating political science major who best exemplifies the ideal of political involvement and social service expressed in the life and career of Stephen H. Miller, who lost his life while taking part in village development in Vietnam.

The Jonathan Mohrig '86 Memorial Prize was created to honor a Haverford sophomore who died in 1984. It is awarded annually to that student at Haverford who embodies Jonathan's enthusiasm, warmth, humor and quiet generosity to those around him, and who, like Jonathan, makes a special contribution to the quality of life at Haverford.

Elliston P. Morris and Elizabeth P. Smith Peace Prizes are now a combined competitive annual set of three awards, open to all full-time students at Haverford College, for outstanding essays on the general topic, "Means of Achieving International Peace." Such essays should reflect scholarship associated with the liberal arts and not exceed 20 double-spaced print-out pages, not counting required notes and bibliography. The essays can deal with a range of conflict-related subjects, as long as some connection to international peace is demonstrated. Essays derived from term papers and senior theses may be appropriate, especially theses written to fulfill a Peace Studies Concentration, as long as the actual submission is particular to

this competition. First, second and third cash prizes will be awarded, unless sufficiently high standards of merit are not attained in the essays submitted. Essays should be deposited with the Coordinator of Peace Studies by May 1.

Newton Prize in English Literature: A prize established by A. Edward Newton may be awarded annually on the basis of Departmental Honors in English, provided that the work of the leading candidate, in the judgment of the English department, merits this award.

The David Olton Award for Student Achievement in Psychology, established in 2001, was created in memory of David Olton '64, Chair of the Psychology Department at Johns Hopkins University, an energetic and joyous contributor to the field of Psychology. The award honors a senior who has done exceptional work and shows great promise in Psychology.

The Orpheus Prize is given by the department of music for student composition showing mastery of the principles of tonal harmony.

George Peirce Prize in Chemistry or Mathematics: A prize in memory of Dr. George Peirce, Class of 1903, is offered annually to a student of chemistry or mathematics who has shown marked proficiency in either or both of these studies and who intends to follow a profession which calls for such preparation. Preference is to be given to a student who has elected organic chemistry, or in lieu of that, to one who has elected mathematics or some branch of chemistry other than organic. Should there be two students of equal promise, the one who is proficient in Greek shall be given preference. The prize is offered, however, exclusively for students who have expressed the intention of engaging in research.

Prizes in Philosophy: Two prizes of books are offered annually to the students who, in the judgment of the chairperson of the philosophy department, do the most satisfactory outside reading in philosophy in connection with the courses in that department.

Religion Prize: A prize for the purchase of books is offered annually to the senior religion major who, in the judgment of the faculty of the religion department, presents and defends the best thesis written in the context of Religion 399b during the year.

The Arthur Hinton "Chip" Rosenfeld III '89 Memorial Fund was established in 1995 by family and friends in memory of Arthur Rosenfeld III '89 and provides support for service internships with preference to students who serve with the Help The World See organization.

Scholarship Improvement Prizes: A first and second prize are awarded at the end of the senior year to the two students who, in the opinion of the judges appointed by the president of the College, show the most steady and marked improvement during their college course.

The Charles Schwartz Memorial Prize in Philosophy: Presented in memory of a graduate of the Class of 1979. It is awarded annually to that student whose senior research thesis best exemplifies the care, precision and creativity in philosophical inquiry which Chuck Schwartz so ably demonstrated.

William Ellis Scull Prize: A prize established in 1929 by William Ellis Scull, Class of 1883, is awarded annually to the junior or senior who has shown the greatest achievement in voice and in the articulation of the English language.

Andrew Silk Summer Internships in Journalism: Established in memory of Andrew Silk, Class of 1976, a summer internship on one of the papers for which he worked is awarded annually to a Haverford or Bryn Mawr student who is active on campus publications and interested in a career in journalism.

SCHOLARSHIP FUNDS, FELLOWSHIPS, AND PRIZES

The Herman M. Somers Internship is given in memory of Professor Herman "Red" Somers, former chair of the Haverford political science department and scholar of public policy, summer fellowships/internships for juniors majoring in political science in aid of public policy research or public policy assistance. Awards are meant to contribute to a summer experience which will promote analysis or practice or a combination of the two, through involvement in government agencies or non-governmental organizations in Washington D.C. or other appropriate sites. Administered by the political science department.

The Herman M. Somers Prize in Political Science: Friends, students and colleagues of "Red" Somers have established an award given to the graduating senior who presents the best thesis in Political Science, reflecting the interest in policy, the respect for evidence and the humane concern for improving society that characterized the research and teaching of Red Somers.

Summer Serve Project, established by the Classes of 1990 through 1994 to provide internships to support at least two juniors and seniors in public interest summer internships in the Philadelphia area.

The Varsity Cup: An award given by the athletic department to the member of the senior class who excels in leadership, sportsmanship and athletic ability.

John C. Whitehead '43 Fund in Entrepreneurial Studies, established to provide summer internships and visiting lecturers in entrepreneurial studies.

The Albert Harris Wilson Award, established by the Class of 1919 and awarded annually to that member of the first-year class in mathematics who during the year has proved by character, scholarship and need to be the one whom Dr. Wilson would have most enjoyed helping.

SAFETY AND SECURITY

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OUR COMMITMENT TO SAFETY

Many parents are concerned about the safety of their daughter or son on a college campus away from home. Haverford College understands that concern and accepts its responsibility to employ security measures to ensure that our students enjoy their years at Haverford as free as possible from any threats to their safety or well-being. Haverford College is dedicated to keeping the campus a secure and healthy place to live, work, and study.

