
HAVERFORD COLLEGE CATALOG 2005-2006

HAVERFORD COLLEGE
ACADEMIC CALENDAR 2005-06

SEMESTER I

August 24	First-year and transfer students arrive
August 27-28	Returning students arrive
August 28	Non-academic registration
August 29	Classes begin at Haverford, Bryn Mawr, and Swarthmore
September 2	Last day to uncover NNG-CR/NO CR from previous semester
September 5	Labor Day; Classes in session
September 5-6	Final academic verification at Haverford and Bryn Mawr
September 6	Last day to register - Class of 2008
September 16	Last day to request NNG-CR/NO CR at Haverford and Bryn Mawr
	Last day to drop a credit at Haverford and Bryn Mawr
October 7	Fall break begins at 4:00 p.m.
October 17	Classes resume at 8:30 a.m.
October 21	End of half-semester courses
October 22-24	Family Weekend/Homecoming
October 24-28	Faculty reports of concern to CSSP due
October 28	Academic flexibility proposals due
November 17-18	Registration for spring semester
November 23	Thanksgiving break begins at 4:00 p.m.
November 28	Classes resume at 8:30 a.m.
December 9	Classes end at Haverford; optional Reading Day All papers (except those in lieu of exams) and lab notebooks due
December 10-11	Reading Period
December 12-16	Final examinations for all students through Friday at 12:00 noon
December 16	Semester I ends at 12:00 noon
January 2	Final grades due in registrar's office by 12:00 noon

SEMESTER II

January 16	Classes begin at Haverford, Bryn Mawr, and Swarthmore
January 20	Last day to uncover NNG-CR/NO CR from previous semester
January 23-24	Final academic verification at Haverford and Bryn Mawr
February 3	Last day to request NNG-CR/NO CR at Haverford and Bryn Mawr Last day to drop a credit at Haverford and Bryn Mawr
March 3	End of half-semester courses Spring break begins at 4:00 p.m.
March 13	Classes resume at 8:30 a.m.
March 13-17	Faculty reports of concern to CSSP due
March 17	Academic flexibility proposals due
April 20	Returning students' Financial Aid Applications due
April 20-21	Registration for semester I, 2004
April 21	Sophomore Major Work Plans due in registrar's office
April 28	Classes end at Haverford and Bryn Mawr All papers (except those in lieu of exams) and lab notebooks due
April 29-May 2	Reading Period (self-scheduled exams may be taken Monday-Tuesday only)
May 1-3	Senior Comprehensive Examinations
May 3-6	Final examinations for seniors through Saturday at 5:00 p.m.
May 8	Senior grades due in the registrar's office by 5:00 p.m.
May 3-12	Final examinations for underclassmen through Friday at 12:00 noon
May 12	Semester II ends at 12:00 noon
May 14	Commencement - A.M. at Haverford; P.M. at Bryn Mawr
May 19	Final grades due in the registrar's office by 12:00 noon
May 26-28	Alumni Weekend

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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 Haverford School by a group of New York and Philadelphia Quakers. 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." A seven-member faculty educated 21 Quaker boys in Greek, Latin, natural and moral philosophy, mathematics and literature in that first year.

After various vicissitudes, the School became a College in 1856, with the right to grant degrees. Under the leadership of Presidents Thomas Chase and Isaac Sharpless, by the turn of the 20th 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 wide-ranging 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 undergraduate college. (There were exceptions, most notably the Relief and Reconstruction program in the years during and immediately after World War II 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 as early as 1917, 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 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, videos, scores, sound recordings, 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 (tripod.brynmawr.edu) which serves as the tri-college library catalog of some 2.7 million volumes and a gateway to our online indexes, databases, and digital collections. Tripod also permits users to request items from Bryn Mawr and Swarthmore to be delivered to Haverford. 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.

Another important gateway to Haverford's collections and services is the Library's website at <http://www.haverford.edu/library>. Web pages include general information about the Library, FAQ and Ask a Librarian pages, announcements of events, and links to related collections. In addition, the Library site links to full text electronic journals, encyclopedias, government publications, newspapers and other news sources, finding aids for special collections, and many other online sources. Users will also find 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, webpages, 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, states-

men, 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; 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 Departments of astronomy, biology, chemistry, computer science, mathematics, physics, and psychology are housed in the state-of-the-art Marian E. Koshland Integrated Natural Sciences Center (KINSC). The KINSC is also home to interdisciplinary Areas of Concentration in Biochemistry and Biophysics and Neural and Behavioral Sciences. These departments and programs are served by a common computational suite, a modern and spacious science library with online access to the collections of Haverford, Bryn Mawr and Swarthmore, a 120-seat auditorium, additional smaller modern classrooms, and numerous informal interaction spaces. Increased opportunities for learning and collaboration at the interfaces between science disciplines are a special feature of the facility.

The Biology Department is housed in the Sharpless and East Wings of the KINSC. The Department includes three new and recently renovated teaching laboratories, eight fully equipped faculty research laboratories, a media preparation facility, tissue culture rooms, instrument rooms, dark rooms, constant temperature rooms, and a microscopy suite. The Department has the equipment to support a sophisticated cell and molecular biology curriculum and the research programs of the faculty including: -70 degree freezers, liquid nitrogen storage, incubators and shakers for microbial and tissue culture work, tissue culture hoods, a Storm 860 imaging system, ultracentrifuges for preparative and analytical uses, refrigerated centrifuges, spectroscopic tools such as UV-vis spectrophotometers and a circular dichroism spectropolarimeter, a fluorescence activated cell sorter, an Hitachi electron microscope with digital imaging capability, stereo and immunofluorescence microscopes, FPLC and HPLC instruments, scintillation and gamma counters, ELISA readers, densitometers, and gel dryers. The Department also shares a confocal microscope with the Department of Biology at Bryn Mawr College.

Facilities in the Chemistry Department, in the East Wing of the KINSC, enable students to use modern, sophisticated instrumentation at all levels of study. There are four laboratories for course work; three instrument rooms; specialized equipment rooms; and a walk-in cold room. Six additional laboratories provide space in which students conduct research 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 and Raman 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 and a PE Clarus-500 GC/MS; a Nicolet 950 Fourier transform Raman spectrometer; Nicolet Magna 550 and Perkin-Elmer Spectrum 1000 Fourier transform infrared spectrometers; a SPEX Fluorolog-2 fluorimeter; JASCO V570, Perkin Elmer Lambda 2, and Shimadzu 160U spectrophotometers, and Hi-Tech SF51 and Olis RSM stopped flow spectrometers; a Perkin-Elmer 341 polarimeter; a Princeton Applied Research 273 electrochemical analyzer; two Rainin and one Hewlett-Packard high-performance liquid chromatographs; a GBC-Difftch MMA powder X-ray diffractometer; Applied Biosystems 433A and Rainin PS3 automated peptide synthesizers, and a ProteinSolutions DynaPro dynamic light scattering instrument. 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 computer science, mathematics, and physics programs, housed in the Hilles and Harris wings of the KINSC, 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.

The Computer Science Department provides a teaching lab consisting of ten Linux workstations, along with an audio-visual presentation system, used primarily to complement the programming courses in the curriculum. The room is also used for guest lectures, research meetings, class discussions, and for viewing video presentations. Each introductory and core course provides for closed, instructor-led lab time in this space. It is also staffed by student assistants each weeknight for help with programming assignments. The workstations are accessible remotely, and all software applications used are either open source or freely available, permitting students to install class applications on their personal computers. There is also a lounge adjacent to the teaching lab that provides current journals in computing, as well as a more informal space for student-faculty interactions.

In addition to the shared computing facilities in the Harris wing of the KINSC, the Mathematics Department maintains a pair of adjacent rooms in the basement of Hilles; one functions as a classroom for courses that incorporate computer use into collaborative learning, and the other serves groups of students who need to use Mathematica alongside other specialized mathematics and typesetting software, such as ODE Architect and LaTeX. Five evenings a week these rooms, H011 and H012, are staffed by mathematics majors and faculty, who transform it into the Math Question Center, open to students in both beginning and advanced courses who need encouragement and assistance while working on projects and homework. Students also work alone and together in the comfortable math lounge on the second floor of Hilles, immediately adjacent to math faculty offices and workspaces. From all of these spaces students have wireless access to the campus network. The four iBooks in H011 and the fourteen PC and Mac desktop machines in H012 are available for student use when these rooms are not reserved for classes or discussion sessions.

Facilities for the Physics Department, in the Harris Wing, include three well-equipped laboratories for instruction and eleven labs for research involving students. The laboratory for nanofabrication and scanning tunneling microscopy houses an ultra-high vacuum scanning tunneling microscope (STM) with atomic resolution, an atomic force microscope, and a high resolution optical microscope. Physics maintains a dedicated instructional computer laboratory containing a network of computers with Mathematica software and universal laboratory interfaces for experiments.

The biophysics laboratory includes a microscopy and manipulation cluster for biology and

nanoscale science, shared with biology and chemistry. This facility provides a unique combination of capabilities, including a high-resolution atomic force microscopy capable of imaging biological samples in solution, and a laser tweezer and micromanipulator/microinjection system for manipulating biological samples. Additional facilities include a Langmuir trough for fabricating synthetic ion channel biomembranes and a video fluorescence microscopy system for studies of model membrane systems.

The nonlinear dynamics and fluids laboratory includes state-of-the-art systems for digital image collection and instrumentation for remote measurement of fluid flow and particle velocities. Computational facilities include two up-to-date PC-based computer clusters for student research and instructional use, as well as various UNIX workstations and graphics terminals for high performance scientific computing, image processing, and molecular studies.

The Psychology Department occupies the upper two floors of Sharpless Hall in the KINSC. Computers are used throughout psychology for experimental presentation, data collection, statistical analysis, and the simulation of mental and biological processes. The department utilizes the common KINSC computational suite, which includes 20 workstations equipped with E-Prime and SPSS software. In addition, four laboratory suites are devoted to faculty and 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, VCRs, and a computer-interfaced response system for data collection. The biological psychology laboratory includes a teaching facility, an animal colony, equipment for computer-controlled experiments in animal learning and behavior, and equipment for the recording of physiological responses in humans. The human neuropsychology lab contains computerized systems for laterality experiments and a 40-channel Neuroscan EEG system. The social psychology laboratory includes computerized questionnaire design and response stations, as well as equipment to record dyadic interactions and experience-based reactions. Finally, the department also houses a digital video-editing facility.

Facilities for the Astronomy Department include the William J. Strawbridge Observatory given in 1933 and built around an earlier structure. The observatory has its own library, classroom, computer room, and workspace for departmental students. Facilities include a computer-controlled 16-inch Schmidt-Cassegrain telescope with three CCD cameras; a CCD spectrometer; a 12-inch Schmidt-Cassegrain telescope; three portable 8-inch telescopes with outside piers; a 4-inch solar telescope; and a 7-foot L-band (1.4 Ghz) radio telescope. Workstations are used for processing data from the CCD camera as well as radio and optical data collected at other observatories. 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. Haverford is part of an eight-college consortium which provides research assistantships for a summer students exchange program, grants for student travel to outside observatories, and a yearly symposium at which students present their research.

Academic Computing Center

Computers are an integral part of a Haverford education. All faculty and students have email accounts, private network storage space, 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 the instructional and research needs of the faculty and students. While there is no

requirement for students to buy computing equipment, nearly 99% of our students have their own computers.

Those who choose to use computing 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 two labs are open until midnight Sunday through Thursday, with more limited hours on Friday and Saturday. During these hours, many of the 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 the Academic Computing Center Volunteer Monitor Program.

Additional computer equipment is available in the Language Learning Center, the INSC, and departmental labs in biology, chemistry, math, computer science, and physics/astronomy. These computers have special hardware or software for students taking classes in those disciplines. Some of these labs are also available for general use.

An ethernet network provides 10- or 100-megabit service directly to all offices, classrooms, public computing labs, 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 15-Mbps link. Students living on-campus can access this high-speed network free of charge. Faculty and students living off-campus can connect to our network from their homes and access the same networked resources via the computing center's 56K dial-in server or using VPN over their broadband network.

Academic Computing supports a standard suite of software for e-mail, Web browsing, word processing, Web development, and other needs. In addition, campus provided virus protection software is required for all users on our network. All supported software is available for use in the public labs and 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. Our Web site lists these specific supported software packages. We also share the Blackboard course management system with Bryn Mawr College and Swarthmore College, allowing easy use of Web-based materials in all tri-college classes.

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 public labs, and may also be available on our network or at academic pricing.

Faculty may use one of several computer classrooms for hands-on computer sessions, 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 their Blackboard course, on the web, or on our campus network. They can also make specific software or information available in the public labs, departmental labs, or the library or they can 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 Helpdesk where mem-

bers 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 RCCs, students staff our public labs, help with hardware repairs, install software, assist with 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 at <http://www.haverford.edu/acc>.

Language Learning Center

The Language Learning Center in Stokes 205 houses sophisticated multimedia equipment designed to support the use of technology in foreign languages. The LLC is open to all students, faculty, and staff. All Haverford faculty members can reserve the LLC for their classes, though priority is given to foreign language faculty.

The Center has thirty Macintosh G4 computers and three Macintosh G5 computers with flat panel monitors and headphones. The Center provides various multimedia equipment, such as a digital video camera, USB microphones, a scanner, external storage devices, and a digital video converter that can be used to digitize VHS tapes and audio cassette tapes.

In the LLC, students can type in both western and non-western languages. All the computers have a spell-checking function for all available languages. Foreign language dictionaries are available in the Center. Handouts for typing accents are available in the Center and online.

The LLC has more than 400 movies from all over the world. Each computer workstation allows individual film viewing. In addition, audio-visual materials in the Center may be displayed through a high-resolution projector, which features multi-standard VCRs and DVD players. There is also a TV with VCR/DVD for small group viewing.

This year the LLC subscribed to satellite TV programming. Students and faculty can enjoy satellite TV programs in Chinese, French, German, Italian, Japanese, and Spanish in the Center.

Language curricular media are digitized with permission from the publishers and available to students through the World Wide Web. This enables students to work outside of the LLC.

The LLC 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 *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, a 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, was renovated and is now part of the Marian E. Koshland Integrated Natural Sciences Center. 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-College News* and Yearbook staff, a student lounge, and a student darkroom. The Dining Center kitchen was renovated in 1998 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 struc-

ture housing the Admission Office, Bookstore, Mail Room, Central Receiving, The Women's Center, The Multicultural Center, a snack bar, Distinguished Visitors Office, Conference Office, Student and Honor Council Offices, meeting rooms, and guest rooms.

Athletic Facilities

Outdoor facilities include: Walton Field for lacrosse, soccer, and track & field events, with the synthetic surface 400-meter eight-lane Johnson Track; the Class of 1888 and Class of 1922 Fields for soccer, field hockey and lacrosse; Merion Fields for intramurals and off-season practices; the three fields on 10 acres on Featherbed Lane, including the Class of 1995 field for varsity softball, plus additional game, intramural and practice spaces; Cope Field for cricket, the Class of 1916 Field with Randall Diamond for baseball; 12 all-weather tennis courts (six named for Normal Bramall and six for Bettye Marshall), and a driving range for golf practice.

In regard to indoor facilities, Ryan Gym, one of the major homes of Haverford athletics for the last 104 years, will cease to be an athletic building in late fall, 2005. It will be replaced by the Douglas B. Gardner '83 Integrated Athletic Center, a 100,000-square-foot new gymnasium built to "green building" specifications. The GIAC will contain the 1,200-seat Calvin Gooding '84 Arena with three practice basketball/volleyball/badminton courts with a wood floor converting to varsity basketball or volleyball game courts; the Dana Swan Multipurpose Room, primarily for aerobics, dance and martial arts; a fencing salle, five international squash courts, a conference room, the 7,200-square-foot Arn '76 and Nancy Tellem Fitness Center, offices for all members of the athletic staff, a sports medicine suite, and extensive locker rooms for athletic teams and the student body and College staff. The Thomas B. Glasser '82 Hall of Achievement provides the opportunity for recognizing Haverford's historic athletic past. The Safety and Security Department is located in the GIAC.

Alumni Field House, donated by alumni and friends of the College in 1957, provides additional extensive facilities for athletics and recreation. Renovated in 1984 and 1997, the Field House's Versaturf floor covers 58,000 square feet. The four-lane 200-Meter Haddleton Track plus two long jump pits, high jump, and pole vault pits are home for many Haverford and other track meets. The Field House also contains a batting cage and a "playing field" for such sports as field hockey, lacrosse, soccer, and baseball/softball. The infield can be used for recreational and intramural basketball (four courts) and varsity and other tennis matches (four courts).

Residence Halls

Haverford offers a variety of housing options and styles. Barclay, Gummere, Leeds, Lloyd, and the North Dorms (Comfort, Jones, and Lunt) are traditional style residence halls with capacities ranging from 70 to 125 students. Most of the rooms are singles arranged in suites for 3 to 6 students. Haverford College Apartments (HCA), a complex of two-story garden apartments, has one and two bedroom apartments. Barclay, Gummere, and HCA are first year areas. Upperclass students may live in any of the residence halls or apartments.

Apartment 15 houses E-haus, a community where students live cooperatively, minimizing their environmental impact through ecologically sound living. Additionally, there are six houses which were originally private dwellings and now serve as housing for students. 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. Cadbury House, for students who want a substance-free and quiet environment, contains a faculty apartment and has housing for 13 students. The

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Ira DeA. Reid House, known also as the Black Cultural Center, has housing for six students who are interested in the cultures and politics of Africa and the African Diaspora and are seeking a culturally supportive environment. Yarnall House houses 13 students, the Henry S. Drinker House houses 18, and 710 College Avenue houses 11.

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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 in one language 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.

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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, 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 should complete their physical education requirement before registering for their fifth semester. 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.

Areas of Concentration

*An area of concentration **must** be elected the same time a student declares a major: that is, during the fourth semester of attendance. As with the major, earlier elections are not permitted.*

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

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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 College currently offers the following areas of concentration:

African and Africana studies, biochemistry and biophysics, computer science, education and educational studies, gender and sexuality studies, Latin American and Iberian studies, mathematical economics, neural and behavioral sciences, and peace and conflict studies. These are described in the catalog under Courses of Instruction with other curricular offerings.

Concentrations in creative writing and environmental studies are available at Bryn Mawr College.

Minors

Many departments and academic programs at both Haverford and Bryn Mawr offer minors, the completion of which will be indicated on the student's transcript. These are described under the entries for individual departments, programs and areas of concentration in this Catalog and in the Bryn Mawr College Catalog. The minor is not required for the bachelor of arts degree or the bachelor of science degree.

As with majors, students may design independent areas of concentration (related to the major) or minors. These programs require the approval of the Committee on Student Standing and Programs. A member of the Haverford College faculty must serve as the student's advisor for these options.

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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.

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.

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, minor, or concentration;
- (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

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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 examination 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;

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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.

Grading Regulations

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 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.

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 '05-'06 Extension/Incomplete, Deadlines

Semester I

Extension work is due on Monday, December 19, 2005

Incomplete work is due on Friday, January 6, 2006

Semester II

Extension work is due on Monday, May 15, 2006

Incomplete work is due on Friday, June 2, 2006

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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.*

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 pro-

gram 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.

Note that the seven-semester option allows the possibility of studying abroad for one semester, while the six-semester option does not.

See also the Academic Flexibility Program on page 35.

Monitoring Academic Performance

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 in consultation with their deans and, if necessary, with members of the athletic department, the admissions office, and (to the extent consistent with confidentiality) the counseling staff.

CSSP relies on the faculty to convey notes of concern to the deans of those students in their courses who are experiencing academic difficulty. The committee reviews these faculty reports at the middle of each semester and sends letters to some students apprising them of its concerns, urging them to consult with their advisors, counselors, deans, and instructors, and recommending, where appropriate, that they make use of the College's peer tutoring system and other academic help resources. CSSP will also apprise such students of the consequences of failure and may put them on one of several levels of "academic warning" that requires them to maintain regular contact with their deans and places their academic performance under close supervision for at least a semester.

In dealing with academic deficiencies, the committee has broad authority to set requirements for a student's continued enrollment or to require him/her to take a College Leave for a minimum of one year; such decisions are typically made at the end of each semester. Students are accountable to themselves and to the College (as embodied in the committee) for the use to which they put both their talents and the resources of the College. Each case that comes before the committee is treated individually within the context of College policy, and from this perspective, accountability means that some students who perform poorly but manage to pass their courses may still be placed on College Leave and ones who are failing may, on occasion, be permitted to continue. However, although it may permit students who fail some of their courses to continue at the College, the committee must first be convinced that there is a high probability that such students will do work that is at least consistently adequate in the immediate future.

Second-semester seniors should note that simply meeting the College requirements and accumulating 32 credits is not necessarily sufficient to ensure graduation. For example, the committee (which reviews all senior academic records before the faculty votes on granting degrees each spring) may decide that a student who has failed two out of the four courses in

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which he/she was enrolled in the eighth semester may not be permitted to graduate even though he/she has the 32 credits required for graduation. 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 successfully completed the required number of courses and satisfied all distributional requirements.

When CSSP is considering the possibility of placing a student on College Leave, it will postpone making its final decision until it has held a second meeting, known as a "drop hearing." The student will be invited to appear before the committee at the drop hearing and will be permitted to attend the hearing in the company of an academic advisor or other faculty member who knows him/her well. If the student does not appear, the committee will make a decision in the student's absence and will inform him/her of its decision in writing.

Students placed on College Leave may appeal CSSP's decision to the president of the College *on procedural grounds only*. 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.

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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 matriculated, 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, a significant amount 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 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.

Academic Flexibility Program

The Committee on Student Standing and Programs (CSSP), a standing committee of the faculty, is empowered to make decisions on requests from students for exceptions to the academic regulations of the College. CSSP 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.

Typically, requests for exceptions involve unusual circumstances and relate to such issues as credit for non-Collegiate academic coursework, graduation in fewer or more than eight semesters, credit for summer courses outside the United States, and special majors.