SAFETY AND SECURITY

Haverford College is a community of more than 1,100 residents, located on 216 acres in a residential suburb of Philadelphia, with a combined population of more than 50,000 residents. As part of that larger community, the College shares many of the same interests and problems, including the concern about crime. Haverford has experienced minimal problems to date with crime on campus. Life on any college campus, however, is subject to the same risks and problems as life elsewhere. A trained campus security force is responsible for a number of measures to ensure that the students and their possessions are protected.

CRIME STATISTICS AND CRIME RATES

In accordance with Pennsylvania's College and University Security Information Act 73 of 1988, and with the federal Crime Awareness and Campus Security Act of 1990, Haverford College provides information relating to crime statistics and security measures to prospective students, matriculated students, and employees. The daily log of all incidents reported is available for inspection at the security office during regular business hours. The College's Safety and Security Department submits an annual Uniform Crime Report to the Pennsylvania State Police. Crime statistics for the most recent three-year period, which reflect incidents reported to the State Police, are available upon request.

The offices of the Safety and Security Department are located at 5 Featherbed Lane in the Safety and Security Building, adjacent to the Alumni Field House. The department provides 24-hour, seven-days-a-week service and protection for the College community.

The department is comprised of 20.5 full-time equivalent staff members, including 19 full-time officers and six part-time officers, as follows:

- 1 Director
- 1 Captain (associate director)
- 1 Safety Coordinator (assistant director)
- 3 Sergeants (full-time)
- 3 Corporals (full-time)
- 8 Security Officers (full-time)
- 6 Security Officers (part-time)
- 1 Secretary/Dispatcher
- 1 Switchboard Operator/Dispatcher

as well as approximately 35 student employees.

All department personnel regularly attend mandatory in-service training pro-

grams aimed at keeping their skills and knowledge of new laws and regulations current.

The Safety and Security Department reports directly to the vice president for finance and administration, and works closely with the dean's office and the Students' Council, as well as with the police departments of Haverford and Lower Merion Townships, to create a safe and secure campus environment. *

All members of the department receive training in First Aid, Cardiopulmonary Resuscitation, and AED (Automated External Defibrillation). Additionally, security staff provide transportation to the College Health Services or to the Bryn Mawr Hospital when Haverford's medical facilities are closed.

The Safety and Security Department makes every effort to prevent crime, provides highly visible security patrols, and responds quickly to the needs of individuals on campus and in the college community as a whole. Crimes involving violence, major property loss, or felony charges are reported immediately by the department to the appropriate township or state agencies. Crime statistics are compiled according to Pennsylvania State Police requirements, using the FBI's Uniform Crime Reporting methods. In the event of an emergency, or when a serious criminal incident has occurred, the department will use appropriate channels to notify the Haverford community.

* Haverford Township Police
Darby and Manoa Roads
Havertown, PA 19083
(610) 853-2400

Lower Merion Township Police
71 E. Lancaster Avenue
Ardmore, PA 19003
(610) 642-4200

PHYSICAL PLANT AND SECURITY

The staff of the Physical Plant Department maintain Haverford's buildings and grounds with an eye toward safety and security concerns. Standard operating procedures include the regular inspection of all outdoor lighting systems and prompt repairs to any faulty lighting equipment or locks that could affect the safety of the college community. The Physical Plant staff are available, through an on-call system, for emergencies which occur outside regular working hours.

The Safety and Security Department cooperates with the staff of the physical plant by reporting potential safety hazards—such as broken windows, defective locks, or burned-out lights—to plant personnel.

FIRE SAFETY

Fire safety is a major concern of the Safety and Security Department and affects all members of the Haverford community. Each residence hall is equipped with automatic smoke detection systems that report to the safety and security office. In addition, each student's room is equipped with a single station smoke detector. The

SAFETY AND SECURITY

College is undertaking the project to install fire sprinkler systems in all residence halls. Fire Exit Drills are conducted in each residence hall so that students become familiar with proper building evacuation procedures. The Safety and Security Department employs student Safety and Security Dorm Monitors. The Safety and Security Dorm Monitors conduct weekly inspections of residence halls to check for any fire, safety, or security hazards.

ACCESS TO BUILDINGS

Officers of the Safety and Security Department are responsible for locking and unlocking campus buildings according to the scheduled use of these buildings during the academic year, as well as for special events. Employees' access to the institution's facilities is on an "as-needed" basis and incorporates strict key control procedures. Visitors to the campus seeking access to Haverford's buildings and facilities for special events must do so through an individual host, the sponsoring department, security, or the Scheduling and Events Office. Students are admitted to public events on campus by displaying their College identification cards.

Haverford security officers are not empowered to make arrests nor to carry firearms. The Safety and Security Department maintains an excellent working relationship with the police forces of Haverford and Lower Merion Townships, which assist the College force as needed, and cooperates with all Pennsylvania state agencies.

Students, faculty, staff, and guests are strongly urged to report any criminal or suspicious incidents to the security department. An officer will be dispatched immediately to each complaint and will evaluate the incident, take appropriate action, and notify the necessary authorities. There are 41 emergency telephones scattered throughout the campus for this purpose. Each provides an instant link with the department—no dialing is required—and the dispatcher knows immediately where the call is coming from. An officer is always dispatched, even if no words are spoken.

HOUSING INFORMATION

Haverford maintains about 1,100 housing spaces in its residence halls. All residence halls are coeducational; students who want single-sex bathroom facilities may choose to live in the dormitory apartments at the Haverford College Apartments. On-campus housing includes apartments, single and double rooms, hall groups, and suites. There are also several special interest housing options available, as well as housing on the Bryn Mawr College campus through the Residence Exchange Program.

The College recognizes that problems can occur between students living in close quarters and expects students to try and work out these differences. When it has been determined that this is not possible, students may request a re-assignment by following the procedures established by the administration. Room change guidelines are included in the *Students' Guide to Haverford College* which is published and distributed to all students at the beginning of each school year.

Access to Haverford's residence facilities is limited to those with proper authorization. The dean's staff, employees of the physical plant, housekeepers, and security

personnel may only enter individual rooms on specific business.

Guests of a resident student are expected to be accompanied by that student. Although no building monitors are used at Haverford and the only guest passes issued are to "official" visiting high school students by the admission office, the College's relatively small and intimate campus makes the presence of unauthorized individuals relatively apparent. Students receive annual training by officers of the security department in safety and security awareness, and they are urged to call the department immediately if unauthorized access occurs. Suspected intruders are investigated by officers, who will determine whether further action is warranted.

Every student is issued a unique key to his or her residence hall and individual room. All residence hall corridor doors are fitted with automatic door closers; all doors are designed to lock immediately upon closing. The doors and windows in a student's room can all be locked from the inside.

An officer will admit a locked out student to his or her room following proper identification of the resident. Fees ranging from \$5 for the first lock out to \$10 for each subsequent lock out are charged to encourage students to carry their keys with them. If a student's key is lost or stolen, the room will be rekeyed. The student is assessed a \$75 fee for this mandatory service.

During such low-occupancy periods as school breaks and vacations, the security department regularly checks and patrols the residence halls. During periods that buildings are not occupied, they are secured in such a manner that a student's key will not unlock the doors. Entrance to these specially secured buildings is by request to the department, and upon proper identification only.

SCREENING AND DISCIPLINE

Haverford complies with all federal, state, and local laws, including those which regulate the possession, use, and sale of alcoholic beverages, controlled substances, and firearms. Regulations affecting students are contained within the "Alcohol and Drug Policy" sections of the students' guide. Employees are notified by the personnel office of all pertinent regulations.

Although the College does not have a written policy regarding the matriculation of students with criminal records, the application and screening process used by the admission office is exceedingly thorough. A standard search is conducted on every applicant considered for a position within the security department. Each applicant is informed that his or her records will be searched, and is notified, in writing, if he or she is denied employment on the basis of the results of that search. Any criminal conduct engaged in by an employee of the College is grounds for immediate suspension and/or discharge.

Further information regarding safety and crime prevention is available 24 hours a day at the Safety and Security Department at 5 Featherbed Lane. Crime statistics are provided separately, and they are available at the department upon request. The telephone number for the Safety and Security Department is (610) 896-1111.

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FACULTY

FACULTY

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Julie M. Nishimura-Jensen, *Visiting Assistant Professor of Classics*
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Iruka Okeke, *Assistant Professor of Biology*
B.Pharm. and M.S., Obafemi Awolowo University; Ph.D., Obafemi Awolowo University and University of Maryland School of Medicine

Judith Owen, *Elizabeth Ufford Green Professor in the Natural Sciences*
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Kenneth Aaron Pardue, *Visiting Assistant Professor of Mathematics*
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R. Bruce Partridge, *Bettye and Howard Marshall Professor of Natural Sciences*
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Christopher P. Pavsek, *Visiting Assistant Professor of German*
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Aydé Pérez, *Visiting Instructor in Spanish*
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Sidney I. Perloe, *Professor of Psychology*
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Brian Pfennig, *Visiting Assistant Professor of Chemistry*
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Eric Raimy, *Visiting Assistant Professor of Linguistics*
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James C. Ransom, *Associate Professor of English*

FACULTY

B.A., University of New Mexico; M.A. and Ph.D., Yale University

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Lyle D. Roelofs, *William H. and Johanna A. Harris Professor of Computational Science*

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Joseph A. Russo, *Audrey A. and John L. Dusseau Professor in the Humanities*

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Suava Zbierski-Salameh, *Assistant Professor of Sociology*

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Bethel Saler, *Assistant Professor of History*

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Melvin Santer, *Visiting Professor of General Programs*

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Ulrich Schönherr, *Associate Professor of German*

M.A., J. W. Goethe-Universität; M.Phil. and Ph.D., Columbia University

David Sedley, *Assistant Professor of French*

B.A., Yale University; Ph.D., Princeton University

Michael A. Sells, *Professor of Religion and Emily Judson Baugh and John Marshall Gest Professor in Comparative Religion*

A.B., Gonzaga University; M.A. and Ph.D., University of Chicago

Debora Sherman, *Assistant Professor of English*

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Stephanie Frank Singer, *Research Professor of Mathematics*

B.S., Yale University; M.S., New York University; Ph.D., Courant Institute of Mathematical Sciences

Paul J. Smith, *John R. Coleman Professor of Social Sciences*

A.B., Bard College; Ph.D., University of Pennsylvania

Walter Smith, *Associate Professor of Physics*

B.A., Wesleyan University; Ph.D., Harvard University

Gustavus T. Stadler, *Assistant Professor of English*

B.A., Yale University; Ph.D., Duke University

Charles Stegeman, *Visiting Professor of General Programs*
Academie Royale des Beaux Arts, Brussels

Wendy Sternberg, *Associate Professor of Psychology*
B.S., Union College; M.A. and Ph.D., University of California, Los Angeles