Students who intend to petition the committee should first consult with their dean and their academic advisor, both of whom have to approve and sign their petition. Petitions should be submitted in writing to CSSP by the deadlines noted below; failure to meet these deadlines may result in a delay in the consideration of a petition until the following semester.

For Semester I of the '05-'06 Academic Year: Friday, October 21, 2005

For Semester II of the '05-'06 Academic Year: Friday, March 17, 2006

Petitioning students should note that their advisor and dean's approval does not guarantee that CSSP will grant their request. If the committee does not approve his/her proposal, the student may appear in person to appeal its decision.

In addition to petitions for independent and interdepartmental majors and for permission to get credit for summer study abroad, which are discussed elsewhere in the Catalog, the following are examples of some of the academic program options that students may pursue only with the approval of CSSP.

A. Credit for Non-Collegiate Academic Work

There may be important educational opportunities for a student to do work in a non-university research laboratory, to do a supervised archaeological study on site, etc., for which the College will grant academic credit. With the approval of CSSP, such work may be undertaken for 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 comparable 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 a relevant field;
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 \$4,050 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.

B. Graduation in Fewer than Eight Semesters

Sufficiently mature students of outstanding ability who have clearly defined career goals and strong motivation to achieve them or who are otherwise judged to have legitimate reasons for special consideration, may apply for permission to graduate in three years. Such a student may, in consultation with his/her dean, and with the approval of his/her academic advisor and the Committee on Student Standings and Programs, select a six-semester program consisting of at least 30 course credits, including up to two approved AP credits or summer courses. Because of the college residency requirement, this program is not compatible with international study. A student for whom a six semester program has been approved must, by April 15 each year, confirm to his/her dean in writing that he/she intends to continue in this program.

Students may also meet the normal requirements of 32 Haverford approved course credits but do so in only seven semesters of study by enrolling for five course credits for four semesters and for four course credits for three semesters. This option will allow students to spend a full semester away from the campus at some time during their college careers and still graduate within four years of matriculation. While there is no deadline for declaring seven-semester programs, and students do not need the approval of CSSP to exercise this option, an early declaration of the intention to graduation in seven semesters will be helpful to both the stu-

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dent and the College. Students considering this option are therefore urged to consult their dean as early as possible, but no later than the end of their first year. All such students must, by April 15 each year, confirm to their dean in writing their intention to continue in the seven-semester program.

C. Extended Programs

Although most students are expected to graduate in four academic years, some may be permitted to take more time to complete their degree requirements. Examples would include students with 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 such cases, the student must secure the prior approval of the Committee on Student Standing and Programs.

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 utilizing the resources of Haverford, Bryn Mawr, Swarthmore, or the University of Pennsylvania. Such students need first to be accepted by the relevant department or departments 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. sequence and, in the fall of the third and senior year, request the Committee to consider the M.A. proposal and the student's qualifications for it.

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 applicants 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 Cape Town, the University of Delft, and the University of the West Indies, among many others. Approximately 45% 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 a 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 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 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. Semester and year international study is solely under the purview of the Educational Policy Committee and students may not petition the Committee on Student Standing and Programs for approval of programs. Students, who do not wish to pay tuition to Haverford College and/or receive Haverford College credit, may not attend the approved programs. Members of the faculty who wish to add programs to the list follow the same procedures noted above. International Study information, including brochures, procedures, and applications, is available from the Office of International Academic Programs, located in Chase Hall 213.

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3/2 Engineering Program

Haverford College and the California Institute of Technology (CalTech) have a joint program under which a student who is interested in engineering may, in the first semester of his/her junior year, apply for transfer to an engineering program at CalTech. If accepted, then at the end of five years (three at Haverford, two at CalTech), the student will be awarded a B.A. or B.S. degree by Haverford and a Bachelor of Engineering Degree by CalTech.

For each engineering discipline, there is a required set of courses to be taken at Haverford during the first three years of the program. Interested students should consult their advisor and the College's advisor for the 3/2 program (Prof. Walter Smith) about the proper course selection; this consultation should occur as early as possible. A cumulative grade point average of 3.5 is generally expected for this program.

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 \$4,050 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's Web site a form entitled, "Approval for Summer School Work";
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 consider these programs in making summer plans. In these cases only, students should follow the procedures outlined in the section above, "Summer Study at Another Institution in the United States," and file the requisite paperwork with the Haverford Registrar *before* embarking on such programs.

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 in the section above, "Summer 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.).

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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 should take note of the fact that they must obtain the approval of the appropriate Haverford departmental chair and of CSSP *before* they take summer school courses abroad and that *approval sought retroactively will in all likelihood be denied*.

Students wishing to request credit for international study during the 2006 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 17, 2006.

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 their 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 number 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 (November 18, 2005 for semester II leaves, or April 21, 2006 for a semester I leave). Return from such a leave is automatic as long as the student provides written confir-

mation 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 officers 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.

COURSES OF INSTRUCTION

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LIST OF DEPARTMENTS

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

* 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

THE CENTERS

HURFORD HUMANITIES CENTER

The John B. Hurford '60 Humanities Center seeks to enhance the intellectual and cultural life at Haverford by fostering challenging exchange among faculty, students, and diverse communities of writers, artists, performers, thinkers, activists, and innovators. From its offices and seminar room in Stokes Hall, the Center sponsors programs that promote relationships between classic humanistic study and contemporary intellectual, artistic, and ethical currents in the wider public world. Among its ongoing programs are annual Faculty and Student Humanities Seminars, Readings Groups, and various initiatives aimed to enrich the humanities curriculum through innovative collaboration across departmental boundaries. The Center also funds Summer programs, including Student Humanities Internships with host organizations such as the Philadelphia Orchestra, The Philadelphia Museum of Art, the Philly Fringe, and the Library Company; Student Research Assistantships supporting the scholarly work of Haverford faculty; and summer residencies for faculty and students at the Cross Cultural Centre in Ascona, Switzerland. Through Center sponsored symposia and presentations by renowned scholars and artists, the Center also enhances the intellectual and cultural life of the Haverford community and the public at large.

For a complete description of the Hurford Center, its various programs, and a calendar of upcoming events, see <http://www.haverford.edu/hhc>.

Richard Freedman, Professor of Music, Director
Emily Carey Cronin, Program Coordinator

KOSHLAND INTEGRATED NATURAL SCIENCES CENTER

The Marian E. Koshland Integrated Natural Sciences Center (KINSC) is a platform for curricular and scholarly discussions among Haverford College's Departments of Biology, Chemistry, Computer Science, Mathematics, Physics, and Psychology. A focus of the KINSC is the development of innovative curricula in interdisciplinary areas, such as biochemistry, biophysics, neurobiology, and materials science. The Center also seeks to promote research initiatives in rapidly emerging fields of study, such as nanoscience and bioinformatics, not traditionally represented at Liberal Arts Colleges. Through interactions with the Center for Humanities and the Center for Peace and Global Citizenship, the KINSC explores the impact of science and technology on society.

For a complete description of the KINSC, its various programs, and a calendar of upcoming events, see <http://www.haverford.edu/KINSC/index.html>.

Philip Meneely, Professor of Biology, Director
Annette Barone, Support Staff
Merleen MacDonald, Support Staff
Kay Warner, Support Staff

CENTER FOR PEACE AND GLOBAL CITIZENSHIP

The Center for Peace and Global Citizenship (CPGC) extends Haverford's long-standing commitment to social justice and works to help create a more just and peaceful world through research, education, and action. The Center encourages interdisciplinary collaboration and curricular innovation on campus, while pursuing broader initiatives beyond campus. Both local and global in reach, the Center seeks to widen and deepen Haverford's connections with social change organizations and to encourage an integrated approach to pressing social, cultural and ethical concerns. The Center sponsors and supports a range of initiatives that stand at the nexus of liberal learning, critical reflection and social action

For a complete description of the KINSC, its various programs, and a calendar of upcoming events, see <http://www.haverford.edu/CPGC/index/index.htm>.

Kaye Edwards, Associate Professor of General Programs, Director
Leslie Dwyer, Assistant Professor of Anthropology and Peace and Conflict Studies,
Academic Liaison for CPGC Programming
Donna Ruane, Administrative Assistant

AFRICANA AND AFRICAN 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, "Introduction to African and Africana Studies"; (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, "Introduction to African and Africana Studies," 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 Tracey E. Hucks, Department of Religion, on leave 2005-06

Bryn Mawr

Professor Robert Washington, Department of Sociology

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, "Introduction to African and Africana Studies," 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 Tracey E. Hucks, Department of Religion, on leave 2005-06

Bryn Mawr

Professor Robert Washington, Department of Sociology

AFRICANA AND AFRICAN STUDIES COURSES

COURSES AT HAVERFORD COLLEGE:

ANTHROPOLOGY

247b **Anthropology and Literature: Ethnography of Black South African Writing 1888-1988**

BIOLOGY

104 **Perspectives on Biology**

ENGLISH

270b **Portraits in Black**

275a **Thinking Globally, Writing Locally: Anglophone Caribbean Literature**

276b **Literature and Politics of South African Apartheid**

281g **Fictions of Empire**

361b **Topics in African-American Literature**

FRENCH

250 **Introduction aux littératures francophones** (Cross-listed in Comparative Literature)

255g **Cinema Français/Francophone et Colonialisme** (Cross-listed in Comparative Literature)

312 **Advanced Topics: "Sembène Ousmane: écrivain et cinéaste sénégalais"** (Cross-listed in Comparative Literature)

GENERAL PROGRAMS

101a **Introduction to African and Africana Studies**

MUSIC

227a **Jazz and the Politics of Culture**

PHILOSOPHY

232a **African-American Philosophy**

233 **Philosophy and Race**

POLITICAL SCIENCE

123b **American Politics: Difference and Discrimination**

230b **Topics in Comparative Politics: Political Economy in Developing Countries**

235a **African Politics**

264b **Political Economies in Developing Countries**

RELIGION

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

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

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

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

SOCIOLOGY

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

SPANISH

340b **The Moor in Spanish Literature**

COURSES AT BRYN MAWR COLLEGE:

ANTHROPOLOGY

223 **Anthropology of Dance**

228 **East African Social/Political/Cultural Development**

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**

217 **Latina/o Literature and Culture**

218 **Law and Literature**

234 **Postcolonial Literature in English**

246 **Pan-African Women Writers**

262 **African-American Literature**

255 **Counter-Cinema**

279 **Modern African Fiction**

AFRICAN AND AFRICANA STUDIES

- 331 **Queer Theory/Queer Literature**
- 343 **Translating America**
- 369 **Women Poets: Rich, Brooks, Plath**
- 379 **The African Griotte**
- 392 **National Bodies**

FRENCH

- 207 **Missionnaires et Cannibales**
- 320 **La France et ses Oriens**

GENERAL STUDIES

- 103 **Introduction to Swahili Language and Culture I**
- 105 **Introduction to Swahili Language and Culture II**

GROWTH AND STRUCTURE OF CITIES

- 237 **Urbanization in Africa**

HISTORY

- 200 **European Expansion and Competition**
- 202 **American History: Civil War to Present**
- 235 **Africa Since 1800**
- 237 **Urbanization in Africa**
- 245 **Recent U.S. History**
- 265 **American Colonial Encounters**
- 337 **Topics in African History**
- 357 **Topics in British Empire: Early Modern Pirates**

POLITICAL SCIENCE

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

SOCIOLOGY

- 215 **Challenges and Dilemmas of Diversity**
- 217 **The Family in Social Context**
- 225 **Women in Society**
- 314 **Immigrant Experiences**
- 350 **Movements for Social Justice in the US**

SPANISH

- 215 **La Literatura Afro-Hispanica**

WRITING PROGRAM

- 255b **Rhetoric of Slavery, Visions and Revisions**

ANTHROPOLOGY

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 policies 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 (textual and visual) 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, museum studies, 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.

John R. Coleman Professor of Social Sciences **Wyatt MacGaffey**, Emeritus
Associate Professor **Laurie Kain Hart**, chairperson, on leave Sem II 2005-06
Associate Professor **Maris Boyd Gillette**, on leave Sem I 2005-06

Assistant Professor **Zolani Ngwane**

Visiting Assistant Professor **Jennifer Patino**

Visiting Assistant Professor **Stuart Rockefeller**, on leave Sem I 2005-06

Visiting Assistant Professor of Peace and Conflict Studies and Anthropology **Leslie Dwyer**

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.
- (2) ANTH 210b, History and Theory of Anthropology
- (3) One area course, such as ANTH 241, Mediterranean; ANTH 245, Africa; ANTH 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) ANTH 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, Blackboard, 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); ANTH 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.

REQUIREMENTS FOR HONORS

Honors are awarded in anthropology based upon overall excellence in the major. "Excellence" is defined by three criteria: outstanding work in the senior thesis (final written work and oral presentation), strong cumulative performance in all anthropological coursework (typically a grade point average of 3.7 or higher), and a record of consistent intellectual commitment and participation in the department. High Honors will be awarded, upon occasion, for exceptional contributions in all areas.

COURSES

103a **Introduction to Anthropology** SO

L. Hart, J. Patino

An introduction to the basic ideas and methods of social anthropology. Examines major theoretical and ethnographic concerns 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.)

105 **Anthropology and Creativity** SO (Cross listed in Comparative Literature)

S. Rockefeller

This course explores the many ways that anthropology and anthropologists have studied, engaged in, and stimulated artistic creativity. We will read essays, ethnographies, poems, novels, and life histories, tracing possibilities of anthropology as a creative discipline and a way of experiencing creativity. Students will present independent term projects in class. *Limited to 20 students.*

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. *Not offered 2005-06.*

111 Peace and Conflict Studies SO (Cross-listed in General Programs)

L. Dwyer

This course is an introduction to the interdisciplinary field of peace and conflict studies. Drawing on perspectives from anthropology, social psychology, political science and history, we will consider both why conflicts occur and what kinds of responses – from formal institutional structures to community-based peace movements – are available to address them. *Enrollment limited to 40 students.* (Satisfies the social justice requirement.)

155b Themes in the Anthropology of Religion SO (Cross-listed in Religion)

Staff

Not offered 2005-06.

201a Peace and Global Citizenship: Theory and Experience SO (Cross-listed in General Programs and Peace & Global Citizenship)

L. Dwyer

On the basis of assigned readings and the students' internship experiences, we will explore the promises and challenges associated with the interaction of various segments of the global civil society. We will consider what entitlements and obligations characterize citizenship in different parts of the world, as well as how the conceptual and geographical boundaries of this citizenship are expanding. Open to students who have completed summer internships with the Haverford College Center for Peace and Global Citizenship, and, with permission of the instructors, to students who have had similar work, study or travel experiences. (Satisfies the social justice requirement.)

202b Among Men: Construction of Masculinities SO

Z. 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. *Not offered 2005-06.*

204b 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. *Not offered 2005-06.*

205 Social Anthropology SO

M. Gillette

In this course we examine systems of production and how they intertwine with other aspects of social organization, such as kinship and gender, and are affected by large scale social forces, such as market dynamics and globalization. Our focus will be small-scale artisans and craft producers. Students will conduct independent research on a productive system of their choice. *Prerequisite:* Anthropology 102, 103 or 110.

206b Anthropology of Art SO

L. Hart

Art as a Western institution: Art and anti-art in the 20th century. History and sociology of collecting "primitive" art. African art in cultural context. Icons and iconography.

Prerequisite: One course in Anthropology, Fine Arts, or permission of the instructor.

Not offered 2005-06.

207 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. *Not offered 2005-06.*

208a Museum Anthropology SO (Cross-listed in Comparative Literature)

M. Gillette

This course investigates the rise and proliferation of museums and museological consciousness in comparative perspective. Topics to be considered include: Objects and their meanings and values. Collecting, ownership, and relations of power. Exhibitions, imperialism, and colonialisation. 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. *Not offered 2005-06.*

209b Anthropology of Education: State of the Debate SO

Z. 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 reproduction 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

S. Rockefeller

The development of anthropological thought in the West. Enlightenment theories of society and the human subject, the study of social organization in 19th and early 20th centuries (including Marx and Durkheim), "social anthropology" and "cultural anthropology." Structuralism, Marxist anthropology, postmodernism and the crisis of representation in the 1980s and 1990s. *Prerequisite:* One course in anthropology. Not open to those who have completed BMC History and Theory of Anthropology.

216a Women and Power in Comparative Perspective SO/SJ

Staff

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.)

229 Anthropology of Europe SO

J. Patico

This course surveys ethnographic accounts of everyday life, community, and modernization in rural and urban Europe in the context of a critical study of the concept of Europe in anthropology. What does it mean to be "European," how has anthropology helped to define and question this category, and how have concepts of "Europe" influenced the anthropological enterprise? We examine the historical and discursive processes according to which the "West" has been understood as distinct from the "Rest," and Eastern Europe as distinct from Europe proper.

234 Violence, Terror, and Trauma SO (Cross-listed in Peace & Conflict Studies)

L. Dwyer

This course will explore ways of understanding violence, its causes and its social effects. It will attend to the ways in which violence articulates with cultural framings of gender, language, self, body, and community and with the powers of the state. We will also look at the political and cultural implications of representations of violence and terror created by scholars, the media, and international aid organizations. We will conclude by critically examining various frameworks for understanding and effecting reconciliation and recovery in the aftermath of violence. *Prerequisite:* One course in Anthropology or Peace and Conflict Studies. *Not offered 2005-2006.*

241 Anthropology of the Mediterranean SO (Cross-listed in Comparative Literature)

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. *Not offered 2005-06.*

247a,b Anthropology and Literature: Ethnography of Black South African Writing 1888-1988 SO

Z. 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 1980's. *Not offered 2005-06.*

257b Ethnic Conflict SO

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.) *Not offered 2005-06.*

258 Politics of Culture and Identity SO

L. Dwyer

This course will examine how "culture" and "identity" have become increasingly important

frameworks through which claims to resources, rights, and power are articulated. Drawing on a diverse set of case studies, we will ask how we can approach politics of culture and identity ethnographically, and what role anthropology might have to play in such struggles.

261a,b 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. *Not offered 2005-06.*

263b Anthropology of 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. May be taken for Bryn Mawr Cities credit. *Prerequisite:* One other course in anthropology or architecture, or permission of the instructor.

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. *Not offered 2005-06.*

324b Post-Conflict Trauma and Psychosocial Repair SO

L. Dwyer

An exploration of the social, cultural, and psychological processes that occur in the aftermath of conflict. Drawing upon anthropological, psychoanalytic, and development literatures on trauma, social suffering, and psychosocial repair, we will focus on the role of social practices such as memory, narrative, ritual, and healing in shaping post-conflict society and subjectivity. *Enrollment limited to 20 students.* (Satisfies social justice requirement.)

345 Love and the Market: Anthropological Explorations in Gender, Economy, and Morality SO (Humanities)

J. Patico

An exploration of personhood and social relations in terms of the complex interplay of ideas about interest and disinterest, materialism and morality, power and sentiment in everyday life and anthropological thought. How do idealized notions of "family" and "home" intersect with economic concerns in different kinship systems? How do we make sense of the "commodification" of persons or things also understood to have "higher" or moral value? Topics include kinship, gender, and public/domestic spheres; theories of "social" and "symbolic capital"; consumption, exchange, and prestige; sex work. *Prerequisite:* A 200-level anthropology course, or permission of instructor.

350a,b Social and Cultural Theory SO

Staff

Not offered 2005-06.

355 Anthropology and the New Faces of Modernity SO

Z. Ngwane

An examination of recent trends in reflection on modernity in the human and social sciences. This course addresses questions about social subjectivity, globalization and the endurance of modernity through a number of ethnographic snapshots from different parts of the world.

Prerequisite: One 200-level course in Anthropology or consent of the instructor.

415 Research Seminar in the Material Culture of China SO (Cross-listed in East Asian Studies)

M. Gillette

This advanced research seminar is about Chinese material culture in its historical and contemporary manifestations. Particular attention will be paid to Chinese ceramics. Students will design & complete individual research projects centered on objects, architectural installations, and other manifestations of Chinese material culture available in the Philadelphia area.

450a,b Senior Seminar: Research and Writing SO

L. Hart, Z. Ngwane, J. Patino

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.

451b Senior Seminar: Supervised Research and Writing SO

M. Gillette, Z. Ngwane, J. Patino

Supervised Research and Writing is the second in the two-course sequence for seniors in Anthropology. Students will complete a thesis using primary sources and/or fieldwork and will participate in a thesis writing workshop. *Prerequisite:* Senior standing in Anthropology at Haverford.

460a,b Teaching Assistantships SO

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).

480a,b,f,i Independent Study SO

Staff

ANTHROPOLOGY

COURSES OFFERED AT BRYN MAWR COLLEGE

Department of Anthropology:

- 102 **Introduction to Anthropology**
- 225 **Paleolithic Archaeology**
- 231 **Cultural Profiles Modern Exile**
- 232 **Nutritional Anthropology**
- 234 **Forensic Anthropology**
- 236 **Evolution**
- 253 **Childhood in the African Experience**
- 262 **South Asian Ethnography**
- 267 **Development of Modern Japanese Nation**
- 270 **Geoarchaeology**
- 281 **Language in Social Context**
- 333 **Anthropological Demography**

Growth and Structure of Cities Program:

- 185 **Urban Culture and Society**
- 229 **Comparative Urbanism – Global Ex-urbias**
- 359 **Techniques of the City**
- 242 **Urban Field Research Methods**

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 Richard S. Ellis, emeritus

Professor Brunilde S. Ridgway, emeritus

Professor Stella Miller-Collett, chairperson, Sem II

Professor James C. Wright, chairperson, Sem I, on leave Sem II

Assistant Professor Mehmet-Ali Ataç

Associate Professor A. A. Donohue, on leave 2004-06

Assistant Professor Peter Magee, major advisor

Lecturer Pamela A. Webb

Instructor Geoffrey Compton

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.

CONCENTRATION IN GEOARCHAEOLOGY

Beginning in 2005 the departments of anthropology, classical and Near Eastern archaeology, and geology will offer a concentration in geoarchaeology. The concentration allows students majoring in Anthropology, Archaeology or Geology to explore the connections among these fields with respect to how our human ancestors interacted with past environments, and how traces of human behavior are preserved in the physical environment. Please consult with Professor Magee regarding this program.

REQUIREMENTS:

A. Two 100-level units from ANTH, CNEA or GEOL, of which one must be from the dept outside the student's major. Possibilities include CNEA 101, ANTH 101, GEOL101, GEOL 102 or GEOL103.

B. ANTH/CNEA/GEOL 270: Geoarchaeology (Magee and Barber).

C. BIOL/CNEA/GEOL 328: Geospatial Data Analysis and GIS (Compton).

D. Two elective courses, to be chosen in consultation with the major advisor, from among current offerings in Anthropology, Classical and Near Eastern Archaeology and Geology. One of these two courses must be from outside the student's major. Suggested courses include but are not limited to ANTH 203 (Human Ecology), ANTH 220 (Methods and Theory), ANTH 225 (Paleolithic Archaeology), ANTH 240 (Traditional Technologies), CNEA 308 (Ceramic Analysis), CNEA 332 (Field Techniques), GEOL 202 (Mineralogy), GEOL 205 (Sedimentology), GEOL 310 (Geophysics), and GEOL 312 (Quaternary Climates).

REQUIREMENTS FOR HONORS

Students with a GPA of 3.5 in the major may be invited by the faculty to undertake work 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 who are invited to work with a faculty member may register for a unit of independent study (403) either semester of the senior year. The paper will be read by the advising faculty member and one other member of the department and an oral defense will be scheduled. Honors are granted if the final paper is considered of superior quality (3.3 or above). Honors papers must be submitted by 5 pm on the Friday before the last day of classes in the second semester.

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.

Professor Peter Magee conducts excavations at Muweilah in the United Arab Emirates. Undergraduate and graduate students in archaeology participate in this project, which usually takes place during the winter break.

Professor James Wright directs the Nemea Valley Archaeological Project in Greece. Currently a collaboration with the Ms. Eva Pappi of the Fourth Inspectorate of Prehistoric and Classical Antiquities of the Greek Ministry of Culture is focused on excavating a Mycenaean chamber tomb cemetery in the valley. Fieldwork is anticipated for the summers of 2006 - 2008. Undergraduate and graduate students in archaeology participate in this project, which focuses on excavation techniques, skeletal analysis, and museum studies.

The department is collaborating with Professor Asli Özyar of Bogaziçi University in Istanbul, in the Tarsus Regional Project, Turkey, sponsored by Bogaziçi University. This is a long-term investigation of the mound at Göztlü Küle at Tarsus, in Cilicia, which was first excavated by Hetty Goldman. Both undergraduate and graduate students in archaeology 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. Students wishing to study abroad are strongly encouraged to meet with the major adviser early in their sophomore year in order to be sure they will be able to fulfill the requirements for the major.

COURSES

101 The Uses of the Past: Introduction to Egyptian and Near Eastern Archaeology HU
M-A. Ataç and P. Magee

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 first semester.*

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 second semester.*

203 Ancient Greek Cities and Sanctuaries

J. C. Wright

A study of the development of the Greek city-states and sanctuaries. Archaeological evidence is surveyed in its historic context. The political formation of the city-state and the role of religion is presented, and the political, economic, and religious institutions of the city-states are explored in their urban settings. The city-state is considered as a particular political economy of the Mediterranean and in comparison to the utility of the concept of city-state in other cultures. *Not offered in 2005-06.*

205 Greek Sculpture

P. Webb

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. *Not offered in 2005-06.*

206 Hellenistic and Roman Sculpture (Cross-listed as History of Art 206)

A. A. Donohue

This course surveys the sculpture produced from the fourth century B.C. to the fourth century A.D., the period beginning with the death of Alexander the Great that saw the transforming of the classical world through the rise of Rome and the establishment and expansion of the Roman Empire. Style, iconography, and production will be studied in the contexts of the culture of the Hellenistic kingdoms, the Roman appropriation of Greek culture, the role of art in Roman society, and the significance of Hellenistic and Roman sculpture in the post-antique classical tradition. *Not offered in 2005-06.*

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 2005-06.*

220 Araby the Blest: the Arabian Peninsula from 3000 to 300 B.C.E.

P. Magee

A survey of the archaeology and history of the Arabian peninsula focusing on urban forms, transport, and cultures in the Arabian peninsula and Gulf and their interactions with the world from the rise of states in Mesopotamia down to the time of Alexander the Great. *Offered in second semester.*

ARCHAEOLOGY – CLASSICAL AND NEAR-EASTERN AT BRYN MAWR COLLEGE

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. *Not offered in 2005-06.*

230 Archaeology and History of Ancient Egypt HU

M-A. Ataç

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 2005-06.*

233. Great Empires HU

M-A. Ataç

A survey of the history, material culture, political and religious ideologies of, and interactions among the five great empires of the ancient Near East of the second and first millennia B.C.E.: New Kingdom Egypt, the Hittite Empire in Anatolia, the Assyrian and Babylonian Empires in Mesopotamia, and the Persian Empire in Iran. *Offered in second semester.*

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. *Not offered in 2005-06.*

270 Geoarchaeology

P. Magee and D. Barber (Geology).

Geoarchaeology is the study of the processes by which humans interacted with their physical environment; how archaeological sites are formed in the environment; and the methods by which archaeologists and geologists analyze these sites. Geoarchaeology uses geological techniques to reconstruct past environments at or near archaeological sites, providing physical context for cultural adaptations. *Offered in first semester.*

302 Greek Architecture HU (Cross-listed as Cities 302)

P. Webb

The Greek architectural tradition and its historical development. *Not offered in 2005-06.*

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. *Offered in first semester.*

308 Methods and Techniques of Pottery Analysis HU (Cross-listed as 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. *Offered in first semester.*

321 The Archaeology of Magna Graecia HU

P. Webb

A study of Sicily and southern Italy from the time of the arrival of Phoenicians and Greeks in the 8th c. B.C.E. through the flourishing of their colonies down to the time of Roman conquest. The course will survey historical sources and study the remains of the cities, their temples, theaters and other architecture, sculpture and other arts, and material remains. *Offered in the second semester.*

324 Roman Architecture HU

(Cross-listed as Latin 324 and Growth and Structure of Cities 324)

R. Scott

The architecture of the Republic and the early Roman Empire. *Not offered in 2005-06.*

327 Spatial Analysis in Archaeology

G. Compton

The spatial dimensions of social phenomena are critical issues in archaeological theory and method. Sophisticated approaches are being employed by archaeologists to document the spatial contexts of past human activities, as the once dominant geographic view of space as an inflexible absolute has been replaced by the recognition that space is foremost a social product and that structures, settlements, landscapes and regions are inhabited, organized and perceived by societies and individuals in a multitude of ways. The goal of this course is therefore to introduce students to current methods for the qualitative analysis of ancient spaces and the quantitative analysis of the spatial attributes of archaeological data. *Not offered in 2005-06.*

328 Analysis of Geospatial Data (Cross-listed as Geology 328 and Biology 328)

G. Compton

This course offers students both an introduction to the conceptual basis of GIS (geographic information system software) applications and opportunity to gain practical experience in using one of the most popular proprietary software packages, ArcGIS. Students are taught to "think spatially," a skill that is useful in research, in the critical assessment of published research, and in careers where the management and analysis of spatial data are important. In addition to lectures, the course has a mandatory weekly laboratory. Required projects for students in archaeology are developed using raw data from the Nemea Valley Archaeological Project. *Offered in the second semester.*

332 Archaeology Field Techniques

P. Magee

Learning to excavate, survey, and understand the resultant information is an important skill 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. *Not offered in 2005-06.*

ARCHAEOLOGY – CLASSICAL AND NEAR-EASTERN AT BRYN MAWR COLLEGE

351 **The Phoenicians** HU

G. Compton

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. *Offered in first semester.*

398/399 **Senior Conference**

P. Magee, P. Webb

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.

Associate Professor **Karl Kirchwey**, director of the creative writing program, chairperson

Associate Professor **Linda Caruso-Haviland**, director of dance

Associate Professor **Mark Lord**, director of theater

Senior Lecturer **Madeline Cantor**, associate director of dance

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 **Elizabeth Mosier**, creative writing

Adjunct Lecturer **Glenda Adams**, creative writing

Adjunct Lecturer **Rachel Simon**, creative writing

Adjunct Lecturer **Ann Kjellberg**, creative writing

Adjunct Lecturer **Marc Lapadula**, creative writing and theater

Adjunct Lecturer **Ben Downing**, creative writing

Adjunct Lecturers (Poetry Master Class) **Frank Bidart, Lucille Clifton, Paul Muldoon, and Carol Muske-Dukes**, creative writing

Dance Staff

Renee Banson, Dede Barfield, Myra Bazell, Yasmin Goodman, Corinne Karon, Grace Mi-He Lee, Dolores Luis, Rebecca Malcolm-Naib, Amanda Miller, Linda Mintzer, Jeannine Osayande

INTER-ARTS

COURSES

251 Arts Teaching in Educational and Community Settings

M. Cantor

This course is a Praxis II course (4-6 hours per week in a school or community placement) intended for students who have substantial experience in an art form and are interested in extending that experience into teaching and learning at educational and community sites. Following an overview of the history of the arts in education, the course will investigate the theories that underlie arts education. The praxis component will allow students to create a fluid relationship between theory and practice through observing, teaching, and reflecting on arts practices in education contexts. *Prerequisites:* Students must have at least an intermediate level of experience in an art form (consult with instructor). *Enrollment limited to 15.*

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, dance 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. *Not offered 2005-06.*

142 Dance Composition I HU

D. Brick

This is a course about making dances that explores basic elements of dances including space, time, rhythm, energy, dynamics, qualities of movement and gesture, and both traditional and postmodern structures. Compositional theory will be approached through the experience and practice of making dance studies starting with simple solo phrases and moving towards more complex and interactive group forms and processes. While primarily a studio course, students will be expected to begin to develop and broaden their understanding of dance as an art form and their abilities to see and critique dances. To this end, students will also be assigned readings.

223 Anthropology of Dance HU/SO (Cross-listed as Anthropology 223)

Staff

This course will first introduce various approaches to the study of dance anthropology as it relates to movement, body, culture, and power by examining theoretical approaches ranging from semiotics of the body, dance and communication theory, and phenomenology to performance, postcolonial, and feminist theories. This will entail cultural analysis of dance styles from Brazil, Haiti, and West Africa, among other places. The second part of the course will use various ethnographies and literature in a focus on India as a case study, to examine how anthropological issues in dance are closely tied to issues of modernity, regional and national identity, gender, and politic in post-colonial nation-states. *Not offered 2005-06.*

240 Dance History I: Roots of Western Theatre Dance

L. Caruso-Haviland

The study of the history of pre-twentieth century dance with particular emphasis on the development of dance within the broader context of Western Art and Culture. We will investigate the historic and cultural forces affecting the development and function of dance, including its non-theatrical forms and applications, but with special emphasis on the development of theatre dance forms. Students should become more conversant with the chronological and contextual framework of the principle events, persons, trends in dance history and become more informed and articulate about its relationship to and impact on the development of Western Culture. We will also learn to recognize, analyze, and make sense of the varied forms of the historic documentation of dance, and, hopefully, to view history not only as a logical evolution or linear progression of events but also as process, change, and cultural shift. The course includes lectures, discussions, and the use of Multimedia materials.

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 2005-06.*

242 Dance Composition II

M. Cantor

The goal of this course is to build on work accomplished in Composition I and to develop an understanding of and skill in the theory and craft of choreography. This includes:

- deepening movement invention skills
- exploring form and structure in dancemaking
- investigate sources for sound, principally music, but including text, language, and vocalizations as well
- developing control of group design
- broadening critical understanding

Students will work on fewer projects than in Comp I and will thus have more opportunities to revise and expand work. Readings will be assigned and related production problems are considered.

250 Performing the Political Body

Staff

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. *Not offered 2005-06.*

B252 Africanisms in American Culture: Dance and Other Contexts

B. Dixon-Gotschild

What do the Lindy Hop, American ballet, hand-jiving, Leonard Bernstein's scores, and the novels of Ernest Hemingway and Ralph Ellison have in common? In this course we will explore the African-based, or Africanist, traditions and attitudes that pervade our daily lives from basketball to ballet. We use a cultural equation as our starting point: cultural exchange is a recursive process. We interrogate the sometimes complementary, sometimes oppositional relationship between Africanist and Europeanist worldviews as they are manifested in the aesthetic and philosophical choices that dictate our lifestyles. In order to do so, we examine the broad fundamentals that comprise both Africanist and Europeanist perspectives. Specific examples of the Africanist aesthetic are explored in dance, music, literature, and daily life through readings, discussion, video screenings, and studio experiences. Readings are drawn from the fields of linguistics, literary criticism, and performance studies. The theoretical core of the course is augmented by 2-3 studio sessions that will allow students to "try on" contrasting examples of Africanist and Europeanist practice, ranging from specific dance motifs to ways of walking and talking. *Not offered 2005-06.*

256 Arts Teaching in Educational and Community Settings

M. Cantor

See Inter-Arts 251.

ARTS PROGRAM AT BRYN MAWR COLLEGE

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.

Dance Technique

Three levels of ballet and modern dance are offered each semester. Improvisation, African dance and jazz are offered each year. Courses in techniques developed from other cultural forms, 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 some intermediate and advanced level courses for academic credit. (*Staff*)

231 **Intermediate Dance Technique: Modern**

331 **Advanced Technique: Modern**

232 **Intermediate Dance Technique: Ballet**

332 **Advanced Dance Technique: Ballet**

Dance Performance

Dance Ensembles (modern, ballet and jazz) are designed to offer students significant opportunities to develop dance technique, particularly in relationship to dance as a performance art. Original works or reconstructions from the historic or contemporary repertory choreographed by faculty or guest choreographers are rehearsed and performed. This course, open to intermediate- and advanced-level dancers by audition or permission of instructor, may in some cases be taken for academic credit or for physical education credit. Students who participate in the Dance Outreach Project, a dance performance/ education program that tours Philadelphia and suburban schools and community groups, can receive physical education credit.

345 **Dance Ensemble: Modern (001); Ballet (002); Jazz (003)**

390 **Senior Thesis/Project**

403 **Supervised Work**

M. Cantor, L. Caruso-Haviland

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

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.

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. *Not offered 2005-06.*

253 **Performance Ensemble** HU

M. Lord

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.

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. *Not offered 2005-06.*

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.

256 **Arts Teaching in Educational and Community Settings**

M. Cantor

See Inter-Arts 251.

ARTS PROGRAM AT BRYN MAWR COLLEGE

262 Playwriting I HU (Cross-listed as Creative Writing 262)

M. Lapadula

This course is run as a workshop, with emphasis on in-class development of student work. Our focus for this introductory playwriting class will be on theme, storytelling and dramatic action, and the weaving of these three elements into a consistent and coherent whole. To achieve this we will be concentrating primarily on the 10-minute play form. Through weekly playwriting/rewriting assignments, students will be expected to complete two stage worthy 10-15 minute original plays during the semester. Since theatre is a collaborative art, students should come to class fully prepared to become actively involved in the work of their peers. We will not only be critiquing each other's work, but acting in and directing it as well. Also, students should expect to meet individually with the professor on at least a bi-weekly basis to discuss and defend their dramatic efforts.

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 2005-06.*

351 Acting II: Solo Performance

Staff

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. *Not offered 2005-06.*

353 Advanced Performance Ensemble

Staff

An advanced, intensive workshop in theatre performance. Led by a faculty director, students explore a range of performance techniques in the context of rehearsing a performance project and participate in weekly seminars in which the aesthetic and theatrical principles of the play and production will be developed and challenged. The course may be repeated.

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. *Not offered 2005-06.*

356 Endgames: The Theater of Samuel Beckett

M. Lord

An exploration of Beckett's theater work conducted through both reading and practical exercises in performance techniques. Points of special interest 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.

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. *Not offered 2005-06.*

362 Advanced Playwriting (Also called Creative Writing 362)

Staff

Not offered 2005-06.

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.

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, playwriting, screenwriting, feature journalism, and literary journalism) 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. Any major 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 beginning/intermediate courses chosen from among 159, 260, 261, 262, 263, 264, 265, 266, 268, and 269, and three electives, including at least one course at the 300 level (360, 361, 362, 364, 367, 371, 373), allowing for advanced work in one or more genres of creative writing which are of particular interest to the student. The objective of the minor in creative writing is to provide both depth and range, through exposure to the genres of creative writing. Students should consult with the creative writing program director about a plan for the minor in order to ensure admission to the appropriate range of courses.

COURSES

159 Introduction to Creative Writing

E. Mosier

This course is designed for students who wish to experiment with three genres of creative writing: short fiction, poetry and drama. Priority will be given to interested first-year students; additional spaces will be made available to upper-year students with little or no experi-

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ence 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 class time will be spent discussing student work, and half will be spent discussing syllabus readings.

251 Travel Writing

B. Downing

This course introduces students to a genre that is too rarely studied or attempted. The first purpose of the course is to introduce students to masterpieces of travel writing in order to broaden students' understanding of the genre and the world. The second is to give students a chance to experiment with travel writing. Finally, the course seeks to sensitize students to the nuances of style (diction, syntax, etc.) that affect the tone and texture of a writer's prose. While students need not have traveled extensively in order to take this course, passionate curiosity about the world is a must.

260 Writing Short Fiction I HU

E. Mosier (Semester I), R. Simon (Semester II)

This course offers an introduction to fiction writing, focusing on the short story. Students will consider fundamental elements of fiction and the relationship of structure, style and subject matter, exploring these elements in their own work and in the assigned readings to develop an understanding of the range of possibilities open to the fiction writer. Writing exercises are designed to encourage 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.

261 Writing Poetry I

K. Kirchwey

This course will provide a semester-long survey of the formal resources available to students wishing to write print-based (as opposed to spoken-word) poems in English beginning with syllabic verse, accentual verse, and accentual-syllabic (metered) verse, as well as free verse. The sound of poetry has always been one of its most important resources, in rap and hip-hop or in poetry written for the printed page. Students will gain experience writing in a variety of verse forms (including cinquains, Anglo-Saxon accentual verse, and sonnets), as part of an ongoing tradition of poets writing on particular subjects in particular voices and forms.

262 Playwriting I (Also called Theater 262) HU

M. Lapadula

This course is run as a workshop, with emphasis on in-class development of student work. The focus will be on theme, storytelling and dramatic action, and on weaving these three elements into a coherent whole. This will be achieved by concentrating primarily on the 10-minute play form. Through weekly playwriting/rewriting assignments, students will complete two stageworthy 10-15 minute original one-act plays and a notebook of critical comments. Students will critique each other's work as well as act in and direct it. Students will have individual meetings with the instructor at least biweekly to discuss and defend their dramatic efforts.

263 Writing Memoir I HU

K. Kirchwey

The purpose of this course is to provide students with practical experience in writing about the events, places and people of their own lives in the form of memoir. Initial class discus-

sions 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 is to explore the range of memoirs available for use as models (excerpts by writers including Elizabeth Bishop, Jaques Casanova, Annie Dillard, Frederick Douglass, Maxine Hong Kingston, and Tim O'Brien) and elements such as voice and perspective, tone, plot, characterization, and the use of symbolic and figurative language. *Not offered 2005-06.*

264 Feature Journalism HU

E. Lotozo

Unlike straight news stories, which tell the who, what, when, and where of unfolding events, feature articles tell stories about people, places, events, trends, and issues. This course will consider the many forms that feature writing 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, structures, and voices to discover what makes for lively and effective feature writing. Prominent journalists will be guest speakers. *Not offered in 2005-06.*

265 Creative Nonfiction HU

R. Simon

This course will explore the literary expressions of nonfiction, looking at the continuum from the objective, as exemplified by the nonfiction novel and literary journalism, to the subjective, as exemplified by the personal essay and memoir. Using the information-gathering tools of the journalist, the self-examination tools of the essayist, and the technical tools of the fiction writer, students will produce pieces that will incorporate both factual information and first person experience. An important goal is for students to learn to read as writers, to allow their analytical work to feed and inform their creative work. *Not offered in 2005-06.*

266 Screenwriting HU

N. Doyne

This combination discussion/workshop course is an introduction to dramatic writing for film. Basic issues in the art of storytelling will be analyzed: theme, dramatic structure, image, and sound. The course 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 a character compelling, and conflict dramatic? How does a story engage our emotions? Through written exercises, close analyses of texts, and the screening of film, we will come to better understand the tools and dictates of film writing. *Not offered in 2005-06.*

268 Writing Literary Journalism HU

A. Kjellberg

This course will examine the tools that literary writers bring to factual reporting and how these tools enhance the stories they tell. Readings will include reportage, polemical writing and literary reviewing. The issues of point-of-view and subjectivity, the uses of irony, forms of persuasion, clarity of expression, and logic of construction will be discussed. The importance of context – the role of the editor and the magazine, the expectations of the audience, censorship and self-censorship – will also be considered.