Ute Striker, *Senior Lecturer in Italian*
B.A., University of Neuchatel, Switzerland; M.A., University of Bonn, Germany

Yung-sheng Tai, *Associate Professor of Mathematics*
B.S., National Taiwan University; Ph.D., Harvard University

Yukino Tanaka, *Visiting Instructor in Japanese*
B.A., Doshina Women's College, Japan; M.A., West Chester University

Jeffrey Tecosky-Feldman, *Senior Lecturer in Mathematics*
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Theresa M. Tensuan, *Assistant Professor of English*
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John D. O. Wagner, *Visiting Assistant Professor of Biology*
B.S., Technische Universität München-Weihenstephan; Ph.D., University of California, Berkeley

Sidney R. Waldman, *Professor of Political Science*
B.A., Oberlin College; Ph.D., University of North Carolina

William E. Williams, *Professor of Fine Arts*
B.A., Hamilton College; M.F.A., Yale School of Art

Susanna D. Wing, *Visiting Assistant Professor of Political Science*
B.A., University of Wisconsin-Madison; M.A. (African Area Studies), M.A. (Political Science), and Ph.D., University of California, Los Angeles

Claude E. Wintner, *Adjunct Professor of Chemistry*
B.A., Princeton University; M.A. and Ph.D., Harvard University

David G. Wonnacott, *Associate Professor of Computer Science*
B.S.E., Princeton University; Ph.D., University of Maryland

Kathleen Wright, *Professor of Philosophy*
B.A., Vassar College; M.A., University of Heidelberg; Ph.D., Boston College

Christina Zwarg, *Associate Professor of English*
A.B., Mount Holyoke College; A.M. and Ph.D., Brown University

Academic Council

The Academic Council consists of the president as chairperson; the provost; three elected divisional representatives of the faculty, one to be elected yearly; and the two faculty representatives to the board of managers. The Academic Council (1) appoints the standing committees of the faculty as noted below, (2) makes recommendations to the president on faculty appointments, reappointments, promotions, and tenure in accordance with accepted procedures, and (3) may consider matters having college-wide academic implications which are referred to it by the president and/or members of the council. The elected members of the Academic Council for the academic year beginning September 1, 2002 are A. McGuire (Humanities), F. Blase (Natural Sciences), R. Ball (Social Sciences), I. Burshatin and J. Owen (faculty representatives to the board of managers).

STANDING COMMITTEES OF THE FACULTY

(The president and provost are ex-officio members of all committees.)

Administrative Advisory

J. de Paula, *chairperson*; L. Bell, K. Koltun-Fromm, G. R. Wynn

Educational Policy

J. Gollub, *chairperson*; C. Beltrán, J. Punt, J. Russo

Distinguished Visitors

V. Kontorovich, *chairperson*; E. Lapsansky, Y. Li

Student Standing and Programs

T. Newirth, *chairperson*; H. Glassman, Z. Noonan-Ngwane

College Honors

S. Finley, *chairperson*; M. Gillette, R. Manning

Committee on Admission

G. Stadler, *chairperson*; R. Fairman, A. Kitroeff

(The dean of the College and director of admission are ex-officio members of this committee)

Special Faculty Assignments

Clerk of the Faculty Terry Newirth

Faculty Secretary Linda Gerstein

Faculty Marshal Lyle Roelofs

SENIOR STAFF

SENIOR STAFF

J. David Dawson, *Provost and Constance and Robert MacCrate Professor in Social Responsibility*

B.A., Towson State University; M.Div., Duke University; M.A., M.Phil., and Ph.D., Yale University

Gregory Kannerstein, *Associate Dean of the College and Director of Athletics*

B.A., Haverford College; M.A., University of Pennsylvania; Ed.D., Harvard University

Delsie Z. Phillips, *Director of Admission*

B.A., Clark University; M.A., Indiana University of Pennsylvania

Jill L. Sherman, *Vice President for Institutional Advancement*

B.A., Ursinus College; M.A., Villanova University

Joseph Tolliver, *Dean of the College*

B.A., M.S., State University of New York at Plattsburgh; Ed.M., Ed.D., Columbia University

Thomas R. Tritton, *President*

B.A., Ohio Wesleyan University; Ph.D., Boston University

G. Richard Wynn, *Vice President for Finance and Administration and Treasurer*

B.A., College of Wooster; M.B.A., Michigan State University; Ph.D., University of Michigan

ADMINISTRATION AND PROFESSIONAL STAFF

ADMINISTRATION AND PROFESSIONAL STAFF

Judy Adham, *Financial Aid Assistant and Assistant to the Director of Admission*
B.S., Glassboro State College

Rebecca Alexander, *Dining Center Production Manager*

Mary Louise Allen, *Director of Eighth Dimension and Women's Center*
B.A. and M.A., Antioch University, Philadelphia; M.L.S.P., Bryn Mawr College

Barbara Anderson, *Office Manager, Admission Office*
B.A., Marymount University

Ernie Anderson, *Dining Center Service Manager*
B.A., Southern Illinois University

William Astifan, *Arboretum Director*
B.S., Syracuse University

Felice Aversa, *Director of Information Management, Institutional Advancement*
Drexel University

Jennifer Barr, *Career Counselor/Resource Specialist*
B.A., Shippensburg State University; M.Ed., Temple University

Louis M. Bayne, *Housekeeping Manager*
B.S., Wharton School, University of Pennsylvania; M.Ed., Temple University

Liza Bernard, *Director of Bryn Mawr-Haverford Career Development*
A.B., Wilson College; M.Ed., College of William and Mary