269 Writing For Children HU

E. Mosier

This course will offer students the opportunity to learn to write imaginatively for children

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aged pre-K through young adult. Students in the course will learn to read as writers, to allow their analytical study of classic and contemporary literature – from fairy tales to the fantastic, from poetry to the so-called “problem” novel – to feed and inform their creative work through the discoveries they make about character, plot, theme, setting, point of view, style, tone, and structure. Regular writing exercises, annotations of readings, class discussion, peer review, and private conferences will provide guidance for each student’s unique exploration of content and style. *Not offered in 2005-06.*

360 Writing Short Fiction II HU

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 2005-06.*

361 Writing Poetry: II HU

Staff

This course is intended for students of poetry as a continuation of Creative Writing 261. This course will continue the survey of the forms of English and American print-based poetry and will include exercises in writing the following: sestinas, villanelles, ballads, ekphrastic poems (about works of art) and dramatic monologues. Several book-length collections of poems will be discussed for their strategies and architecture. Each student will be responsible for rendering into English a poem from a foreign language with which she is familiar. *Prerequisite:* Creative Writing 261 or work demonstrating equivalent familiarity with the basic forms of poetry in English. *Not offered in 2005-06.*

362 Playwriting II HU

Staff

This course focuses on the development of a project (a 30+ page one-act play) from conception to production-ready script. Students should have proposals (1-2 pages) for at least two possible projects prior to the first class meeting. The workshop process begins with a thorough examination of the student’s accepted proposal followed by a series of drafts, aided by project-specific exercises aimed at isolating and strengthening the play’s dramatic elements: character, dialogue, setting and spectacle. *Prerequisite:* Creative Writing 262; or suitable experience in directing, acting or playwriting; or submission of a work sample including two short plays or an acceptable equivalent. *Not offered in 2005-06.*

364. Approaches to the Novel HU

G Adams

An advanced workshop for students with a strong background in fiction writing who want to write a novel. Students are expected to write intensively, taking advantage of the structure and support of the class to complete the first draft of a (25,000-30,000 word) novel/novella. Students will examine elements of fiction in their work and in novels on the reading list, exploring strategies for sustaining the writing of a long work. *Prerequisite:* Creative Writing 260 or proof of interest and ability. A writing sample of 10 double-spaced pages should be submitted to the instructor by the end of the fall semester.

366. **Writing Memoir II HU**

K. Kirchwey

This course will enable students to complete one or two longer memoirs in the semester. The syllabus readings for the course will focus on book-length memoirs (by authors such as James Baldwin, Paula Fox, Vivian Gornick, Primo Levi, Mary McCarthy, Tobias Wolff). Types of memoir (the memoir of childhood; the memoir of place; the memoir of illness and recovery; the memoir of war and civil unrest) will be considered as templates for the students' own writing. Discussions of syllabus reading will alternate with discussions of weekly student writing assignments. *Prerequisite:* Creative Writing 263 or work demonstrating equivalent expertise. *Not offered in 2005-06.*

367 **Advanced Fiction/Nonfiction HU**

Staff

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 visiting instructors who are also writers known for their work both in fiction and in nonfiction. *Prerequisite:* Creative Writing 260, 263 or 265, or work demonstrating equivalent mastery of fiction or nonfiction prose. *Not offered in 2005-06.*

371 **Fiction Master Class HU**

Staff

This course is intended to provide advanced students of fiction with the opportunity to diversify, extend and deepen their work. Students will submit three or four short stories during the semester, and will take at least one story through the revision process. Class time will be divided equally between discussion of student writing and syllabus readings. Students will be responsible for careful readings of each others' work, and should be prepared to participate in constructive critical discussions of this work. *Prerequisite:* an intermediate-level fiction course or comparable mastery of the elements of fiction writing. *Not offered in 2005-06.*

373 **Experimental Writing HU**

Staff

This course will introduce advanced writing students to new forms in fiction writing. Students will examine the challenges to convention in 20th- and 21st-century fiction, the open-ended character, experiments in time and narration, and new combinations of traditional literary and film genres – fairy tales, myth, and film noir. include Martin Amis, Italo Calvino, Angela Carter, Jim Crace, Don DeLillo, Michel Foucault, William Gass, Jürgen Habermas, Susanna Moore, Mary Shelley, Jeanette Winterson, and Mary Wollstonecraft. *Not offered 2005-06.*

B382 **Poetry Master Class HU**

This course is intended for students who have completed Creative Writing 261 (Creative Writing 361 is also strongly recommended) or who can demonstrate equivalent proficiency in writing verse. Four major contemporary poets – Frank Bidart (Wellesley College), Paul Muldoon (Princeton University) and Carol Muske-Dukes (University of Southern California) – will each teach a three-week-long unit in this course. Discussions of syllabus reading will alternate with discussions of student poems. Students will have a chance to have their poems reviewed by each of the four visiting poets, who will also present a public reading of their work. *Prerequisite:* Creative Writing 261.

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403 **Supervised Work** HU

Staff

Students who have completed beginning or intermediate and advanced-level courses in a particular genre of creative writing and who wish to pursue further work on a tutorial basis may meet with the Creative Writing Program director to propose completing a one-semester-long Independent Study course with a member of the Creative Writing Program faculty.

Haverford College currently offers the following English courses in creative writing:

291a. **Poetry Writing: A Practical Workshop**

292b. **Poetry Writing II**

293a. **Fiction Writing: From the Conventional to the Experimental**

294b. **Fiction Writing: States of Mind**

ASTRONOMY

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 206b and Physics 214b follow in the spring semester. 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**
Betye and Howard Marshall Professor of Natural Sciences **R. Bruce Partridge**
Visiting Assistant Professor of Physics **Fronefield Crawford III**

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. Two mathematics courses are also required for the astronomy major; Mathematics 121 and all 200-level or higher mathematics courses can be used to satisfy this requirement. 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 given 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. *Offered in 2007-08 and alternate years.*

112a **Survey of the Cosmos** NA/QU

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 exponential 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. *Prerequisite:* No prerequisites, but Astronomy 101 is useful. *Offered in 2006-07 and alternate years.*

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 2006-07 and alternate years.*

152i Freshman Seminar in Astrophysics NA (Cross-listed in Physics)

S. Boughn

This half-credit course is intended for prospective physical science majors with an interest in recent developments in astrophysics. Topics in modern astrophysics will be viewed in the context of underlying physical principles. Topics include black holes, quasars, neutron stars, supernovae, dark matter, the Big Bang, and Einstein's relativity theories. *Prerequisite:*

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. *Prerequisite:* 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. *Prerequisite:* Astro 205a, Math 114b or equivalent or permission of the instructor.

313c Observational Optical Astronomy NA

S. Boughn

One credit, full year course. Five observing projects that involve using the 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 2005-06 and alternative years.*

321b Stellar Structure and Evolution NA

S. Boughn

The theory of the structure of stellar interiors and atmospheres and the theory of star formation and stellar evolution, including compact stellar remnants. *Prerequisite:* Astro 204a and Phys 214b. *Offered in 2006-07 and alternate years.*

322a 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, and alternate years. *Prerequisite:* Astronomy 205a and 206b, or consent of instructor. *Offered in 2006-07.*

404a,b Research in Astrophysics NA

S. Boughn, R. B. Partridge, F. Crawford

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.

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

STAFF

Joseph A. Amorim (soccer)
David Beccaria (baseball)
Amy Bergin (volleyball)
Thomas Donnelly (cross-country, track)
John Douglas (sports information director)
Jen Ward (softball)
Kamran Rashid Khan (cricket)
Ann Koger (tennis)
David Littell (fencing)
Michael Mucci (basketball)
Michael Murphy (lacrosse)
James Osborne (basketball)
Francis Rizzo (cross-country, track)
MaryAnn Schiller (field hockey, lacrosse)
Sean Sloane (squash, tennis)
Wendy Smith (soccer)
Ty Taylor (multicultural recruiting intern)

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.

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. However, students may not obtain both a chemistry minor and a biochemistry concentration, and they may not obtain both a physics minor and a biophysics concentration.

Professor Robert C. Scarrow, concentration advisor, chemistry

Associate Professor Karin Åkerfeldt, concentration advisor, chemistry

Associate Professor Suzanne Amador Kane, concentration advisor, physics

Associate Professor Jennifer Punt, concentration advisor, biology

Associate Professor Robert Fairman, concentration advisor, biology

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), 306 (inter- and intra-cellular communication) or 309 (molecular neurobiology). Chemistry 100-101 (or 105; general chemistry) and 220a (organic chemistry I). Mathematics: one semester of courses numbered 114 (calculus II) or higher. 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 351 (bioinorganic chemistry), 352 (topics in biophysical chemistry) and 357 (topics in bioorganic chemistry);
-

this course may be taken multiple times with different topics).

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), Physics 230b (medical physics), or a similar course approved by the concentration coordinating committee.

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:

Two half-semester courses from the following: Chemistry 351 (bioinorganic chemistry), 352 (topics in biophysical chemistry), and 357 (topics in bioorganic chemistry; this course may be taken multiple times with different topics).

Courses meeting biochemistry concentration requirements may be used for the chemistry major in lieu of Chemistry 302b.

Physics Majors' Requirements for the Biophysics Area of Concentration:

Physics 320b (introduction to biophysics), Physics 230b (medical physics), or a similar course approved by the concentration coordinating committee.

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.

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. Perspectives in Biology courses without prerequisites are offered at the 100-level for exploration by students interested in learning about biology but not intending to major in the subject. These are appropriate for students from all backgrounds and disciplines and are separate from the major track.

2. The major curriculum begins in the sophomore year with Cell Structure and Function (Biology 200a and 200b), a course in cellular and molecular biology 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. The junior year curriculum consists of two junior laboratory courses (300a and 300b) and a suite of half-semester 300-level lecture courses, of which majors must complete four, representing a "core" of advanced courses which complete the common experience offered to students majoring in biology at Haverford.

4. In the senior year students select from 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 immerse students in 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. Seniors also participate in a 400-level senior research tutorial. The tutorial may be taken for single or double credit per semester in the senior year. It involves 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 half credit course for senior majors, involving participation in the department's external seminar program and presentations of research projects to the department.

Alternative routes within the major are offered to students interested in interdisciplinary studies within the science division. Areas of Concentration are supported biochemistry; biophysics; and neural and behavioral studies. In these interdisciplinary programs, a student majoring in biology takes an enhanced curriculum to fulfill the requirements of both their major and 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 the major requirement of Biology 200a and 200b.

Qualified students from other majors may be admitted to Biology 300 and other courses in the curriculum 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 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 Robert Fairman
Associate Professor Karl Johnson
Associate Professor Jennifer Punt, Chairperson
Assistant Professor Andrea Morris
Assistant Professor Iruka Okeke
Visiting Assistant Professor John Wagner
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 (100-level courses can not be counted toward major requirements). Biology 200 is taken in the sophomore year. In order to enroll in 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 concurrent with Biology 200. Students must complete one semester of organic chemistry before beginning Biology 300.
- c. Biology 300a, 300b, and four 300-level lecture courses. 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 specific permission of the Haverford biology department.
- d. Two half-semester courses at the 350 level.
- e. A minimum of 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.

Alternative curricula within the major are offered to students interested in interdisciplinary studies within the science division. These are encompassed within the Areas of Concentration in biochemistry; biophysics; and neural and behavioral sciences. In these interdisciplinary programs, a student may major in biology and take an enhanced selection of courses to fulfill the requirements of the biology major and their concentration. Further information is given under individual program descriptions for the relevant Areas of Concentration.

Biology majors wishing to follow the biochemistry concentration take the following courses: Biology 200a, 200b; one semester of Biology 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 Chemistry 351, Chemistry 352, or Physics 320; two credits of senior research; and Biology 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.

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PERSPECTIVES IN BIOLOGY COURSES FOR STUDENTS NOT INTENDING TO MAJOR IN THE SCIENCES (NO PREREQUISITES; NOT OPEN TO STUDENTS WHO HAVE TAKEN HC BIOL200 OR BMC BIOL101 OR 102)

123 Perspectives in Biology: Scientific Literacy NA

K. Johnson

An introduction to the biological literature through reading and discussion of articles from the current primary and popular literatures. Our texts will include the week's issues of *Science*, *Nature* and *The Science Times*. We will follow breakthroughs and discoveries as they are reported to the scientific community and consider both evolution and revolution in scientific thought in "real time" from the viewpoint of the larger scientific community. One half semester. *Enrollment limited to 25.*

124 Perspectives in Biology: Tropical Infectious Disease NA

I. Okeke

An examination of factors that contribute to the emergence and endemicity of selected infectious diseases in tropical developing countries, with a focus on diseases where transmission routes are unique to tropical developing countries or unknown. Examples will include water-borne, vaccine-preventable and zoonotic (animal transmitted) infections. Students will examine the microbiological, epidemiological and public health factors that control the emergence or persistence of infectious diseases in the tropics. One half semester. *Enrollment limited to 25. Not offered 2005-2006.*

125 Perspectives in Biology: Genetic Roil and the Royal Families NA

R. Fairman

Family pedigrees reveal the inherited nature of a variety of human conditions and provide a powerful way to identify individual genes and to study the molecular consequences of mutation, particularly through the development of specific diseases, such as hemophilia and porphyria. The Royal Families of Europe offer well-documented family histories in which frequent intermarriages provide unparalleled and often tragic glimpses into both the genetic and molecular basis of disease and other aspects of the human condition. One half semester. *Enrollment limited to 25.*

126a,b Perspectives in Biology: an Historical Introduction to Molecular Biology NA

J. Owen

A retrospective look at some of the major discoveries in molecular biology from the point of view of a nonscientist. Sufficient biochemistry will be studied to prepare students to read contemporary accounts of 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. *Enrollment limited to 25. Not offered in 2005-06.*

127 Perspectives in Biology: Human Genetic Diversity NA

P. Meneely

A major scientific milestone marking the start of the 21st century was the publication of the human genome sequence. With the subsequent reading of many human genomes, comparisons reveal clues to the natural history of the human species. Starting with basic concepts of human genetics and topics such as natural selection, founder effects and genetic drift, the course will examine issues of human origins and migrations, diversity and the relationship between different populations and ethnic groups. One half semester. *Enrollment limited to 25. Not offered in 2005-06.*

128 Perspectives in Biology: How Do I Know Who I Am? NA

J. Owen, J. Punt

The capacity of the body to recognize its own cellular and molecular components underlies the functioning of a successful immune system capable of recognizing and appropriately handling invasion and neoplasm. Some emphasis will be placed on how this problem has been differentially solved by phylogenetically disparate organisms. One half semester. *Enrollment limited to 25. Not offered in 2005-06.*

129 Perspectives in Biology: The Vexations of Vaccines NA

J. Owen, J. Punt

Vaccines exploit the memory of our immune systems – specifically, their ability to produce an overwhelming defensive response to the second exposure to a pathogen. First used as a treatment for small pox by Chinese and Turks in the 15th century, vaccination is now the cornerstone of preventative health programs and has eradicated some diseases worldwide. We will discuss the history of vaccination, its biological and cellular bases, and the difficulties involved in generating vaccines for current scourges. We will also critically evaluate the controversies surrounding vaccination in some communities. One half semester. *Enrollment limited to 25. Not offered in 2005-06.*

130 Perspectives in Biology: Origins – Evolution and Animal Diversity NA

R. Hoang

This course will explore the history and theory of evolution. Key concepts will be introduced as we consider a range of topics from Darwin, “selfish genes,” the origins of man, the way “origins” are viewed in a variety of cultures, arguments for and against evolution, and some of the implications that evolutionary theory has for society. One half semester. *Enrollment limited to 25.*

OTHER NON-MAJORS COURSES WITH NO CHEMISTRY PREREQUISITES

187 Computing Across the Sciences NA (Cross-listed in Computer Science)

D. Wonnacott, P. Meneely

This course covers the uses and internal workings of computational techniques used to study continuous & discrete systems in a variety of sciences. The first half covers numerical techniques for simulation and optimization, important in the analysis of continuous systems and the second covers discrete systems emphasizing biological sequence alignment with DNA & proteins. No prior experience with programming is required. *Prerequisite:* One semester of calculus; one semester of any lab science is also highly recommended.

214 Historical Introduction to Microbiology NA

M. 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 seminars, the course is intended for a general audience. *Not open to Freshmen. Enrollment limited to 15 students.*

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217a,b **Biological Psychology** SO (Cross-listed in Psychology)

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 (Cross-listed in Psychology)

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.

252a,b **Women, Medicine, and Biology** SO (Cross-listed in General Programs)

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 30 students with preference given to Gender and Sexuality Studies Concentrators. (Satisfies the social justice requirement.) Not offered 2005-2006.

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

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

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. *Prerequisite:* 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 should seek the advice of the Department Chairperson before enrolling in Biology 200.

300a,b,d,g,f,i **Laboratory in Biochemistry and Molecular Biology** NA

(Cross-listed in Chemistry)

Staff

One lecture and two laboratory periods per week. An introduction to the application of modern experimental approaches in the study in interesting biological questions. Techniques employed are drawn from (partial lists): cloning and nucleic acids (DNA and RNA) manipulation, including polymerase chain reaction (PCR) and site-directed mutagenesis; protein expression, purification, and characterization, with emphasis on circular dichroism and fluo-

rescence spectroscopy; immunofluorescence, confocal and electron microscopy, and fluorescence-activated cell sorting (FACS) analysis. *Enrollment limited to 40 (20 per section)*. 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. *Prerequisite:* Biology 200, and organic chemistry (Chemistry 220a) or the equivalent, or consent of the instructor.

301 Advanced Genetic Analysis NA

P. Meneely

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 or consent of instructor.

302 Cell Architecture NA

K. Johnson

An examination of cellular structure and function. Topics include the cytoplasmic matrix and the endomembrane system, with particular emphasis upon the dynamic qualities of living cells. *Prerequisite:* Biology 200 or its equivalent or consent of instructor.

303 Structure and Function of Macromolecules NA (Cross-listed in Chemistry)

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. *Prerequisite:* Biology 200 and Chemistry 221 or the equivalent to be taken previously or concurrently or consent of instructor.

304 Biochemistry: Metabolic Basis of Disease and Adaptation NA

J. Punt

This course will introduce students to advanced biosynthetic processes associated with carbohydrate, nucleic acid, protein, and lipid metabolism. A coverage of the pathways and the experiments which defined them will be accompanied by discussions of their direct relevance to disease, abnormality, and evolutionary adaptation. *Prerequisite:* Biology 200 and Chemistry 221 or equivalent to be taken previously or concurrently or consent of instructor. *Not offered 2005-2006.*

306 Inter- and Intra-Cellular Communication NA

J. Punt or J. Wagner

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 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 or consent of instructor. *Not offered 2005-2006.*

307 The Cell in Development NA

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

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cell determination and differentiation are explored. *Prerequisite:* Biology 200 and 301 or consent of instructor. *Not offered 2005-2006.*

308 Immunology NA

J. Owen or J. Punt

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. *Not offered 2005-2006.*

309 Molecular Neurobiology NA

A. Morris

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.

310 Molecular Microbiology NA

I. Okeke

A study of prokaryotic biology with emphasis on cell structure, gene organization and expressions, which will incorporate selected readings from the primary literature. Topics include the bacterial and viral cell structure, the genetics of bacteria and bacteriophage, gene regulation, horizontal gene transfer and microbial genomics. The course will be taught via lecture, class presentation and discussion, and workshops. *Prerequisite:* Biology 200 and Chemistry 221a or consent of instructor. *Not offered 2005-2006.*

311 The Plant Cell in Development NA

C. Hunter

This course will introduce the unique aspects of plant cell structure and examine the impact of these features on cell-cell communication and morphogenesis during plant development. Topics will include the establishment of embryonic polarity, maintenance of pluripotent (stem) cells, and influence of environment of plant growth. *Prerequisite:* Biology 200 or consent of instructor.

312 Development & Evolution NA

R. Hoang

This course introduces important links between developmental and evolutionary biology. Genetic changes that produce variations between organisms are an important aspect of evolutionary change. Since development can be viewed as the process that links genetic information to the final form of an organism the fields of development and evolution clearly impact one another. We will look at *Drosophila* and zebrafish, where developmental mechanisms have been elucidated in remarkable detail. We will then look beyond these model systems to comparative studies that examine development in a range of organisms. We will consider how these comparative studies provide insight into evolutionary mechanisms and how underlying differences in development may account for the differences we see between organisms. *Prerequisite:* Biology 200 or consent of instructor.

330 **Laboratory in Neural and Behavioral Science: Molecular Development** NA

A. Morris

A half-semester lab course introducing molecular and cellular approaches to understanding the development of the nervous system. A variety of model organisms will be used to investigate neural induction, patterning, neural crest cell migration and axon guidance.

Prerequisite: Biology 200 or consent of instructor.

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

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

A. Morris

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 student presentations of research articles, 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.

351 **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 viral 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. *Not offered 2005-2006.*

352 **Cellular Immunology** NA

J. Owen or J. Punt

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 300, Biology 308, or consent of instructor. *Not offered 2005-2006.*

353 **Apoptosis: A Matter of Life and Death** NA

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 cell death and proliferation underlies many disease states, including cancer and AIDS. In this course we will explore current advances in our understanding of the molec-

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ular basis for cell death (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 read extensively and students will take the lead in the discussion and debate of current controversies. *Prerequisite:* Biology 200 and one semester of 300 level Biology or consent of instructor.

354 Computational Genomics NA

P. Meneely

Complete or nearly complete DNA sequences are available for the genomes of hundreds or species, including humans. Computer-based comparisons between DNA sequences of two different genes or two different species are now routinely used in biological research. This course will examine the biological and evolutionary basis of sequence comparisons, as well as introducing the students to the statistical foundations for such comparisons. The format will involve both lectures and in-class work done at the computer. Potential topics include: evolution of DNA sequences; pairwise comparison of two sequences or one sequence with a large number of sequences; alignment of sequences; identification of domains or motifs within proteins; gene structure identification from a DNA sequence; and a large scale genome comparison. *Prerequisite:* Biology 301 or consent of instructor; Biology 303 recommended and the student should be comfortable with statistical reasoning and high school algebra. *Not offered 2005-2006.*

355 Signal Transduction and Cell Biology NA

J. Punt, J. Wagner

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. *Prerequisite:* Biology 300 and Biology 306 or consent of instructor. *Not offered 2005-2006.*

357 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 consent of the instructor. *Not offered 2005-2006.*

358 Developmental Genetics NA

J. Wagner

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.

359 Molecular Oncology NA

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. *Enrollment limited to 15 students.*

Prerequisite: Biology 300a or b or consent of the instructor.

360 Bacterial Pathogenesis NA

I. Okeke

The course will begin with lectures to overview current concepts in bacterial pathogenesis. Initial readings will be taken from texts or reviews on the subject, and the rest of the course will consist of focused discussions on current research in the field and student presentations on the primary literature. *Prerequisite:* Biology 310 or consent of the instructor. *Not offered 2005-2006.*

361 RNA-mediated Gene Regulation NA

C. Hunter

In this course we will study the early literature, in which scientists grappled with the possibility of non-coding regulatory RNAs. We will then discuss current papers that attempt to understand the mechanisms and functions of these RNAs. Topics may include X-chromosome inactivation, genomic imprinting, microRNAs, RNA-mediated viral defense, and clinical applications of RNA interference (RNAi).

SENIOR RESEARCH, LIBRARY RESEARCH, INDEPENDENT STUDY AND SENIOR DEPARTMENTAL STUDIES (TEN HOURS PER WEEK PER CREDIT)

402a,b Senior Research Tutorial in Genetics and Meiosis NA

P. Meneely

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.

403a,b Senior Research Tutorial in Protein Folding and Design NA

R. Fairman

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.

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404a,b Senior Research Tutorial in Molecular Microbiology NA

I. Okeke

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. *Not offered 2005-2006.*

405a,b,f Senior Research Tutorial in Molecular Biology NA

J. Wagner

Studies in yeast genetics and signal transduction using molecular approaches will be used to address fundamental biological problems. Laboratory work is supplemented by readings from current literature. *Prerequisite:* Consent of the instructor.

406 Senior Research Tutorial in Cellular Immunology NA

J. Owen

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 the process as it affects both B and T cells. *Prerequisite:* Consent of the instructor. *Not offered 2005-2006.*

407a,b Senior Research Tutorial in Cell Motility and the Cytoskeleton NA

K. Johnson

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.

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

J. Punt

The fate of 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 descendants, 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.

409a,b,f Senior Research Tutorial in Molecular Neurobiology NA

A. Morris

The developing nervous system of vertebrate embryos rapidly becomes patterned into distinct domains by 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.

410a,b Senior Research Tutorial at Off-Campus Research Labs NA

J. Punt

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 410 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.

411a,b Senior Research Tutorial on The Control of Cell Shape: Molecular & Evolutionary Approaches NA

R. Hoang

All embryos undergo a series of highly elaborate cell movements to produce their final shape and form. Understanding the molecular basis of these movements provides important insight into the underlying molecular mechanisms, and also enables us to ask how changes in these mechanisms give rise to differences between organisms. Students therefore approach this subject from both molecular and evolutionary perspectives. Using the fruit fly as a model system, we are looking inside cells to ask how intricate changes to the cytoarchitecture of individual cells drive movements of entire layers of cells. We hope to further understand how these same developmental processes go awry in situations of human disease (e.g. cancer metastasis). We are also examining cell movements in a variety of insects to ask how the developmental mechanisms themselves evolve and change. Projects draw on a variety of techniques including cell and molecular biology, embryology, genetics, genomics and cell imaging. Laboratory work is supplemented by readings from the current literature. *Prerequisite:* Consent of instructor.

480a,b,f,i Independent Study NA

J. Punt

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

493j Interdisciplinary Examinations of Biologically Significant Research NA (Cross listed in Chemistry)

Staff

Seminar for HHMI Scholars and any junior or senior science major committed to an interdisciplinary approach to the study of original research.

499j Senior Department Studies NA

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.

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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**

CHEMISTRY

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. 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). 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, with the students who started in Chemistry 100. 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 ten to twelve 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.

John Farnum Professor of Chemistry **Colin F. MacKay**, Emeritus

Professor **Robert C. Scarrow**

Associate Professor **Karin Åkerfeldt** (on leave 2005-2006)

Associate Professor **Frances Rose Blase**

Associate Professor **Terry L. Newirth**, Chairperson

Assistant Professor **Alexander Norquist**

Visiting Associate Professor **Mark Schofield**

Visiting Assistant Professor **Ali Sezer**

Visiting Assistant Professor **Michael J. Kukla**

Adjunct Professor **Claude E. Wintner**

MAJOR REQUIREMENTS

Each student confers with the major advisor to plan a program that takes into account spe-

cific 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 core required courses are: Chemistry 100a (or placement in Chemistry 105b), either 101b or 105b (or placement in Chemistry 220a), 220a, 221b, 301a, 302b, 304a, 391j, and one semester of inorganic chemistry (from Chemistry 320, 351 and 353). Chemistry majors must also complete two semesters of additional advanced chemistry courses numbered 303-369, only one of which may be a research tutorial (Chemistry 36x); one semester of mathematics courses numbered 114 (calculus II) or higher (Mathematics 117 is highly recommended); and either introductory physics (Physics 101a/102b or 105a/106b) or Biology 200a/200b.

Chemistry Major with Biochemistry Concentration

Biochemistry concentrators are allowed to substitute either semester of Biology 300 for Chemistry 302b, and a 300-level Biology course (beyond those used to satisfy concentration requirements) may be used toward the additional advanced chemistry course requirement. 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; and, at least one semester of biochemistry. This last requirement may be satisfied by Biology 200b, by Bryn Mawr Chemistry 242, or by two half-semester courses of Chemistry 351, 352, or 357.

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 credit with an analytical or physical chemistry laboratory component (such as Chemistry 301 or 302, or Bryn Mawr Chemistry 251 and 252). 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

A. Norquist, R. Scarrow, Staff

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 stu-

dents and consists of five lectures and one laboratory period. The remaining sections do not have enrollment limits and consists of three lectures, one required recitation, and one laboratory period. Students should enroll in sections 2, 3 or 4 depending on which recitation time they choose. All students must be able to attend one of the three recitation times. Placement of students into section 1 or 2/3/4 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
M. Schofield, Staff

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
A. Sezer, A. Norquist

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.

151a Case Studies in Chemistry NA (Cross-listed in General Programs)
M. Schofield

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.

152a Chemistry: Its Application to the Everyday World NA
(Cross-listed in General Programs)

A. Sezer

This course will help students understand the many varied ways that science and chemistry affects their lives – positively and negatively. Basic chemical concepts will be introduced to help students understand the basic properties of matter as well as higher level chemical concepts. Concepts will be developed both qualitatively and quantitatively to help students make links between phenomena that they can observe and microscopic quantities such as atoms and molecules. The course is directed to the non-science major.

220a Organic Chemistry I: Introduction to Organic Chemistry NA
F. Blase, M. Kukla

Three lectures, one required 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*T. Newirth, M. Kukla*

Three lectures, one required recitation, and one laboratory period. Students must be free to attend one recitation and one afternoon of lab. 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,b Laboratory in Biochemistry and Molecular Biology NA (Cross-listed in Biology)*R. Fairman, K. Johnson, A. Morris, J. Wagner*

One lecture and two laboratory periods per week. An introduction to the application of modern experimental approaches in the study in interesting biological questions. Techniques employed are drawn from (partial lists): cloning and nucleic acids (DNA and RNA) manipulation, including polymerase chain reaction (PCR) and site-directed mutagenesis; protein expression, purification and characterization, with emphasis on circular dichroism and fluorescence spectroscopy; immunofluorescence, confocal and electron microscopy, and fluorescence-activated cell sorting (FACS) analysis. Enrollment limited to 40 (20 per section). 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. *Prerequisite:* Biology 200, and organic chemistry (Chem220a or the equivalent), or consent of the instructor.

301a Lab in Chemical Structure and Reactivity NA*T. Newirth, M. Schofield*

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, powder x-ray diffraction, and the gas chromatograph-mass spectrometer are used by students, with faculty supervision. *Prerequisite:* For 301a Chemistry: 221b, (Co-requisite: 304a).

302b Lab in Chemical Structure and Reactivity NA*R. Scarrow, F. Blase*

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. *Prerequisite:* for 302b: Chemistry 221b and 304a.

304a Physical Chemistry I: The Physical Basis of Chemistry and Biology NA/QU*A. Sezer*

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. *Prerequisite:* Chemistry 101b, 105b or 220a; one semester of mathematics with courses numbered Math 114 or higher (117 preferred).

305b Physical Chemistry II: Chemical and Biochemical Dynamics NA/QU

A. Sezer

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. *Prerequisite:* Chemistry 304a.

320b Inorganic Chemistry NA

R. Scarrow

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

351h Bioinorganic Chemistry NA

R. Scarrow

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. *Prerequisite:* Chemistry 221b and 304a.

352e,h Topics in Biophysical Chemistry NA

R. Scarrow

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. *Prerequisite:* Chemistry 351d; Biology 200a,b or consent of instructor. *Not offered 2005-2006.*

353h Topics in Materials Science NA

A. Norquist

This course will focus on the structure-property relationship central to the study of materials with specific functions. Structural studies will include bonding, order/disorder and non-stoichiometry in crystalline and non-crystalline solids. Optical, magnetic and electronic properties will be discussed in the context of non-linear optical materials, ferroelectric and magneto-resistant materials, as well as superconductors and semiconductors. *Prerequisite:* Chemistry 304, or Physics 214 and Chemistry 101b or Chemistry 105b

355g,h Topics in Advanced Organic Chemistry NA

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

T. Newirth

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**

R. Scarrow, A. Norquist

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.

480a,b,f,i **Independent Study NA**

Staff

Tutorials on any topic in experimental or computational physical chemistry or biophysical chemistry. The range of activities will be agreed upon by the student and faculty member.

Prerequisite: Consent of the instructor.

493 **Interdisciplinary Examinations of Biologically Significant Research NA**

(Cross-listed in Biology and Physics)

Staff

Seminar for HHMI Scholars and any junior or senior science major committed to an interdisciplinary approach to the study of original research.

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.

361a,b **Research Tutorial in Physical Chemistry NA**

A. Sezer

Directed research in material science and engineering, especially towards electronic, biological, and chemical processing and applications of polymer and semiconductor thin films.

Prerequisite: Consent of instructor.

363a,b **Research Tutorial in Organic Chemistry NA**

K. Akerfeldt, 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.

365a,b **Research Tutorial in Bioinorganic Chemistry NA**

R. Scarrow

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

367a,b **Research Tutorial in Biophysical Chemistry NA**

M. Schofield

Topics include synthesis and reactivity of chiral platinum complexes; structural characterization of platinum oligonucleotide complexes by combined multidimensional NMR/computational methods. *Prerequisite:* Consent of instructor.

369a,b Research Tutorial in Materials Science NA

A. Norquist

Topics include synthesis and structural characterization of organically templated microporous materials. *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 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, on leave Semester I

Audrey A. and John L. Dusseau Memorial Professor in the Humanities and

Professor of Classics Joseph A. Russo, on leave Semester I

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

Deborah H. Roberts, chair

Visiting Assistant Professor Bret Mulligan

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.

Classical Culture and Society: Six courses drawn from the range of courses counted towards Classical Culture and Society are required. Of these, two must be in Greek or Latin at the 100 level and at least one must be in Classical Culture and Society at the 200 level.

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

D. Roberts

Introduction to ancient Greek, with selected readings in poetry and prose.

101a **Introduction to Greek Literature: Herodotus and Plato** HU

B. Mulligan

Plato's *Crito* and *Ion*.

102b **Introduction to Greek Poetry: Homer** HU

J. Russo

201a **Advanced Greek: Plato and Thucydides** HU

Taught at Bryn Mawr in 2005-06.

202b **Advanced Greek: Tragedy** HU

D. Roberts

Sophocles, Euripides, and readings in Aristotle's *Poetics*.

COURSES IN LATIN LANGUAGE AND LITERATURE

001 **Elementary Latin** HU

B. Mulligan

An introduction to Latin, with selected readings in poetry and prose.

101a **Introduction to Latin Literature: Catullus and Cicero** HU

D. Roberts

Introduction to the study of Latin literature through readings from Catullus' poetry and Cicero's *Pro Caelio*. Class will include some grammar review, but emphasis will be on developing reading skills and on critical interpretation and discussion.

101b **Introduction to Latin Literature: Vergil** HU

B. Mulligan

Selected books of the *Aeneid*.

201a **Advanced Latin**

Taught at Bryn Mawr in 2005-06.

202b **Advanced Latin** HU

Taught at Bryn Mawr in 2005-06.

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 is taught at Bryn Mawr in 2005-06 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

119b **Athenian Culture and Society in the 5th Century** HU

Staff

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.

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

Staff

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. *Not offered in 2005-06.*

208a or b **Mythology** HU

(Cross-listed in Comparative Literature)

J. Russo

Archetypal figures and stories from Greek mythology, with parallels and continuations in modern culture. Discussion of theories of myth interpretation, including psychoanalytic, Jungian, and structuralist interpretations. *Enrollment limited to 30, no first-year students. Offered in 2005-06 and alternate years.*

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 2005-06.*

212a **The Classical Tradition in Western Literature** HU

(Cross-listed in Comparative Literature)

D. Roberts

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 2006-07 and alternate years.*

213b **Tragedy and the Tragic: Suffering, Representation, and Response** HU

(Cross-listed in Comparative Literature)

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. *Not offered in 2005-06.*

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, to the Greek family and household, and to gender stereotypes in myth. *Not offered in 2005-06*

290a **History of Literary Theory: Plato to Shelley** HU

(Cross-listed in English and Comparative Literature)

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 2005-06 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 toward 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:

Barbara Riley Levin Professor of Spanish and Comparative Literature **Israel Burshatin**,
chair, on leave first semester (Spanish and comparative literature)

William E. Kenan, Jr. Professor of Classics and Comparative Literature **Deborah Roberts**,
acting chair, first semester (classics and comparative literature)

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

Associate Professor **Ulrich Schönherr** (German)

Associate Professor **David Sedley** (French)

Assistant Professor **Maud McInerney** (English)

At Bryn Mawr College:

Fairbanks Professor in the Humanities **Azade Seyhan** (German and comparative literature)

Professor **Elizabeth C. Allen** (Russian and comparative literature)

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

Assistant Professor **Francis Higginson** (French)

Assistant Professor **Bethany Schneider** (English)

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 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)

Assistant Professor **Graciela Michelotti** (Spanish)

Assistant Professor **Jerry Miller** (philosophy)

Assistant Professor **Zolani Ngwane** (*anthropology*)
Assistant Professor **Debra Sherman** (*English*)
Visiting Assistant Professor **John Lardas** (*Religion*)
Mellon Post-Doctoral Fellow **Marianne Tettlebaum**

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 **María Cristina Quintero** (*Spanish*)
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*)
Assistant Professor **Jonathan Robert Kahana** (*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
D. Sedley

COMPARATIVE LITERATURE

203b **Writing the Jewish Trajectories in Latin America** (Also called Spanish 203b)
G. Michelotti

205a **Studies in the Spanish American Novel** (Also called Spanish 205a)
R. García-Castro

205b **Legends of Arthur** (Also called English 205b)
M. McInerney

207b **Fictions of Spanish American History** (Also called Spanish 207b)
R. Castillo Sandoval

208a **Museum Anthropology** (Also called Anthropology 208a)
M. Gillette

208b **Mythology** HU (Also called Classics 208b)
J. Russo

210b **Spanish and Spanish American Film Studies** (Also called Spanish 210b)
G. Michelotti

211a **Introduction to Postcolonial Literature** (Also called English 211a)

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

214a **Writing the Nation: 19th-Century Literature in Latin America**
(Also called Spanish 214a)
R. Castillo Sandoval

216a **Fiction of the Holocaust** HU (Also called General Programs 216b)
D. Gillis
(Satisfies the social justice requirement.)

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

235a **Spanish American Theater** (Also called Spanish 235)
G. Michelotti

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- 241a **The Anthropology of the Mediterranean Area** HU (Also called Anthropology 241a)
L. Hart
- 243b **18th-Century Literature: Trans-Atlantic Exchanges: Conversion and Revolution in Britain** (Also called English 243b)
- 247a **Anthropology and Literature: Ethnography of Black African Writing 1888-1988**
(Also called Anthropology 247a)
Z. Ngwane
- 250b **Music in the Literary Imagination 1800-1949** (Also called Music 250b)
D. Kasunic
- 250a **Words and Music: Tones, Words, and Images** HU (Also called Music 250a)
C. Cacioppo
- 250b **Words and Music: The Renaissance Text and its Musical Readers** HU
(Also called Music 250b)
R. Freedman
- 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)
Staff
- 258a **Vienna at Turns of Centuries: Art, Politics, and Culture**
(Also called Music and German 258a)
- 262a **Islamic Literature and Civilization** HU (Also called Religion 262a)
Staff
- 263a **The Middle Eastern Lyric** HU (Also called Religion 263a)
Staff
- 277b **Postcolonial Women Writers** HU (Also called English 277b)
R. Mohan
- 289a **Children's Literature** HU
D. Roberts
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COMPARATIVE LITERATURE

290a History of Literary Theory: Plato to Shelley HU

(Also called English and Classics 290a)

D. Roberts

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

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

A. Kosman

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

J. Lardas

310b The Family Novels of the Past Forty Years of Spanish America

(Also called Spanish 310b)

R. García-Castro

312 01 Advanced Topics: Making Fun: l'art du ridicule du XVIe au XVIIe siècles

(Also called French 312 01)

D. Sedley

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

K. Anyinéfa

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

R. García-Castro

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

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

332a Topics in 20th-Century Continental Philosophy: Foucault on Sex and Power

(Also called Philosophy 332a)

J. Miller

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

I. Burshatin

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

(Also called Anthropology 350a)

Z. Ngwane

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

G. Michelotti

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

A. Gangadean

359b Disciplining Art: The Rise of Aesthetic Theory

(Also called German, Music & Philosophy 359b)

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

R. Mohan

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

D. Sherman

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

398 Theories and Methods in Comparative Literature HU

A. Seyhan

Advanced work in the history and problems of comparative literature.

399b Senior Seminar HU

E. Allen & I. Burshatin

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

COURSES OFFERED AT BRYN MAWR COLLEGE:

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)

212 **Borges y sus lectores** (Also called Spanish 211)

213 **Approches théoriques** (Also called French 213)

215 **La literatura afro-hispánica** (Also called Spanish 215)

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)

COMPARATIVE LITERATURE

- 231 **Cultural profiles modern exile** (Also called Anthropology & German 231)
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 **Introduction to African Literature** (Also called English 279)
283 **The Urban Novel** (Also called English 283)
298 **Cultural Politics of Memory** (Also called English 298)
306 **Film Theory** (Also called English and History of Art 306)
308 **Spanish Drama of the Golden Age** (Also called Spanish 308)
318 **The Matter of Troy** (Also called English 318)
323 **Culture and Interpretation** (Also called Philosophy 323)
325 **Etudes avancés de civilisation** (Also called French 325)
333 **Queer Theory/Queer Literature** (Also called English 333)
343 **Translating America** (Also called English 343)
350 **Voix médiévales/ échos modernes** (Also called French 350)
352 **Romanticism and Interpretation** (Also called English 352)
398 **Theories & Methods in Comparative Literature**

COMPUTER SCIENCE

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 physics, 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, and also as a freestanding minor for students in any major at the college.

Haverford's program 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 or minor), 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 a course in Discrete Mathematics (231). Additional electives and advanced topics courses build on material developed in the core courses.

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. (Consult program coordinator for further details.)

J. McLain King Professor of Mathematics **Curtis Greene**

Associate Professor of Physics **Walter Smith**

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 **Dianna Xu**

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).

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.

THE COMPUTER SCIENCE MINOR

1. Computer Science 205/206 (or 110/206 at Bryn Mawr)
2. Either Computer Science 240 and 355, or Computer Science 245 and 350
3. Discrete Mathematics 231
4. Either Computer Science 340 or 345.

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

COURSES

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

J. Dougherty

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 205. Students who complete this course will be prepared for Computer Science 205 if they choose to continue. *Not offered 2005-06.*

101b **Fluency with Information Technology** NA/QU

J. Dougherty

A study of the skills, concepts and capabilities involved in the design, implementation and effective use of information technology. Using a variety of quantitative techniques, we will explore a range of uses of information technology in various fields. Not open to CS majors.

130a **Foundations of Rigorous Thinking** NA/QU

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 further course work in computer or cognitive science. *Not offered 2005-2006.*

147a **The History of Mechanical Thought** NA (Cross-listed in Writing Program)

An exploration of the history of computer and information systems, from early number systems to binary logic, and from the abacus to the modern computer. We will also explore what makes a machine automatic, or a general purpose calculating machine. Only open to freshman for fulfilling the writing requirement.

187b **Computing Across the Sciences** NA (Cross-listed in Biology)

D. Wonnacott, P. Meneely

This course covers the uses and internal workings of computational techniques used to study continuous & discrete systems in a variety of sciences. The first half covers numerical techniques for simulation and optimization, important in the analysis of continuous systems and the second covers discrete systems emphasizing biological sequence alignment with DNA & proteins. No prior experience with programming is required. *Prerequisite:* One semester of calculus; one semester of any lab science is also highly recommended.

205a **Introduction to Computer Science** NA/QU

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 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).

206b **Introduction to Computer Science** NA/QU

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 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). *Prerequisite:* 205 or permission of instructor

210a **Linear Optimization and Game Theory** NA/QU

(Cross-listed in Mathematics and Economics)

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 121 and instructor consent, or Math 215.

212a **Computer Graphics** NA

J. Dougherty, D. Wonnacott

The fundamental principles of computer graphics: data structures for representing objects to be viewed, and algorithms for 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. *Prerequisite:* Computer Science 206, and Mathematics 215 (may be taken concurrently) or permission of instructor. *Not offered 2005-06.*

225a **Fundamentals of Databases** NA

An introduction to the principles of relational database design and use including: the entity/relationship data model and the logical algebra/calculus behind query languages. An integrated laboratory component covers declarative programming using the international standard SQL. *Not offered 2005-06.*

231 **Discrete Mathematics** NA/QU (Cross-listed in Mathematics)

G. Weaver

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. *Offered at Bryn Mawr College.*

235a **Information and Coding Theory** NA (Cross-listed in Mathematics)

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. *Not offered 2005-06.*

240a **Principles of Computer Organization** NA

D. Wonnacott

A lecture/laboratory course studying the hierarchical design of modern digital computers: boolean logic/algebra; sequential state systems; register machines; instruction sets; memory organization; assembly language programming. Lectures will cover the theoretical aspects of system architecture. In the laboratory, designs discussed in lecture will be constructed in software. *Prerequisite:* Computer Science 206, or consent of instructor. Math/Computer Science 231 is strongly recommended. *Offered in fall semester of even-numbered years.*

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 fall semester of odd-numbered years.*

340b **Analysis of Algorithms** NA (Cross-listed in Mathematics)

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.