Marie Bistline, *Accounting Manager, Business Office*
B.S., West Chester University

Violet Brown, *Director of External Relations*
A.S., Latin American Institute, N.Y.; B.A., Montclair State College

Joe Cammisa, *Academic Computing Consultant and Unix Specialist*
B.Sc., University of Maryland

Tessa M. Canavan, *User Support Specialist*
B.A., Eastern College

Michael Cossaboon, *Coordinator for Administrative Computing*
B.S., King's College

Alan H. Crosman, *Business Manager and Director of Human Resources*
B.A., Earlham College

Patricia E. Darrah, *Associate Dean and Director Of Academic Resources*
B.A., Lincoln University; M.Ed., Lehigh University; Ph.D., Temple University

Douglas S. Davis, *Programmer/Analyst*
B.S., University of Illinois, Urbana-Champaign Campus

Emily Davis, *Director of Annual Giving*
B.A., Haverford College

Dee Delaney, *Campaign Associate*
B.A., Columbia University

John C. Diaz, *Associate Director of Physical Plant*
B.A. and B.S., Columbia University

Kathleen B. DiJoseph, *Facilities Coordinator*
B.S., University of Virginia

Robin Doan, *Assistant to the Dean and Student Housing Officer*
Syracuse University

B. Kent Donley, *Maintenance Manager*
B.A., University of Washington

John Douglas, *Sports Information Director*
B.A., Western Maryland College

J.T. Duck, *Assistant Director of Admission*
B.A., Haverford College

Cecilia Dunbar-Oertel, *Assistant to the Director of Non-Academic Scheduling and Summer Programs*

Amy Feifer, *Associate Director of Career Development*
A.B., Franklin & Marshall; M.S., University of Pennsylvania

Catherine S. Fennell, *Director of Institutional Research and Assistant to the Vice President, Finance and Administration*
B.S., Susquehanna University; M.S., University of Pennsylvania

Jerry Fleming, *Bi-College Director of Telecommunications*

John J. Francone, *Director of Dining Services*
B.S., Robert Morris College

Thomas P. Ferguson, *Director of Publication Production*
B.A., University of the Arts; B.A., Pennsylvania State University

Nancy M. Grundhofer, *Human Resources Manager*
Pennsylvania State University

Amy Ham, *Coordinator of Student Activities*
B.A., Trinity College (Conn.); M.B.A., Sacred Heart University

Lynne S. Hartshorne, *Gift Planning Associate*
B.A., Arcadia University (formerly Beaver College)

Eileen Haupt, *Associate Director of Annual Giving, The Parents Fund*
Philadelphia College of Textile and Sciences

ADMINISTRATION AND PROFESSIONAL STAFF

Janet Heron, *Stewardship Coordinator*

Stephen E. Heacock, *Executive Director of Marketing & Communications*
B.A., Muhlenberg College

Roger D. Hill, *Director of Audiovisual Services*
B.A., Temple University; M.S., Philadelphia College of Textiles and Science

David J. Hoy, *Director of Financial Aid*
B.A., St. Mary's Seminary and University

Patsy A. Hutchins, *Assistant Director of Financial Aid*
B.A., St. Joseph's University

Sandra Johnson, *Alumni Associate*
Brooklyn College

Steven Kavanaugh, *Director of Gift Planning*
B.A., Earlham College

Michael Keaton, *Assistant Director of Admission*
B.S. and M.S., Syracuse University

Robert Killion, *Associate Director of Admission*
B.A., Grinnell College

Thomas L. King, *Director of Safety and Security*
B.A., Temple University; M.Ed., Holy Family College

Cheryl Koester, *Academic Computing Specialist*
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B.A., West Chester University

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B.A., William Smith College

Evelyne Laurent-Perrault, *Coordinator of Multicultural Programs*
L.D., Universidad Central de Venezuela

Bruce H. Levine, *Dining Center Catering Manager*

Kathleen Lewis, *Director of the Language Learning Center*
B.A., Brown University

Nicole A. Lewis, *Evening Operations Manager, Dining Center*
B.S., Widener University

Mary Ellen Lyons Luongo, *Director of Administrative Computing*
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B.S., St. Joseph's University; M.S., Shippensburg University; Ph.D., Bryn Mawr College

Brenna McBride, *Writer in Marketing & Communications*

B.A., Loyola College

Beth Anne McGrath, *Research Associate for Institutional Advancement*

B.A., Villanova University

Katie Michael, *Admission Counselor*

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Maxwell Institute

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B.A., Temple University

Matthew Nocifore, *Director, Networking and Systems*

Drexel University

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B.A., Beloit College; M.S., University of Pennsylvania; M.Div., Union Theological Seminary

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B.S., Tufts University; M.S., Naval Postgraduate School

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ADMINISTRATION AND PROFESSIONAL STAFF

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William A. Roth, *Major Gifts Officer*

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Nancy Sargent, *Director of Prospect Research*

Angela Scott, *Major Gifts Officer*

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Pamela M. Sheridan, *Director of Public Relations*

B.A., Syracuse University

Aaron Smith, *Academic Computing Network Specialist*

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Sharon Strauss, *Coordinator of User Services*

B.A., University of Pennsylvania

Julie Summerfield, *Bookstore Manager*

B.A., University of Pennsylvania

Dana W. Swan II, *Associate Director of Admission*

B.A., Swarthmore College

Mark Sweeney, *Safety Coordinator*

Delaware County Community College

Stephen A. Tessino, *Controller*

B.B.A., Siena College; M.S., Wharton School, University of Pennsylvania; C.P.A., Pennsylvania

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Amanda Van Zandt, *Associate Director of Annual Giving, The Haverford Fund*

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Diane Wilder, Director of Leadership Gifts and Advancement Services

B.A., Swarthmore College

Carol Wilkinson, Assistant to the Provost for Faculty Services

Corey Wilkinson, Cash Operations Manager, Dining Services

Sam A. Williams, Director of Purchasing

Judy Young, Director of Academic Scheduling and Distinguished Visitors and Coordinator of Faculty Housing and Offices

Anne Zimmerman, Payroll Supervisor

HEALTH SERVICES STAFF

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Robert Bartolanzo, Health Services Physician

M.D., New York Medical College

COUNSELING AND PSYCHOLOGICAL SERVICES STAFF

David Bushnell, Psychological Counselor

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Rebecca Ergas, Psychological Counselor

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Jane C. Widseth, Psychological Counselor

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ADMINISTRATION AND PROFESSIONAL STAFF

LIBRARIANS

Richard W. Aldred, *Catalog Librarian*

B.A., Guilford College; M.S. (L.S.), Drexel University

John Anderies, *Music Librarian*

B.M., Baldwin Wallace College-Conservatory of Music; M.A., Case Western Reserve University; M.L.S., Indiana University

Linda G. Bills, *Tri-College Library Special Projects Librarian*

B.A., University of California, Los Angeles; M.A., University of Hawaii; A.S.L.I.S., Case Western Reserve University

Jon Mark Bolthouse, *Tri-College Consortium Systems Coordinator*

B.A., Loyola University of Chicago; M.S. University of Illinois, Urbana-Champaign

W. Bruce Bumbarger, *Library Conservator*

B.A., Westchester University; Apprenticeship in Advanced Binding and Book Conservation with Fritz & Trudi Eberhart

Donna Fournier, *Coordinator for User Services and Collections*

B.A., Connecticut College; M.A., West Chester University; M.L.S., Southern Connecticut State University

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Dawn Heckert, *Circulation Services Supervisor*

B.A., Muhlenberg College; M.A.R., Lutheran Theological Seminary at Philadelphia

Robert H. Kieft, *Librarian of the College*

B.A., Hope College; M.L.I.S., University of California, Berkeley; Ph.D., Stanford University

Emma Jones Lapsansky, *Curator of the Quaker Collection*

B.A., M.A. and Ph.D., University of Pennsylvania

Norm Medeiros, *Coordinator of Bibliographic and Digital Services*

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B.A., Bates College; M.S., Drexel University

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B.A., University of Maryland; M.S., Drexel University

Margaret Schaus, *Reference Librarian*

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COACHING/TRAINING STAFF

Joseph A. Amorim, *Men's Soccer Coach; Assistant Director of Athletics*
B.A., La Salle College; M.A., Villanova University

David Beccaria, *Head Baseball Coach*
B.A., Johns Hopkins University

Leanne Cole, *Multicultural Recruiting Intern*
B.A., M.A., Washington College (MD.)

Kevin Courtney, *Interim Assistant Athletic Trainer*
B.S., West Chester University

Thomas P. Donnelly, *Men's Cross-Country and Track Coach*
B.A., Villanova University

Dan Evans, *Head Athletic Trainer*
B.S., West Chester University; M.Ed., Temple University

Penelope C. Hinckley, *Associate Director of Athletics*
B.S., Boston University, Sargent College; M.A., University of Connecticut

John Kelly, *Head Women's Softball Coach*
B.A., St. Joseph's University

Kamran Rashid Khan, *Cricket Coach*
M.A., Punjab University, Pakistan; M.A., Villanova University

Ann Koger, *Women's Tennis Coach; Associate Director of Athletics*
B.S., and M.S., Morgan State University; Ed.D., Temple University

David Littell, *Interim Fencing Coach*
B.A., Northwestern University, J.D., Boston University

Michael Mucci, *Men's Basketball Coach*
B.A., M.Ed., Villanova University

James C. Osborne, *Women's Basketball Coach*
B.A., M.Ed., Johnson State College (VT.)

Francis Rizzo, *Women's Track and Cross-Country Coach*
B.A., West Chester University

Sean Sloane, *Men's Tennis and Men's and Women's Squash Coach*
B.A., Princeton University; M.A.T., Wesleyan University; Ph.D., University of Massachusetts, Amherst

Wendy Smith, *Women's Soccer Coach; Assistant Director of Athletics*
B.A., Haverford College; M.B.A., University of Rhode Island

ADMINISTRATION AND PROFESSIONAL STAFF

SPECIAL APPOINTMENTS

Bruce Boyes, *Machinist and Instrument Maker and Director of the Machine Shop*
B.A., Temple University

Ann Brown, *Program Administrator/Advisor for Haverford/Bryn Mawr Teacher Education Program*
B.A., Haverford College

Joanne Brown, *Purchasing and Stock Room Manager in Chemistry and Biology*
B.S., Chestnut Hill College; M.S., St. Joseph's University

John E. Butler, *Biology Department Supervisor*

Kathleen Dostal, *Instructional Laboratory Supervisor*
M.S., Catholic University of America

Katherine P. Heston, *Laboratory Instructor in Biology*
A.B., Princeton University; M.S., University of Wisconsin, Madison

Hilarie R. H. Johnston, *Exhibitions Coordinator, Cantor Fitzgerald Gallery*
B.A., Bryn Mawr College, M.F.A., University of North Carolina at Greensboro

Scott E. Shelley, *Physics Instructional Laboratory Associate*
B.S., University of Guelph, M.S., University of Toronto

Jenette Wheeler, *Pre-Medical Advisor*
B.A., Johns Hopkins University; M.D., Emory School of Medicine

Al Williams, *Pre-Law Advisor*
B.A., Virginia Union University; P.B., Haverford College; J.D., University of Virginia; M.A., Villanova University

COLLEGE VISITORS ON SPECIAL FUNDS

2001-2002

During the last 30 years the College's regular teaching faculty has been supplemented annually by as many as a hundred scholars, artists, scientists and outstanding representatives of other fields who are invited as part of Haverford's Distinguished Visitors Program. Some may stay only a few hours, but most remain for a few days or, in some cases, may even conduct courses for an entire semester.