Prerequisite: Computer Science 206. *Offered in spring semester of odd-numbered years.*

345b **Theory of Computation** NA (Cross-listed in Mathematics)

S. Lindell

Introduction to the mathematical foundations of computer science: finite state automata, formal languages and grammars, Turing machines, computability, unsolvability, and computational complexity. *Prerequisite:* Computer Science 231. *Offered in spring semester of even-numbered years.*

350b **Compiler Design** NA

D. Wonnacott

A practical introduction to modern compiler and interpreter design with a substantial labora-

tory component using compiler-writing tools. *Prerequisite:* Computer Science 245. *Offered in 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. *Offered in spring semester of odd-numbered years.*

392a Advanced Topics: High Performance Scientific Computing NA

J. Dougherty

393 Physics of Computation NA

S. Lindell

Advanced seminar covering the fundamental physical limits and potentials of computation. *Prerequisite:* Either Math 235 or Phys 303 or advanced course work in Computer Science.

394 Advanced Topics in Theoretical Computer Science NA (Cross-listed in Mathematics)

S. Lindell

A study of the asymptotic properties of resource-bound computation with an emphasis on the use of logical and physical analysis techniques. *Prerequisite:* Students should have completed a 300-level course in Computer Science.

399i Senior Seminar NA (Cross-listed in Mathematics)

Staff

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

460a,b Teaching Assistant NA

D. Wonnacott

480c Senior Thesis Preparation NA

Staff

An independent study course, taken for a half credit in both the fall and the spring semesters of the senior year, whose purpose is to research and prepare a written expression and oral presentation of advanced material under the direct supervision of a faculty member.

COMPUTER SCIENCE

RELATED COURSES IN MATHEMATICS

- 203 **Applied Statistics**
- 210 **Linear Optimization and Game Theory**
- 215 **Linear Algebra**
- 218 **Probability and Statistics**
- 250 **Combinatorial Analysis**

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 Bi-College Department of East Asian Studies links rigorous language training to the study of East Asian, and particularly Chinese and Japanese, culture and society. In addition to our intensive programs in Chinese and Japanese languages, departmental faculty offer courses in East Asian philosophy, linguistics, literature, religion, and social and intellectual history. The East Asian Studies program also incorporates courses on East Asia by affiliated Bi-College faculty on East Asian anthropology, cities, economics, philosophy, and sociology, as well as additional courses on East Asian culture and society by faculty at Swarthmore.

The intellectual orientation of the East Asian Studies Department is primarily historical and text-based; that is, we focus on East Asia's rich cultural traditions as a way to understand its present, through the study of primary sources (in translation and in the vernacular) and scholarly books and articles. All students wishing to specialize in this humanistic approach to the study of China, Japan, and (with special approval) Korea are encouraged to consider the East Asian Studies major. But we also work closely with affiliated faculty in the Bi-Co and Tri-Co community who approach East Asia from the perspective of such social science disciplines as Anthropology, Economics, Political Science, Sociology, and the Growth and Structure of Cities, as well as with faculty in History, Music, Religion, and Philosophy. EAS majors are encouraged to take advantage of these programs to supplement their EAS coursework. Students who wish to combine the study of East Asia and its languages with a major in another discipline are invited to consider the East Asian Studies minor, described more fully below.

At Bryn Mawr College:

Tz'u Chiang, *Lecturer*

Alexei Ditter, *Instructor*

Youngmin Kim, *Assistant Professor, on leave calendar year 2006*

Pauline Lin, *Assistant Professor, in residence as of fall 2006*

Suzanne Spain, *Associate Provost, Co-chair*

Changchun Zhang, *Instructor*

At Haverford College:

Hank Glassman, *Assistant Professor*

Shizhe Huang, *C. V. Starr Professor of Asian Studies and Associate Professor of Chinese and Linguistics, Co-chair*

Yoko Koike, *Senior Lecturer, on leave fall 2005*

Paul Jakov Smith, *John R. Coleman Professor of Social Sciences and Professor of History and East Asian Studies, on leave 2005-06*

Takanobu Tsuji, *Visiting Instructor*

Yukino Tanaka, *Lecturer*

Hai Lin Zhou, *Visiting Assistant Professor*

MAJOR REQUIREMENTS

1. Completion of at least the third-year level of (Mandarin) Chinese or Japanese (i.e. 101-102). Students who entered college with native fluency in one East Asian language (including Korean) must complete this requirement with another East Asian language.
2. EAST 200B (Sophomore Seminar: Methods and Approaches to East Asian Studies), which highlights the emergence of East Asia as a coherent cultural region and introduces students to basic bibliographic skills and research approaches. Required of EAS majors and minors; open to History majors and others with permission of the instructors. This course should be taken in the second semester of the sophomore year.

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3. Five additional courses in East Asian cultures, as follows: one 100-level Introduction (from among EAST 120, 129, 131, or 132); two 200-level courses; and two 300-level seminars.
 4. A one-semester senior conference (EAST 398) in the Fall, culminating in the completion of a senior thesis by the end of that semester.

MINOR REQUIREMENTS

The East Asian Studies Department offers a flexible six-course minor for students with varying interests in East Asian cultures and languages. All candidates for minor credit must take EAST 200 (Sophomore Seminar). In addition, they may take five additional courses in East Asian cultures and society, or any combination of culture courses and language courses in Chinese or Japanese above the first-year (001-002) level. The most typical configurations will be EAST 200 plus: five additional culture courses and no language; three additional culture courses and two language courses at the second (003-004) or third-year (101-102) level; or one additional culture course and four language courses at the second-year level and above.

Language Placement Tests

Placement tests for first-time students at all levels are conducted in the first week of the fall semester. To qualify for third-year language courses 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 departmental faculty on the basis of superior performance in two areas: coursework in major-related courses (including language classes), and the senior thesis. A 3.7 average in major-related coursework is considered the minimum necessary for consideration for honors.

Study Abroad

The East Asian Studies Department strongly recommends study abroad to maximize language proficiency and cultural familiarity. Because study abroad provides an unparalleled opportunity to study a culture from the inside, students spending a semester or year in China, Japan, or Korea will be required to prepare an essay of 10 pages on significant issues confronting their host country, based on information from local newspapers or magazines, television, or personal interviews. No departmental credit will be granted for study abroad without satisfactory completion of this assignment, whose details should be worked out with the student's advisor. Formal approval is required by the study abroad advisor prior to the student's travel. Without this approval, credit for courses taken abroad may not be accepted by the East Asian studies program. If studying abroad is not practical, students may consider attending certain intensive summer schools approved by the East Asian studies program. These plans must be worked out in concert with the program's study abroad advisor and the student's dean.

COURSES

H120 **Chinese Perspectives on the Individual and Society**

Smith

A survey of philosophical, literary, legal, and autobiographical sources on Chinese notions of the individual in traditional and modern China. Particular emphasis is placed on identifying how ideal and actual relationships between the individual and society vary across class and gender and over time. Special attention will be paid to the early 20th century, when Western ideas about the individual begin to penetrate Chinese literature and political discourse. *Not offered in 2005-06.*

H129 **The Lotus Sutra: Text, Image, and Practice**

(Cross-listed as Writing Program 129 and Religion 129)

Glassman

An exploration of the Lotus Sutra, arguably the most important text in the history of East Asian Buddhism. We will examine its narrative and doctrinal dimensions, study artistic representations of its stories, and explore the practice and cult of the text.

B131 **Chinese Civilization** (Cross-listed as History 131)

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.

H132 **Japanese Civilization**

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. *Not offered in 2005-06.*

H200 **Sophomore Seminar: Methods and Approaches in East Asian Studies**

Glassman

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 required for East Asian Studies minors and is open to other interested students.

H201 **Introduction to Buddhism**

Glassman

Focusing on the East Asian Buddhist tradition, the course examines Buddhist philosophy, doctrine and practice as textual traditions and as lived religion. *Not offered in 2005-06.*

B205 **Enlightenment and Decadence in Modern Chinese Literature and Film**

Not offered in 2005-06.

B210 Topics in Chinese Culture: Love and Madness in Late Imperial China

Ditter

This course will explore the interconnectedness of fiction and reality through readings of depictions of love (qing), desire (yu), madness (kuang), and obsession (chi) in narrative and dramatic works of literature from late imperial China alongside depictions of historical figures and documents from medical and legal cases of that period in which individuals were driven to suicide or other "irrational" acts by these same stories.

B212 Introduction to Chinese Literature: *The Dream of the Red Chamber*

Ditter

This course introduces Chinese literature from its beginnings through the late-18th century, via greatest masterpiece of traditional Chinese fiction, *The Dream of the Red Chamber*. First published in 1791, the novel recounts the experiences of a magical stone from heaven reborn as the male heir of the immensely wealthy and aristocratic Jia family. Nearly every significant literary genre in the pre-modern Chinese tradition is represented within the novel's detailed and realistic descriptions of daily life in a great Chinese household. By studying relevant aspects of the literary tradition alongside each section of the novel, we will learn to appreciate China's rich pre-modern literary tradition from our own contemporary perspective and to see it through the eyes of the novel's 18th-century characters for whom the literary tradition was a part of their daily lives.

H216. Invaded Ideology and Translated Modernity: Modern Chinese and Japanese Literatures

Not offered in 2005-06.

225 Topics in Modern Chinese Literature: Modern Chinese Literature in the Republican Period (1911-1949)

Ditter

We will study a selection of Chinese literature written between 1911 and 1949, when Chinese literature went through a dramatic period of change and self-evaluation. Focusing primarily on fiction (and to a lesser degree, prose and film), we will examine how writers in this period struggled not only with formal concerns (new literary idioms and modes of expression), but also with larger questions of Chinese identity and the role of modern Chinese literature, for example: What did it mean to be Chinese in a world in which China was no longer the center? What did it mean to be "modern"? What role did literature serve in constructing memories of "old" China and creating visions of the "new"? By examining literature and the historical and cultural contexts within which it was produced, we will learn to appreciate both the artistry and diversity of these works and what they can teach us about the experience of living in a world perceived as undergoing radical change.

B226 Introduction to Confucianism

(Cross-listed as Philosophy 226 and Political Science 226)

Kim

An introduction to Confucianism, arguably the most influential intellectual and cultural tradition in East Asia. In the first half, this course will train students to read the condensed style of the Confucian canons – the Analects, the Book of Mencius, the Great Learning and the Doctrine of the Mean – by examining different commentators' explanations of select passages. In the second half, we will analyze Confucianism in light of contemporary discussions of issues such as human rights, virtue ethics, women's history, economic development and political authority. This course has no prerequisites and assumes no background in East Asian culture. *Not offered in 2005-06.*

H228 The Logos and the Tao (Cross-listed as Philosophy 228)

Wright

Not offered in 2005-06.

H228 Musical Voices of Asia (Cross-listed as Music 228)

Freedman

Not offered in 2005-06.

B229 Comparative Urbanism

(Cross-listed as Anthropology 229 and Growth and Structure of Cities 229)

McDonogh

B234 Introduction to Korean Culture (Cross-listed as History 252)

Kim

This course examines the dynamics of Korean cultural and intellectual history from the perspective of cultural identity. How did Korea negotiate its position in the traditional Asian cultural sphere? What is the significance of the so-called "Confucianization" of Choson Korea? What events and conditions shaped Korea in the 20th century? What was the impact of Japanese colonialism on Korea's modern transformation? This course explores these questions through a variety of literary works as well as historical writing, philosophical debates, and the arts. No knowledge of Korean language or history is required. *Offered at Swarthmore, not Bryn Mawr, in 2005-06.*

H240 Economic Development and Transformation: China vs. India

(Cross-listed as Economics 240)

Jilani

A survey of the economic development and recent transitional experience in China and India, giant neighboring countries, accounting for roughly one third of total world population. The course will examine the economic structure and policies in the two countries, with a focus on comparing China and India's recent economic successes and failures, their development policies and strategies, institutional changes, and factors affecting the transformation process in the two countries.

H242 Chinese Language in Culture and Society

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. *Not offered in 2005-06.*

H242 Buddhist Philosophy (Cross-listed as Philosophy 242)

Gangadean

Not offered in 2005-06.

H244 Anthropology of China (Cross-listed as Anthropology 244)

Gillette

Not offered in 2005-06.

H250 Religion in Modern Japan

Not offered in 2005-06.

H251 Gender and Power in East Asia (Cross-listed as Anthropology 251)

Gillette

Not Offered in 2005-06.

H256 Zen Thought, Zen Culture, Zen History

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.

H260 Mid-Imperial China (Cross-listed as History 260)

Smith

Surveys the fundamental transformation of Chinese society between the 9th and 16th centuries. *Not offered in 2005-06.*

H262 Chinese Social History: Gods, Ghosts and Ancestors in Traditional Chinese Society (Cross-listed as History 262)

Smith

Surveys a rotating series of topics in the Chinese social and cultural history. *Not offered in 2005-06.*

H263 The Chinese Revolution (Cross-listed as History 263)

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 2005-06*

H264 The Social History of Chinese Religions (Cross-listed as History 264)

Smith

This course surveys the place of religion in China's social, cultural, and political history during the imperial and modern eras. The syllabus is organized chronologically, in an effort to

locate major themes (Daoism, Buddhism, Neo-Confucianism, sectarianism, etc.) in their appropriate historical context. The main goals of the course are: [1] to introduce the interdependent world of gods, ghosts, and ancestors and the ways they are worshipped – or kept at bay; [2] to underscore the importance of religious institutions in China's past and present; [3] to explore the scholarly literature in what is one of the most robust sub-fields in Chinese studies; and [4] to sample some of the sources available for the study of religion in Chinese society. *Not offered in 2005-06.*

H265 Modern Japan (Cross-listed as History 265)

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 2005-06.*

B267 The Development of the Modern Japanese Nation

(Cross-listed as Anthropology 267 and Sociology 267)

Takenaka

B270 Japanese Architecture and Planning

(Cross-listed as Growth and Structure of Cities 270 and History of Art 270)

Hein

Not offered in 2005-06.

H275 Romancing/Passing

Not offered in 2005-06.

H282 Structure of Chinese

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 H262 or consent of the instructor.

H299 Agnes Chen Memorial Lectureship in East Asian Studies

Zhou

Established in honor of his sister by Francis J. Chen '40, the course for fall 2005 is "Fertile Soil: Modern Japanese Literature and its Encounter with the West."

H310 Religion and Gender in Premodern Japanese Literature

(Cross-listed as Religion 310)

Glassman

Examination of the intersection of religion and gender in Japanese literature from the 8th 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 2005-06.*

H315 Cultural Interchange in 19th- to 20th-Century East Asia

Not offered in 2005-06.

B325 Topics in Chinese History and Culture

Topic to be determined for spring 2006.

H330 Cinema Nostalgia

Not offered in 2005-06.

B335 East Asian Development (Cross-listed as Economics 335)

Rock

H342 Topics in Asian Philosophy: Buddhism in a Global Context

(Cross-listed as Philosophy 342)

Not offered in 2005-06.

H347 Topics in East Asian History

Smith

Not offered in 2005-06.

H349 Topics in Comparative History

Smith

Seminar meetings, reports, and papers. May be repeated for credit with change of topic. *Not offered in 2005-06.*

B354 Identity, Ritual and Culture in Vietnam (Cross-listed as Anthropology 354)

Pashigian

Not offered in 2005-06.

B381 Topics in Japanese Art (Cross-listed as History of Art 381)

Easton

Not offered in 2005-06.

B398 Senior Conference

Glassman, Kim

A semester-long research workshop culminating in the writing and presentation of a senior thesis. Required of all majors; open to minors and others by permission.

B403 Supervised Work

H415 Theory and Experience (Cross-listed as Anthropology 415)

Gillette

This advanced research seminar is about Chinese material culture in its historical and contemporary manifestations. Particular attention will be paid to Chinese ceramics. Students will design and complete individual research projects centered on objects, architectural installations, and other manifestations of Chinese material culture available in the Philadelphia area.

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.

CHINESE LANGUAGE

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 minor in East Asian studies. Information about study abroad programs can be found under the East Asian studies heading in this catalog.

Shizhe Huang, director

Tz'u Chiang

Changchun Zhang

B001, B002 First-year Chinese

Chiang

Offered in an intensive section (1.5 credits) for students new to the language, which meets for six hours for lecture and oral practice. Also offered in a non-intensive section (1 credit) for students who can speak but not read or write the language, which meets three hours a week.

H003, H004 Second-year Chinese

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. Three hours a week of classes and two hours of drills. *Prerequisite:* First-year Chinese or equivalent.

B101, B102 Third-year Chinese: Readings in the Modern Chinese Short Story and Theater

Zhang

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: Second-year Chinese or permission of instructor.

B201, B202 Fourth-year Chinese: Readings in the Humanities

Chiang

Development of language ability by readings in 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:* Third-year Chinese or permission of instructor.

JAPANESE LANGUAGE

Yoko Koike, director, on leave fall 2005

Hank Glassman

Yukino Tanaka

Takanobu Tsuji

H001, H002 First-year Japanese (Intensive)

Tsuji, 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.

H003, H004 Second-year Japanese

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.

H101, H102 Third-year Japanese

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.

H201, H202 Fourth-year Japanese

Glassman, 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.

ECONOMICS

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 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 use 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) and at least 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.

Associate Professor Richard Ball

Professor Linda Bell, chair

Professor Vernon J. Dixon

Professor Vladimir Kontorovich

Assistant Professor Saleha Jilani

Associate Professor Anne E. Preston

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.

*Note: Economics 100 may be substituted for Economics 101 with the approval of the chair. Approval will not be granted to students who earn a grade below 3.0 in Economics 100.

Prospective economics majors 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. 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

100a **The Economics of Public Policy** SO

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. Recent topics have 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.

101a,b **Introduction to Microeconomics** SO

S. Jilani, V. Kontorovich

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.

102a,b **Introduction to Macroeconomics** SO

A. Preston

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.

203a,b **Statistical Methods in Economics** SO/QU

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. *Prerequisite:* Economics 101, or 102, or 105, or 100 with Chair approval, and conditional on a grade of 3.0 or higher.

205a,b **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. *Prerequisite:* Economics 101, or 102, or 105, or 100 with Chair approval, and conditional on a grade of 3.0 or higher.

209a,b **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 McDonalds 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. *Prerequisite:* 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.

210a **Linear Optimization and Game Theory** NA/QU (Cross-listed in Mathematics and Computer Science)

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 121 and instructor consent, or Math 215.

211a **The Soviet System and Its Demise** SO (Cross-listed in Political Science and Russian)

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. *Prerequisite:* Two one-semester courses in Economics, Political Science, or History.

215 **Urban Economics** SO

V. Dixon

Micro- and macroeconomics 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. *Prerequisite:* 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.

222 Economic Analysis of Contemporary Policy Issues SO

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. *Prerequisite:* Econ 101 or Econ 100 with approval of the chair and conditional on a grade of 3.0 or higher.

224a,b Women in the Labor Market SO

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.

225a 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. *Prerequisite:* Economics 101 and 102 or Economics 105 and one other economics course excluding economics 111.

240a Economic Development and Transformation: China vs. India SO (Cross-listed in East Asian Studies)

S. Jilani

A survey of the economic development and recent transitional experience in China and India, giant neighboring countries, accounting for roughly one third of total world population. The course will examine the economic structure and policies in the two countries, with a focus on comparing China and India's recent economic successes and failures, their development policies and strategies, institutional changes, and factors affecting the transformation process in the two countries.

247a,b 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.

248a Global Economics: 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. *Prerequisite:* Econ 300 and 302 (or equivalent) or consent of instructor.

300a,b 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. *Prerequisite:* Econ 101, 102 and Math 114 or econ 105 and one other Econ course and Math 114. Econ 100 can be applied with approval of the Chair.

302a,b 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. *Prerequisite:* Economics 101, 102 and Mathematics 114 (or equivalent) or Economics 105 and one other economics course, excluding Mathematics 114 (or equivalent). Economics 100 can be applied with approval of the Chair, and conditional on a grade of 3.0 or higher.

304a,b Introduction to Econometrics SO

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,b 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. *Prerequisite:* Economics 203, 300 and two semesters of college level calculus (or equivalent).

312 General Equilibrium Theory SO*R. Ball*

This course provides an examination of the Arrow-Debreu model of general competitive equilibrium, one of the foundations of neo-classical microeconomic theory. The course focuses on sufficient conditions for existence and uniqueness, welfare properties, and stability of equilibrium prices. *Prerequisite:* (i) Econ 300, and (ii) either Math 216 or Math 317

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. *Prerequisite:* Econ 300 and 302 (or equivalent) or consent of instructor.

396b Research Seminar SO*Staff*

Senior thesis. An independent research project conducted on a topic selected by the student in consultation with a department advisor. *Prerequisite:* Senior status and Economics 300, 302 and 304 or consent of instructor.

480 Independent Study SO*Staff*

Prerequisite: Consent of the instructor.

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

The Bryn Mawr-Haverford Education Program is built around three mutually informing pursuits: the interdisciplinary study of learning as a central human and cultural activity; the investigation of the politics of schooling as a powerful source of personal and societal development; and the preparation of lifelong teachers, learners, and researchers. Students who complete one of the Education Program options are prepared to become leaders and change agents in whatever professional and human activities they pursue.

The Bryn Mawr/Haverford education program offers the following options to students interested in education: students may (1) take courses that are open to all interested students, (2) pursue a minor in educational studies, (3) complete a sequence of courses leading to certification to teach at the secondary (grades 7-12) level in Pennsylvania as part of the four-year undergraduate program, or (4) complete certification requirements in a 5th year at reduced tuition.

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.