Whatever the schedule may be, its purpose is to bring the visitor into close contact with students. A typical visitor might give one or more public lectures, lunch with professional colleagues on the faculty, participate in a seminar, or dine with student majors from Haverford and Bryn Mawr at the home of the department chairperson.

The visitors program was greatly strengthened by a generous bequest from William Pyle Philips, of the Class of 1902, who in 1950 left much of his estate to Haverford, a portion of which was specified to underwrite the expenses of bringing "distinguished scientists and statesmen" to Haverford. The Philips Fund is the largest of several currently supporting the entire Distinguished Visitors Program; others are the Emily Judson Baugh and John Marshall Gest Fund, the Scholars in the Humanities Fund, the Mary Farnum Brown Fund, the William Gibbons Rhoads Fund, the Thomas Shipley Fund administered by the English Department, the J. F. Lincoln Family Foundation Fund, the David Levin Memorial Fund, the Alan R. Morse Fund, the Ellis T. Williams Memorial Fund, the Tilney Memorial Fund, the Moore Fund for the Arts and the Humanities, Bruce Hartung French Fund in Economics and American History, and a special fund for African history. Lecturers and visitors to the campus on these funds during 2001-02 are listed below.

The Emily Judson Baugh and John Marshall Gest Center for the Cross-Cultural Study of Religion

The establishment of the center was made possible by a bequest of Margaret Gest in memory of her parents, Emily Judson Baugh Gest and John Marshall Gest. In keeping with Margaret Gest's desires and will, the center aims "to promote better understanding among peoples" through the study of the "fundamental unity of religions" without "negating the differences." The current center program is housed in the Gest Center, one of the College's oldest buildings (built 1853-55), restored through the generous gift of a friend of Margaret Gest.

The program, supported by the Gest bequest, includes an annual lecture series on the Unity of Religions that is open to the off-campus community and an annual dialogue in which adherents of various faiths explore common religious frontiers.

2001-2002 Visitors

Dana L. Anderson

Department of English, Pennsylvania State University

Kolapo Abimbola

Temple University

Eric Adelberger

Professor of Physics, University of Washington

Linda Beck

Assistant Professor of Political Science, Barnard College

Susan Blader

Associate Professor of Chinese Language and Literature, Dartmouth College

Robert Brandom

Distinguished Service Professor, University of Pittsburgh

Theresa Braunschneider

University of Michigan

Dr. Svetlana Broz

Medical Doctor and Author of "Good People in Bad Times" (oral histories of the Bosnian War), Granddaughter of Marshall Tito (President of Yugoslavia 1953-1980)

Peter Burian

Professor of Classics and Comparative Literature, Duke University

Judith Butler

Maxine Elliot Professor, the Departments of Rhetoric and Comparative Literature, University of California-Berkeley

Melissa L. Caldwell

Lecturer, Committee on Degrees in Social Studies, Harvard University

Charles Canady

General Counsel to Governor Jeb Bush, previously served 8 years in the House of Representatives

Paul Chaikin

Professor of Physics, Princeton University

Julie N. Christoph

University of Wisconsin-Madison

Dimitri Conostas

Professor of International Relations, Former Greek Ambassador to the European Union

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"Old Memories, New Histories: Greeks and Turks (1890-1924)."