Associate Professor of Education Alison Cook-Sather, Director
Program Administrator/HC Advisor and Concentration Coordinator, Ann Brown
Field Placement Coordinator and BMC Advisor, Robyn Newkumet
Senior Lecturer in Education, Alice Lesnick
Lecturer in Education, Jody Cohen
Visiting Lecturer in Education, Barbara Hall
Visiting Lecturer in Education, Kristine Lewis

REQUIREMENTS

(1) For Certification

The Bryn Mawr/Haverford education program is accredited by the state of Pennsylvania to prepare candidates for secondary certification (grades 7-12) in 13 fields: biology, chemistry, Chinese, citizenship education, English, French, German, Latin, mathematics, physics, Russian, social science, social studies, 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.

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 distribution requirements, and the courses listed below:

1. Education 200 (Critical Issues in Education).
2. Psychology 203 (Educational Psychology).
3. Either Education 250 (Literacies and Education) or Education 210 (On the Margins)
4. One other education-related course (see program administrator for options)
5. Education 301 (Curriculum and Pedagogy Seminar).
6. Education 302 (Practice Teaching Seminar) and Education 303 (Practice Teaching).

These courses are taken concurrently and earn triple credit.

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, stu-

dents should consult with the program administrator regarding course selection and sequencing.

Students preparing for certification must take two courses in English and two courses in math prior to being admitted to the certification program and must attain a grade point average of 3.0 or higher. 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 teaching. 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. Required education course (Education 210, 225, 240, 250, 260, 266 – see course descriptions below).
3. & 4. Two education-related electives (see program administrator for options).
5. Education 310a Defining Educational Practice (HC).
6. Education 311b Field Work Seminar (HC).

The Portfolio

To synthesize their work in the minor or the certification program, students produce a portfolio. The portfolio draws on the work students produce in their courses as well as in their other activities (volunteering, summer programs, community work, etc.); it serves as an ongoing forum through which students synthesize their studies, is developed over the course of the student's college career, and is 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-page analysis of the significance of the piece of work.

138 Critical Issues in Education: Politics and Practices SO

(Cross-listed in Writing Program)

A. Lesnick

An examination of major issues concerning educational reform through readings, discussions, writing, and 3-4 visits to a school context. Among the issues to be explored are the complexity of U.S. education; the meaning of childhood, culture, freedom, and difference; and the pos-

sibilities for educational reinvention and empowerment.

200a,b Critical Issues in Education SO

B. Hall

An examination of major issues concerning educational reform through readings, discussions, writing, and 7-8 visits to a school context. Among the issues to be explored are the complexity of U.S. education's history and politics; the meaning of childhood, culture, freedom, and difference; learning theories and pedagogical approaches; and the possibilities for educational reinvention and empowerment. 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

The course explores the schooling experiences, strengths, and needs of student populations frequently marginalized by their differences from the mainstream. We use a cultural perspective as well as contacts with educators, parents, and students to address issues such as labeling, how (different) children learn and teachers teach, and how policies intersect with practice. Students conduct field research in school placements. *Enrollment is limited to 25 with priority given to students pursuing certification or the minor in Educational Studies.*

240a,b Qualitative Research: Theories, Texts, and Practices SO

A. Lesnick

This is a Praxis course and 2-3 hours per week in a field placement are required. (Satisfies the social justice requirement.)

250b Literacies and Education SO

(Cross-listed in General Programs)

A. Lesnick

A critical exploration of what counts as literacy, who decides, and what the implications are for teaching and learning. Students will explore both their own and others' experiences of literacy through reading and writing about power, privilege, access, and responsibility around issues of adult, ESL, cultural, multicultural, gendered, academic, and critical literacies. Field work required. *Enrollment limited to 25 (Writing Intensive Praxis I).* Priority given first to those pursuing certification or a minor in Educational Studies. (Satisfies the social justice requirement.)

260 Multicultural Education SO

J. Cohen

An investigation of the notion of multicultural education. This course problematizes the history, meanings, purposes, and outcomes of multicultural education and engages students in researching and reinventing what is possible in education for, with, and about a diverse world. Field work required. *Enrollment limited to 25.* Priority given first to those pursuing certification or a minor in Educational Studies.

266 Schools in American Cities SO

(Cross-listed in General Programs)

J. Cohen

This course examines issues, challenges, and possibilities of urban education in contemporary

EDUCATION AND EDUCATIONAL STUDIES

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" that 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 Seminar 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 high school 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.

310a Defining Educational Practice SO

A. Lesnick

An interdisciplinary inquiry into the work of teaching and learning in education-related contexts. Three to five hours of field work required per week. *Enrollment limited to 20*. Priority goes to students completing the minor in Educational Studies.

311b Field Work Seminar SO

A. Lesnick

Drawing on the diverse contexts in which participants complete their field work, this seminar invites exploration and analysis of ideas, perspectives, and different ways of understanding what each person experiences and observes at his/her site. Five to eight hours of field work required per week. *Enrollment limited to 20*. Open only to students completing the minor in Educational Studies.

480a,b,f,i Independent Study SO

Staff

**Note: 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 610-526-5376.*

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 five to eight 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 AOCs 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).

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)

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**, on leave Semester I

Associate Professor **Rajeswari Mohan**, chair, Semester I

Associate Professor **James C. Ransom**, on leave Semester I; retiring in Dec. '05

Associate Professor **Christina Zwarg**,

Assistant Professor **Laura McGrane**, on leave '05-'06

Assistant Professor **Maud McInerney**

Assistant Professor **Debora Sherman**

Assistant Professor **Gustavus Stadler** on leave '05-'06

Assistant Professor **Theresa Tensuan**, on leave '05-'06

Visiting Assistant Professor **Susan Benston**

Visiting Assistant Professor **Stephen Hock**

Visiting Assistant Professor **Dorian Stuber**

Visiting Assistant Professor **Eugenia Zuroski**

Visiting Instructor **Daisy Fried**

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

291a **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

D. Fried

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 Writing Program 150a,b)

K. Benston, R. Mohan, D. Sherman, D. Stuber, E. Zuroski, 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.

201a b **Chaucer** HU

M. McInerney

One semester devoted to a close reading of the *Canterbury Tales*; the other semester studies the early lyrics, dream visions and *Troilus and Criseyde*. Semesters may be taken separately.

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 2005-06.*

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 2005-06.*

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. *Not offered in 2005-06.*

211 Introduction to Postcolonial Literature HU

R. Mohan

An introductory survey of English literature from regions that used to be part of the British Empire, focusing on topics such as the representation of first contact, the influence of western education and the English language, the effects of colonial violence, displacement, migration, and exile; consideration of specific aesthetic strategies that have come to be associated with this body of literature.

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.

218 The Western Dramatic Tradition HU (Cross-listed as Comparative Literature 218)

K. Benston

Introduction to the tradition of Western drama through close study of major representative plays. *Not offered in 2005-06.*

220 The British Epic HU

M. McInerney

An exploration of the long narrative poems that shape the epic tradition in British literature. Readings in classical epic and medieval epic, Chaucer, Spenser, Milton, etc.

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 2005-06.*

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.

241 Eighteenth-Century Literature HU

E. Zuroski

Poetry drama, fiction, and nonfiction prose of the Restoration and 18th century. Topic to be announced.

243 Eighteenth-Century Literature 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. *Not offered in 2005-06.*

250 Irish Literature: Writing the North ('68 to the Present) HU

Staff

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. *Not offered in 2005-06.*

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 2005-06.*

253 English Poetry from Tennyson to Eliot HU

S. Finley

A study of 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. *Not offered in 2005-06.*

254 Victorian Literature HU

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.

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 2005-06.*

258 The Novel HU*D. Sherman*

The course examines the British novel as a form crucially developed from the latter part of the 18th 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 2005-06.*

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 2005-06.*

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 2005-06.*

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. *Not offered in 2005-06.*

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 2005-06.*

264 Adaptation: Literature into Film HU

S. Hock

In this course, we will study a number of books and the films based on them, in order to explore the variety of ways in which directors can adapt works of literature into film. Through examination of these adaptations, we will gain a greater understanding of the defining qualities of both literature and film.

266 A Sense of Place HU

J. Ransom

This course examines non-fiction writing about place in the work of a range of U.S. writers from Thoreau (*Walden*) to such recent writers as Annie Dillard (*Pilgrim at Tinker Creek*) and William Least Heat Moon (*PrairyErth*), with especial attention to the discursive construction of highly particularized environments. *Not offered in 2005-06.*

268 New American Fiction HU

S. Hock

Selected readings in recent North American fiction.

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 2005-06.*

272 Malingering: Illness & Idleness in Literature and Film HU

D. Stuber

Surveys two opposing definitions of illness in literature and film from 1850 to the present. In one illness is an aberration; in the other it is a respite from confining normativity. Examines the relation of each to the ideological systems of capitalism and normative heterosexuality that dominate the period.

273 Modern British Literature HU

D. Stuber

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 Flann O'Brien. 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 2005-06.*

275 Thinking Globally & Writing Locally HU

R. Mohan

The course will examine the ways the global circulation of people, ideas, languages, and liter-

ary and cultural forms brought about by colonialism, decolonization, and immigration shape specific Anglophone literary traditions. *Not offered in 2005-06.*

276 Literature and Politics of South African Apartheid HU

(Cross-listed in Africana Studies)

L. McGrane

An exploration of the politics and historiography of South African apartheid literature and culture. Considers the interplay between categories of race, gender, and national identity in novels, poetry, and films from the apartheid era. (Satisfies social justice requirement.) *Not offered in 2005-06.*

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 2005-06.*

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. *Not offered in 2005-06.*

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 2005-06.*

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 2005-06.*

282 “An Energy of Profusion; 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 2005-06.*

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 2005-06.*

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 2005-06.*

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 2005-06.*

295 Interpretation and the Other: Meaning, Understanding, and Alterity HU

(Humanities Seminar)

(Cross-listed in Religion, Philosophy, and Comparative Literature.)

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. *Limited to 20. Not offered in 2005-06.*

299a, b Junior Seminar HU

M. McInerney, R. Mohan, C. Zwarg

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 The Hundred Years War (1337-1453) and the Production of Literary Culture HU

M. McInerney

325 Advanced Shakespeare HU

K. Benston

347 **Topics in 18th-Century Literature** HU

E. Zuroski

352 **Romanticism and Theory** 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: How to do Things with Books** HU

G. Stadler

366 **Topics in American Literature: Storytelling and the Ruins of Feminism** HU

C. Zwarg

367 **Topics in American Literature: The Poems of Our Climate: Robert Frost, Wallace Stevens, and William Carlos Williams** 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: Mixing Memory & Desire: Psychology & Gender in Modern British Literature & Film** HU

D. Stuber

377 **Problems in Postcolonial Literature** HU

R. Mohan

380 **Violence in Contemporary American Literature** HU

T. Tensuan

381 Textual Politics: Marxism, Feminism, and Deconstruction HU

R. Mohan

382 On the Sublime HU

D. Sherman

**383b Topics in American Literature: Textuality and Identity in Contemporary
Experimental Fiction HU**

S. Hock

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

S. Hock

388 Problems in Narrative: Obsession, Trauma, Hysteria, Oblivion, Bliss HU

K. Benston

389 Problems in Poetics 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****1xx Film/Art****205 Introduction to Film Studies****210 Renaissance Lyric****220 Teaching of Writing****231 Modernism in Anglo-American Poetry: "After Us the Savage God"****238 Silent Film: International Film to 1930****242 Historical Introduction to English Poetry I****243 Historical Introduction to English Poetry II****250 Methods of Literary Study I****250 Methods of Literary Study II****263 Toni Morrison & the Art of Narrative Conjure****279 Introduction to African-American Literature****291 Documentary Film & Media****3xx A Sense of Place****306 Film Theory: Animation & "Liveness"****316 Spenserian Allegory****317 Exhibition/Inhibition (Cross-listed in History of Art)****362 African American Literature****382 Poetry Master Class (Cross-listed in Arts Writing)****398 Senior Seminar****399 Senior Seminar****ARTW 159 Introduction to Creative Writing****ARTW 251 Travel Writing (New)****ARTW 260 Writing Short Fiction I****ARTW 261 Writing Poetry: Subjects & Predicates****ARTW 262 Playwriting I****ARTW 268 Writing Literary Journalism****ARTW 364 Approaches to the Novel****ARTW 382 Poetry Master Class****GNST Healing, Harming, and Humanism****GNST 290 Interdisciplinary Perspectives on Sex and Gender**

FINE ARTS

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 William E. Williams

Associate Professor Ying Li, chair

Assistant Professor Hee Sook Kim

Visiting Assistant Professor Deborah Masters

Visiting Assistant Professor Gerald Cyrus

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: you 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.

102d, g Arts Foundation-Drawing HU

Y. Li

103d,e,g,h Arts Foundation-Photography HU

G. Cyrus

106d,g Arts Foundation-Drawing HU

Staff

107e,h Arts Foundation-Painting HU

Y. Li

108g,h Arts Foundation-Photography HU

W. Williams

109e,h Arts Foundation-Sculpture HU

Staff

120g 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. *Not offered 2005-06.*

121d,e,g,h 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.

122d,e,g,h 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, and black and white printing. Emphasizing the expressive potential of the medium to create a personal visual statement.

123d,e,g,h 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.

124d,h Foundation Printmaking: Monotype HU

H. Kim

Basic printmaking techniques in Monotype medium. Painterly methods, direct drawing, stencils, brayer techniques for beginners in printmaking will be taught. Color, form, shape, and composition in 2-D format will be explored. Individual and group critiques will be employed.

216a History of Photography from 1839 to the Present HU

(Cross-listed in General Programs)

W. Williams

An introductory survey course about the history of photography from its beginnings in 1839 to the present. The goal is to understand how photography has altered perceptions about the past, created a new art form, and become a hallmark of modern society. *Prerequisite:* Sophomore standing.

223a,b Printmaking: Materials and Techniques: Etching HU

H. Kim

Concepts and techniques of B/W & Color Intaglio. Line etching, aquatint, soft and hard ground, chin-colle techniques will be explored as well as visual concepts. Developing personal statements will be encouraged. Individual and group critiques will be employed.

Prerequisite: Permission of instructor by review of portfolio.

224a Computer and Printmaking HU

H. Kim

Computer-generated images and printmaking techniques. Students will create photographic, computer processed, and directly drawn images on lithographic polyester plates and zinc etching plates. Classwork will be divided between the computer lab and the printmaking studio to create images using both image processing software and traditional printmaking methods, including lithography, etching, and silk-screen. Broad experimental approaches to printmaking and computer techniques will be encouraged. Individual and group critiques will be employed. *Prerequisite:* Any introductory printmaking course or permission of instructor by portfolio review.

225b Lithography: Material and Techniques HU

H. Kim

231a,b Drawing (2-D): All Media HU

Staff

Various drawing media such as charcoal, cont, 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,b Painting: Materials and Techniques HU

Y. Li

Problems of (1) form, color, texture, and their interrelationships; (2) influences 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; (5) the relationships of form and composition, and color and composition. Media are primarily oils, but acrylics, watercolor and pastels are explored. Part of the work is from life models. May be repeated for credit. *Prerequisite:* Fine Arts 101 or consent of instructor.

241a,b Drawing (3-D): All Media HU

C. Cairns, D. Swords

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,b Sculpture: Materials and Techniques HU

Staff

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 103 or equivalent.

321b Experimental Studio: Etching HU

H. Kim

Concepts and techniques of Color Intaglio. Combined printmaking methods as well as solid foundations in printmaking techniques will be encouraged. Personal statements and coherent body of works will be produced during the course. Individual and group critiques will be employed. *Prerequisite:* Permission of instructor by review of portfolio.

322a,b Printmaking: Experimental Studio Lithography HU

H. Kim

Concepts and techniques of Color Lithography. Combined printmaking methods as well as solid foundations in printmaking techniques will be encouraged. Personal statements and coherent body of works will be produced during the course. Individual and group critiques will be employed. *Prerequisite:* One course in printmaking or permission of instructor.

326a Experimental Studio: Lithography HU

H. Kim

327b 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. *Prerequisite:* A foundation drawing course and Foundation Printmaking, or permission of instructor.

331a,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. *Prerequisite:* Fine Arts 231a or b, or consent of the instructor.

333a,b Experimental Studio (Painting) HU

M. Armstrong

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. *Prerequisite:* Fine Arts 223a or b, or consent of instructor.

341a,b Experimental Studio (Drawing) HU

Staff

Prerequisite: Fine Arts 241a or b or consent of instructor.

343a,b Experimental Studio (Sculpture) HU

C. Cairns, D. Swords

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,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. *Prerequisite:* Fine Arts 251a and 260b.

460 Teaching Assistant HU

Staff

480a,b,e,f,i 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 the instructor.

499a,b Senior Departmental Studies HU

Kim, Li, Williams

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. *Prerequisite:* Consent of the instructor.

FRENCH AND FRENCH STUDIES

The Departments of French at Haverford and Bryn Mawr colleges 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 and Francophone cultures through the study of literature and language. 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 and Francophone literatures and cultures, and special attention is given to the speaking and writing of French. Courses at the 200 level treat French and Francophone literatures and civilizations from the beginning to the present day. Four 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 and Francophone cultures (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, 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 (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 in the non-intensive sequence (001-002; 003-004; 101-102; 101-105; 102-102 or 103-105). 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 Grammaire avancée 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.

At Haverford College:

Professor Koffi Anyinefa

Assistant Professor Duane W. Kight

Instructor Florence Echtman, at Haverford and Bryn Mawr Colleges

Associate Professor David L. Sedley, Chair and Major Advisor

At Bryn Mawr College:

Eunice Morgan Schenck 1907 Professor Grace M. Armstrong

Senior Lecturer Janet Doner

Senior Lecturer Roseline Cousin

Assistant Professor Francis Higginson

Associate Professor Brigitte Mahuzier, Chairperson and Director of Avignon Institute

Visiting Lecturer, Nathalie Marcus

MAJOR REQUIREMENTS

Requirements in the major subject are:

1. Literature concentration: French 101-102, 101-105, or 103-102; 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, 101-105, 103-102 or 103-105; French 212 or 260; French 291 and 294, the core courses; a minimum of two civilization courses to be chosen among 246, 248, 251, 255, 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, 101-105, 103-102 or 103-105; 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.

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, and Wellesley College 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 and Francophone literatures and cultures, most particularly for those who anticipate professional careers requiring a knowledge of the language and civilization of France and French speaking countries. 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

FRENCH AND FRENCH STUDIES

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

001a, 002b **Elementary French HU**

R. Cousin, J. Doner, F. Echtman, D. Kight, N. Marcus

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 each week) and non-intensive (five hours each week) sections. This is a year-long course; both semesters (001 and 002) are required for credit.

003a, 004b **Intermediate French Non Intensive HU**

R. Cousin, F. Echtman, F. Higginson, D. Kight, N. Marcus, D. Sedley, Staff

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 each week) sections which are supplemented by an extra hour per week with an assistant. This is a year-long course; both semesters (003 and 004) are required for credit. *Prerequisite:* Open to graduates of French 002 (Non-Intensive) and to students placed at that level by the department.

005a **Intensive Intermediate French HU**

G. Armstrong, J. Doner, F. Echtman

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 each 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 the second semester. Open only to graduates of Intensive Elementary French or to students specially placed by the department. Students who are not graduates of Intensive Elementary must take either 102 or 105 in Semester II to receive credit.

101a **Textes, Images, Voix I HU**

B. Mahuzier, N. Marcus, D. Sedley

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. Open only to graduates of Intermediate French or to students specially placed by the department.

102b **Textes, Images, Voix II HU**

G. Armstrong, F. Echtman

Continued development of students' expertise in literary and cultural analysis by emphasizing close reading as well as oral and written analyses of works chosen from various genres and periods of French/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. Offered in second semester. *Prerequisite:* French 005, 101 or 103.

103a De Sedan à la Belle Epoque (1870-1914) HU

D. Kight

In this course, students will be introduced to events, personalities, and issues whose effects are still felt in contemporary France. The course will be structured around thematic clusters, such as: "Napoléon III et Victor Hugo," "La Commune de 1871," and "Impératrices des Tuileries, des salons et de la scène." Readings will be drawn from literary and non-literary texts of the period, as well as from relevant theoretical, historical, sociological, and anthropological analyses. The same complexities of French grammar covered in French 101 will be reviewed. Open to graduates of Intermediate French or to students specially placed by the department.

105b 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, magazines, and they are complemented by video materials. *Offered in second semester. Prerequisite:* French 005, 101 or 103.

201a 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. *Prerequisite:* Consent of the instructor.

202b Crise et identité: 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.

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 2005-06.*

FRENCH AND FRENCH STUDIES

204 **Le Siècle des lumières** HU

Staff

Representative texts of the Enlightenment and the Pre-Romantic movement, with emphasis on the development of liberal thought as illustrated in the *Encyclopédie* and the works of Montesquieu, Voltaire, Diderot, and Rousseau. *Not offered in 2005-06.*

205 **Le Temps des Prophètes: de Chateaubriand à Baudelaire (1800-1860)** HU

Staff

From Chateaubriand and Romanticism to Baudelaire, a study of selected poems, novels, and plays. *Not offered in 2005-06.*

207a **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.

212a **Grammaire avancée: composition et conversation** HU

F. Echtman

A general review of the most common difficulties of the French language. Practice in composition, translation, and conversation.

213b **Approches Critiques et Théoriques** HU

(Cross-listed as Comparative Literature 213)

B. Mahuzier

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.

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 2005-06.*

250 **Introduction à la Littérature Francophone** HU

K. Anyinefa

A study of male and female writers of Black Africa, Arab North Africa, and the Caribbean. *Not offered in 2005-06.*

260a, b **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.

262b **Débat, discussion, dialogue** HU

R. Cousin

Intensive oral practice intended to bring non-native French speakers to the highest level of

proficiency through the development of debating and discussion skills. *Prerequisite:* French 212 or 260.