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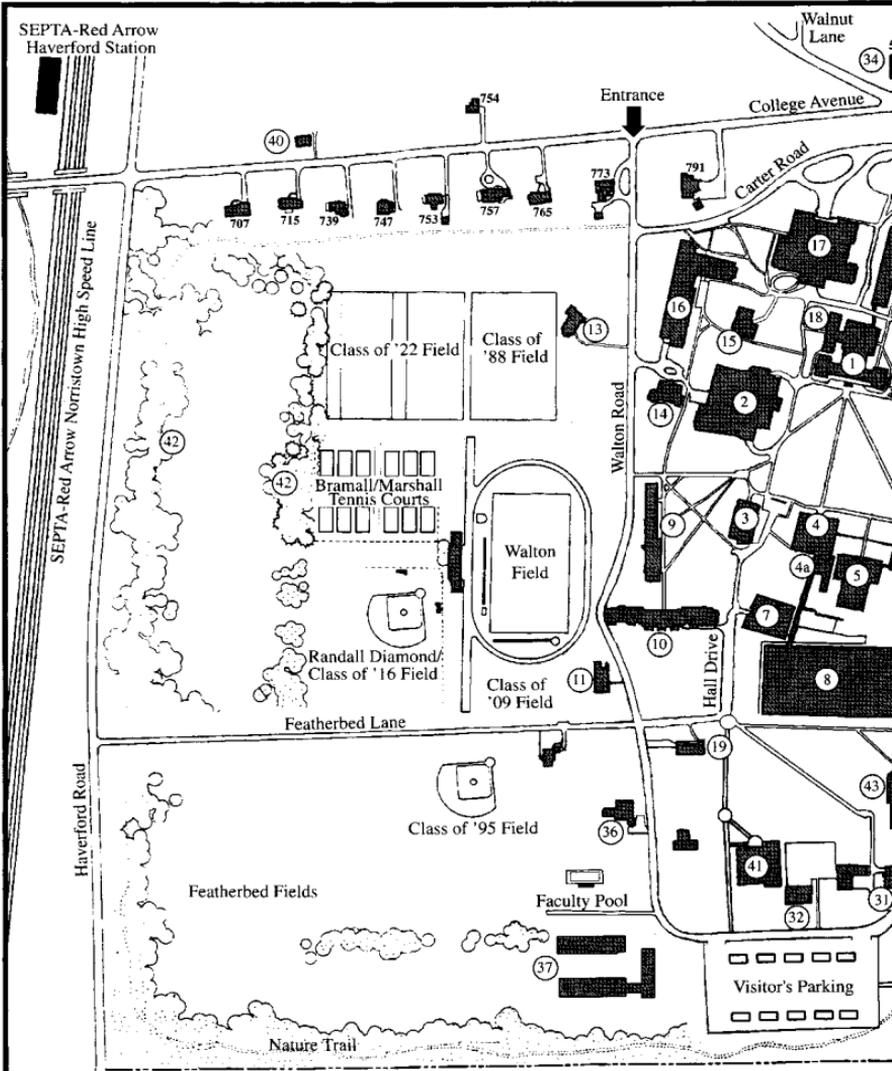
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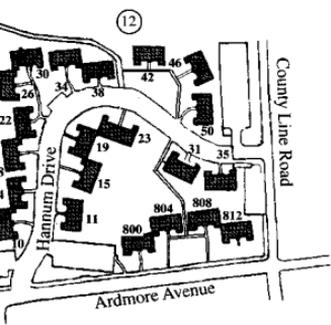
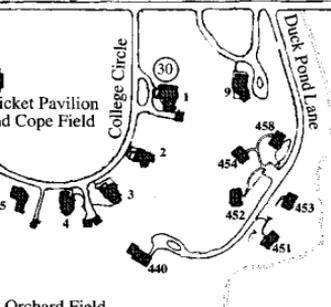
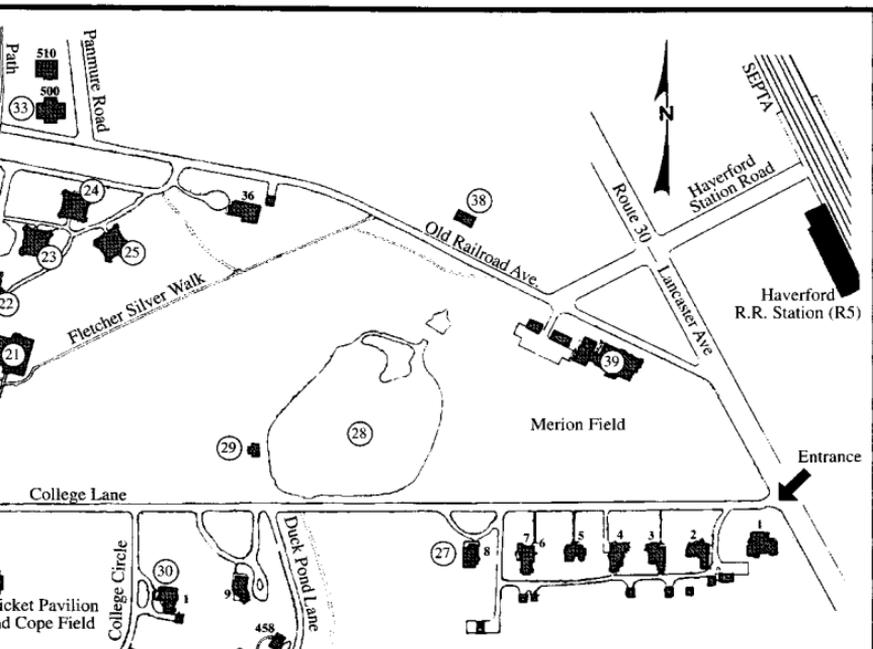
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CAMPUS MAP



H A V E R F O R D



Campus of Haverford College

Haverford, Pennsylvania

CAMPUS MAP KEY

Numbers correspond to those circled

- | | |
|------------------------------------|--------------------------------------|
| 1. Founders Hall | 22. Union Hall |
| 2. Magill Library | 23. Jones Hall |
| 3. Hall Building | 24. Lunt Hall |
| 4. Ryan Gymnasium | 25. Comfort Hall |
| 4a. Sesquicentennial Squash Courts | 26. Lloyd Hall |
| 5. Hilles Hall | 27. Cadbury House |
| 6. Sharpless Hall | 28. Duck Pond |
| 7. Locker Building | 29. Skating House |
| 8. Alumni Field House | 30. President's House |
| 9. Leeds Hall | 31. Ira DeA. Reid House |
| 10. Gummere Hall | 32. Foundry |
| 11. Drinker House | 33. Yarnall House |
| 12. Haverford College Apartments | 34. La Casa Hispánica |
| 13. Observatory | 35. Friends Meeting House |
| 14. Morris Infirmary | 36. Woodside Cottage |
| 15. Chase Hall | 37. Physical Plant/ Arboretum Office |
| 16. Stokes Hall | 38. 19 Old Railroad Avenue |
| 17. Dining Center | 39. 10 Old Railroad Avenue |
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