280 Analyses sémiologiques de la culture française: stéréotypes et réalités HU

Staff

A study of how French society represents itself both to the French and to others and of the discrepancies between this representation and the more complex, evolving reality. Conducted through various media (popular and serious literature, films, art, theatre, computer media, song, television, talk shows, pedagogical texts, etc.), this study focuses on representation and reality in political and social life, national history, the European Union, Parisian and provincial contexts with their microcultures, finance, fashion, and sexual mores. *Not offered in 2005-06.*

299 Littérature, Histoire, et Société de La Révolution à La Première Guerre Mondiale HU

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. *Not offered in 2005-06.*

302 Le Printemps de La Parole Féminine: Femmes écrivains des débuts 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 2005-06.*

307 Le Théâtre du XVIIIe siècle: Marivaux, Beaumarchais HU

Staff

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 2005-06.*

312a Advanced Topics in French Literature HU

Staff

An in-depth study of a topic or movement in French literature. Topic for Fall 2005: TBA

320 La France et ses Orientés HU

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. *Not offered in 2005-06.*

FRENCH AND FRENCH STUDIES

325a, 326b **Etudes avancées de civilisation** HU

Staff

An in-depth study of a particular topic, event, or historical figure in French civilization. *Not offered in 2005-2006.*

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.

354 **Ecrivains/théoriciens engagés** HU

B. Mahuzier

Not offered in 2005-06.

398a, 399b **Senior Conference** HU

G. Armstrong, D. Sedley

A weekly seminar examining representative French and Francophone literary texts and cultural 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.

480a,b,f,i **Independent Study** HU

Staff

Prerequisite: Consent of the instructor.

GENDER AND SEXUALITY STUDIES

The bi-college concentration in Gender and Sexuality Studies is committed to the interdisciplinary study of a range of different questions raised by the category gender. The program includes courses that interrogate experiences which call attention to matters of gender difference, gender roles, gender socialization and gender bias, considered historically, materially, and cross-culturally, and courses that engage sexual difference, sexual roles, sexual socialization and sexual bias.

Students choosing a concentration or minor in Gender and Sexuality Studies plan their programs in consultation with the coordinator of the program on their home campus and members of the Gender and Sexuality Studies Steering Committee. Courses in the program draw upon and speak to feminist theory and women's studies; transnational and third-world feminisms; womanist theory and the experiences of women of color; the construction of masculinity and men's studies; lesbian, bisexual, gay, queer, transgendered/transsexual studies; and gender as it is inflected in and by class, race, religion, and nationality.

Assistant Professor Debora Sherman, Coordinator at Haverford
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 Economics 100; English 278; Political Science 123; Philosophy 105; or Sociology 155 (Hohenstein) at Haverford. Equivalent courses at Bryn Mawr, 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: Gender & Sexuality.
- (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 Gender and Sexuality Studies will have to make a proposal to the College Committee on Student Standing and Progress (CSSP).

GENDER AND SEXUALITY STUDIES AT HAVERFORD INCLUDE:

Fall 2005

ECON 100 The Economics of Public Policy

ENGL 301 Sex and Gender in the Middle Ages

PHIL 258 The Philosophy of the Body

PHIL 332 Topics in 20th c. Philosophy: Foucault on Sex and Power

RELG 301 Images of Mary Magdalene

Spring 2006

ANTH 345 Love and the Market Place

ENGL 254 Victorian Sexualities

ENGL 363 John Brown's Body: Violence, National Fantasy, and Bodies That Matter

HIST 354 **Topics in Early Modern Europe: Libertinage and Modernity**
PHIL 106 **The Philosophy of Consciousness and the Problem of Embodiment**
PHIL 356 **Topics in Social & Political Philosophy: Feminist Epistemology**
POLS 123 **American Politics: Difference and Discrimination**
POLS 229 **Latino Politics in the U.S.**
POLS 263 **Women and Politics**
RELG 221 **Women and Gender in Early Christianity**

GENDER AND SEXUALITY STUDIES AT BRYN MAWR COLLEGE INCLUDE:
Fall 2005

ARTD 240 **Dance History**
GNST 290 **Interdisciplinary Perspectives on Gender and Sexuality**
CITY/SOCL 205 **Social Inequality**
ENGL/HART 317 **Exhibition & Inhibition**
FREN 201 **Le chevalier, la dame et le prêtre: littérature du Moyen Age**
PHIL 221 **Ethics**
SOCL 201 **Study of Gender in Society**
SPAN 265 **Escritoras espanolas**
SPAN307 **La mujer en la literatura Signo Oro**

Spring 2006
CITY/COML319 **Gender in German Literature & Film**
ENG 263 **Toni Morrison**
HART 108 **Women, Feminism & History of Art**
HART 321 **Topics in German Art**
POLS 374 **Gender and Power in Comparative Context**
SOCL 350 **Movements for Social Justice**
SPAN 329 **Narrating Latina & Latino Life**

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 Harvey Glickman, Emeritus

Associate Professor M. Kaye Edwards

Associate Professor Shizhe Huang

Visiting Professor Ruth Guyer

Visiting Professor Bettina Hoerlin

Visiting Professor Carol Mager

Visiting Associate Professor Christopher Couch

Visiting Assistant Professor Lucas Platt

Visiting Assistant Professor Eric Raimy

COURSES

101b **Introduction to African and Africana Studies** SO

An interdisciplinary introduction to Africana Studies, emphasizing change and response among African peoples in Africa and outside. *Offered at Bryn Mawr in 2005-2006.*

111b **Introduction to Peace and Conflict Studies** SO, SJ (Cross-listed in Peace and Conflict Studies)

L. Dwyer

A broad overview of the study of conflict, peace and peace-building. Topics include: militarization, nuclearization, ethnic conflict, genocide, social movements, and non-violence, with special emphasis on understanding the historical and cultural contexts of conflicts and peace-building efforts. (Fulfills 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

201a **Human Rights Development and International Activism** SO, SJ

(Cross-listed in Anthropology and Peace and Conflict Studies)

L. Dwyer

(Fulfills the social justice requirement.)

215a **Sport and Society** HU

A. Kitroeff, G. Kannerstein

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, experienced as a spectacle and how it was treated as an important social institution. *Enrollment limited to 50 students. Prerequisite:* Freshman Writing.

216a History of Photography from 1839 to the Present HU (Cross listed in Fine Arts)
W. Williams

An introductory survey course. The goal is to understand how photography has altered perceptions about the past, created a new art form, and become a hallmark of modern society.

221a Epidemiology and Global Health SO
K. Edwards

This course will examine the interplay of biomedical, societal, and ethical concerns in global health. A unit on epidemiology will provide the analytical tools to measure effectiveness of various public health responses. Case studies, such as smoking and tobacco-related diseases, emergency contraception, AIDS prevention and therapies will highlight the impact of medical science, economics, culture, and politics on public health in different countries. *Enrollment limited to 25 students. Prerequisite:* College-level biology course; a course in statistics is recommended.

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.*

241b The Economics and Finances of Higher Education SO
G. 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, assessing financial health, as well as other topics. *Not offered 2005-2006.*

242b Chinese Language in Culture and Society SO (Cross listed in East Asian Studies)
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.

245b Phonetics and Phonology HU
E. Raimy

This course investigates the sound patterns found in human languages. Phonetics is the study of these patterns from a physical and perceptual perspective while phonology is the study of

sound patterns from a cognitive perspective. Activities in this class will expose students to the methodologies used by both perspectives (articulatory description and acoustic analysis for phonetics and formal theoretical models for phonology) and show the necessity and utility of both approaches in understanding the nature of sound patterns in human language.

252b Women, Medicine, and Biology SO (Cross-listed in Biology)

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 30 students with preference given to Gender and Sexuality Studies Concentrators. (Satisfies the social justice requirement.) Not offered in 2005-2006.

254b Bioethical Dilemmas SO

R. Guyer

This course considers five areas in which bioethical dilemmas arise: environmental contamination and remediation, abuse of human subjects in research, powers and dangers of new reproductive and genetic technologies, the welfare of research animals, and issues in organ transplantation.

265b U.S. Foreign Policy in the New World Disorder HU

H. Glickman

Consideration of the major policy areas, regional and global, at issue in contemporary foreign policy. An analytic seminar, led in association with the Great Decision Program of the Foreign Policy Program, leading to a student town meeting. Topics: the war on terrorism; rebuilding Afghanistan and Iraq; the European (dis)connection; Asian face-offs; Africa's unending crisis. *Prerequisite:* One social science course.

272a The First Amendment and Workplace Discrimination SO, SJ

C. Mager

What speech is protected by the First Amendment? Should workplace restrictions on behavior relating to sexuality, ethnicity, race, and religion apply to pure speech in the absence of conduct? Should the government try to impose a general civility code or foster sexual, racial, ethnic, and religious equality through government restrictions on behavior? (Satisfies the social justice requirement.)

279a Independent Film-Making and Television: Past, Present, and Future HU

L. Platt

An examination of independent film and television from 1942 through the present, and trends into the future: the height and collapse of the studio system, the mid-century domination of the television networks, the rise of independent film and video, and the mainstream co-opting of those forms.

280b The International Graphic Novel

GENERAL PROGRAMS

282b **Structure of Chinese** SO (Cross-listed in East Asian Studies)

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. *Prerequisite:* consent of the instructor.

290a **Interdisciplinary Perspectives on Gender** HU

Bi-college course for Feminist and Gender Studies concentration. *Offered at Bryn Mawr in 2005-2006.*

322b **Field Methods in Peace and Conflict Studies** SO

(Cross-listed in Anthropology and Peace and Conflict Studies)

L. Dwyer

This course will address the methodological, political and ethical challenges of understanding situations of conflict. We will take a critical look at traditional sources used in peace and conflict studies, such as the media, official accounts, and human rights reports, and we will explore methods of first-hand data gathering in conflict settings. During the semester, students will conduct their own research on local conflicts. Sustained attention will be paid to fieldwork methodologies, and to issues surrounding the researcher's position in social conflicts. *Not offered in 2005-2006.*

494f **Senior Conference in Science and Society** NA

K. Edwards

A conference course for students writing their final paper for the Science 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 Science and Society Program or consent of the instructor. *Not offered in 2005-2006.*

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.

Professor Maria Luisa Crawford (on leave 2005-06)

Professor W. Bruce Saunders, chairperson

Assistant Professor Donald C. Barber

Assistant Professor Arlo B. Weil, major advisor

Lecturer and Laboratory Coordinator Blythe L. Hoyle

Keck Postdoctoral Fellow Catherine A. Riihimaki

MAJOR REQUIREMENTS

Thirteen courses are required for the major: Geology 101 and 102 or 103; 202, 203, 204, and 205; Math 101 and 102, or alternates approved by the adviser; a two-semester sequence of Chemistry (101/103-104) or Physics (101-102); Geology 403; and either two advanced geology courses or one advanced geology course and an additional upper-level course in chemistry, mathematics, physics, or computer science.

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. Most students complete a one-semester project in the fall semester; a two-semester project may be undertaken with 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.

MINOR REQUIREMENTS

A minor in geology consists of two of the 100-level GEOL courses, and any four of the 200- or 300-level courses offered by the Department.

CONCENTRATION IN GEOCHEMISTRY

The geochemistry concentration encourages students majoring either in geology or in chemistry to design a course of study that emphasizes Earth chemistry. In geology this concentration includes at least: Geology 101, 103, 202, 205; one of 301 or 302 or 305; Chemistry 101 or 103, 104 and 231 (Inorganic Chemistry). Additional chemistry courses might include 211 (Organic Chemistry) or 222 (Physical Chemistry). Other courses that complement this concentration are: calculus, computer programming, and computer modeling.

CONCENTRATION IN ENVIRONMENTAL STUDIES

The environmental studies concentration allows students to explore the interactions among the geosphere, biosphere, and human societies. The concentration represents interdisciplinary

cooperation among the Departments of Anthropology, Biology, Economics, English, Geology, Political Science, and Growth and Structure of Cities, and is open to students majoring in any of these departments.

The environmental concentration in geology consists of Geology 101 or 102, 103, 202 and two other 200-level Geology courses, 302 or 328, 397, another 300-level Geology course and 403; Chemistry 101 or 103, and 104; two semesters of math, statistics or computational methods; Biology 220; and three additional environmental courses outside of the Natural Sciences, two of which should address issues of Planning and Policy, and one of which should address issues of Humans in the Environment. See the Environmental Studies Web site (<http://www.brynmawr.edu/es/core.htm>) for current courses in these last two categories.

CONCENTRATION IN GEOARCHAEOLOGY

The geoarchaeology concentration allows students majoring in Anthropology, Archaeology, or Geology to explore the connections among these fields with respect to how our human ancestors interacted with past environments, and how traces of human behavior are preserved in the physical environment. In geology, the geoarchaeology concentration consists of 13 courses: Geology 101 or 102 or 103, 202, 205, 270, 328, another 200- or 300-level Geology course, and 403; Chemistry 101 or 103, and 104; two semesters of math, statistics or computational methods; either Archaeology 101 or Anthropology 101; and one 200- or 300-level elective from among current offerings in Anthropology or Classical and Near Eastern Archaeology.

COURSES

101 **How the Earth Works** NA

A. B. 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 two-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 **Earth Systems and the Environment** NA

(Cross-listed as Growth and Structure of Cities 103)

D. C. Barber

Three lectures and one lab per week, plus a mandatory two-day field trip for which an extra fee is collected. This integrated approach to studying the Earth focuses on interactions among geologic, biologic, and oceanographic processes. Also discussed are the consequences of population growth, industrial development, and human land use.

201 **Crystallography and Optical Mineralogy** NA

Staff

Crystallography involves the study of the external forms and symmetry of crystalline solids, as well as an introduction to the study of crystals using x-ray diffraction. Optical mineralogy introduces the effects of the interaction of light with crystalline substances, and use of the

polarizing microscope for mineral identification. *Prerequisite:* Geology 101 or Chemistry 101 or 103, and 104.

202 Mineralogy and Crystal Chemistry NA

Staff

The crystal chemistry of representative minerals. Descriptive and determinative hand-specimen mineralogy as well as the relations between the physical properties of minerals and their structures and chemical compositions. The occurrence and petrography of typical mineral associations and rocks are also covered. *Prerequisite:* an introductory course in geology or chemistry (both recommended).

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 computer-aided 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. B. 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. *Prerequisite:* Geology 101 and Mathematics 101.

205 Sedimentary Materials and Environments NA

D. C. Barber

Three lectures, one laboratory a week, with at least one day-long field trip. An introduction to the principles of sedimentology, depositional processes, facies analysis and stratigraphy, including interpretation of sedimentary sequences and techniques for reconstructing past environmental conditions. *Prerequisite:* Geology 101, 102, or 103, or consent of instructor. *Recommended:* Geology 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. *Not offered 2005-06.*

209 Natural Hazards Q (Cross-listed as Growth and Structure of Cities 209)

A. B. 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 consent of instructor.

236 Evolution NA (Cross-listed as Anthropology 236 and Biology 236)

R. Davis, S. Gardiner, 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.

250 Computational Methods in the Sciences Q

Staff

Introductory survey of theoretical methods in the sciences. Design, implementation, interpretation, and evaluation of models. Conceptual, analytical, and computational models; simulations; evolutionary algorithms; optimality models; and role of theory in science. Case studies from a variety of natural and social sciences. Laboratory three hours a week, group research project. *Prerequisite:* sophomore or higher standing, two courses at any level in any single natural or social science.

255 Problem Solving in the Environmental Sciences Q

C. Riihimaki

Lecture/discussion three hours a week. Hands-on experience developing effective approaches to solving complex environmental problems. Students will learn fundamental quantitative concepts while exploring issues such as global warming, sudden catastrophes, and the effects of steady flow of wind and water on Earth's surface.

270 Geoarchaeology NA (Cross-listed as Archaeology 270, Anthropology 270)

D. C. Barber, P. Magee

Societies of the past depended on our human ancestors' ability to interact with their environment. Geoarchaeology analyzes these interactions by combining archaeological and geological techniques to document human behavior while also reconstructing the past environment. Course meets twice weekly for lecture, discussion of readings, and hands-on exercises.

Prerequisite: an introductory course in anthropology, archaeology, or geology, or consent of instructor.

301 Geochemistry of Crystalline Rocks NA

Staff

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.

Prerequisite: Geology 202, Chemistry 101 or 103, and 104, or consent of instructor.

302 Low Temperature Geochemistry NA

B. Hoyle, K. Lukacs

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. *Prerequisite:* 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** NA

A. B. Weil

Lecture three hours, one problem session a week, and a weekend fieldtrip. Plate tectonics and continental orogeny are reviewed in light of the geologic record in selected mountain ranges and certain geophysical data. *Prerequisite:* Geology 204.

305 **Igneous and Metamorphic Petrology** NA

Staff

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. *Prerequisite:* Geology 202, and Chemistry 101 or 103, and 104.

306 **Advanced Sedimentary Geology** NA

D. C. Barber

Three hour lecture/discussion a week, and a weekend field trip; for 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. *Prerequisite:* Geology 205 or consent of instructor. *Not offered 2005-06.*

310 **Introduction to Geophysics** NA

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. *Prerequisite:* Geology 101 and Physics 101-102. *Not offered 2005-06.*

312 **Quaternary Geology** NA

Three class hours a week, including hands-on data analysis exercises. 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 covers the many types of geological evidence, from glacial geomorphology to deep-sea geochemistry, used to reconstruct ocean and atmospheric conditions emphasizing Quaternary climate variability. *Prerequisite:* Geology 101, 102, or 103, or consent of instructor.

314 Marine Geology NA

D. C. 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. *Recommended:* Geology 205. *Not offered 2005-06.*

328. Analysis of Geospatial Data using GIS NA

An introduction to analysis of geospatial data, theory, and the practice of spatial reasoning. As part of this introduction, students will gain experience in using one or more GIS software packages and will be introduced to data gathering in the field and by remote sensing. Each student is expected to undertake an independent project that uses the approaches and tools presented.

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.

350 Advanced Topics in Geology NA

A seminar course offered occasionally covering topics on areas of Geology not otherwise offered in the curriculum. Past topics offered: Paleobiology Research and Neotectonics. *Prerequisite:* Advanced standing in Geology and the consent of the instructor.

397 Senior Seminar in Environmental Studies

C. Riihimaki

403 Independent Research

Staff

An independent project in the field, laboratory, or library culminating in a written report and oral presentation.

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 Marianne Tettlebaum

Professor of Philosophy Kathleen Wright

Associate Professor of Music Richard Freedman

At Bryn Mawr College:

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 six 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 one remaining upper-level course 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

C. Pavsek

Meets five hours a week with the individual class instructor, one hour 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 (001 and 002) are required for credit.

101,102 **Intermediate German** HU

U. Schönherr, I. Meyer

Meets three hours a week with the individual class instructor, one hour with student drill instructor. 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, and Context HU

I. Meyer

This course is intended for students who wish to refine their speaking, writing, and reading skills beyond the Intermediate level. Designed as a comprehensive introduction to modern German culture, we will discuss a variety of literary, political, historical, and philosophical texts, including feature films and video materials. In addition, students have the opportunity to enrich the curriculum, by giving class reports on current events of their choice. Weekly grammar reviews will complement these activities.

202 Advanced Training: Introduction to German Studies HU

U. Schönherr

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 (205, 206); each can be taken independently. *Not offered in 2005-06.*

212 Marx and Western Marxism HU

C. Pavsek

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. *Not offered in 2005-06.*

214 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. *Not offered in 2005-06.*

223,224 Topic in German Cultural Studies HU (Cross-listed in Comparative Literature)

M. Tettlebaum, C. Pavsek

Course content varies. Topic for 2005-2006: "Disciplining Art: The Rise of Aesthetic Theory."

224b New German Cinema HU

GERMAN AND GERMAN STUDIES

258 Vienna at the Turns of Centuries: Art, Politics, and Culture HU

(Cross-listed in Comparative Literature)

M. Tettlebaum

An exploration of the musical, literary, cultural, and political climate of Vienna, at the end of the 18th century and the beginning of the 20th century. We will study representative artworks from the two periods, as well as their relationships.

262a Film Before WWII: Introduction to Film HU

C. Pavsek

This course is an introduction to the history of German, French, American and Soviet cinema from its beginnings in 1895 until the late 1930s. It will consider the historical development of narrative and non-narrative film styles, art cinemas and commercial cinema, the development of cinema as an industry as well as its political uses. *Not offered in 2005-06.*

299 Cultural Diversity and its Representations HU

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 2005-06.*

305 Modern German Drama: Brecht and his Legacy HU

C. Pavsek

320 Sex-Crime-Madness: The Birth of Modernism and the Aesthetics of Transgression HU

U. Schönherr

Focusing on major literary figures from Goethe to Brecht, the seminar will examine the "paradigm shift" towards a modern aesthetics of transgression in which social, racial, and sexual deviancy take center stage. Readings will include prose texts and plays by Goethe, Kleist, E.T.A. Hoffmann, Gotthelf, Wedekind, Schnitzler, Mann, Kafka, and Brecht.

321 Literature and New Media HU (Cross listed in Comparative Literature)

U. Schönherr

The emergence of new acoustic, visual, and electronic media since the late 19th century has dramatically changed the status of writing, textuality, and literature. Focusing on modernist as well as contemporary texts, the seminar will reconstruct the changing intermedial relationship between the book and its technologically advanced "other" from the print-based medium to the latest digital "Hypertext" novel. *Not offered in 2005-06.*

359 Hearing-Writing-Silence: Music, Politics, and Gender in German Literature (1800-2000) HU

U. Schönherr

This course will explore the rich and diverse tradition of music narratives in German literature from the age of Romanticism to the present. Contrary to all mystifications, literature does not create music, but rather a text, which is normally being read and not being listened to, and in which music, voice, and sounds are silenced. Against this background, the literary representations of music/musical experiences turn out to be first and foremost a problem of translation. Focusing on exemplary authors, we will analyze the highly diverse functions music occupies in German literary history, ranging from language-philosophical and religious-meta-

physical implications to issues of gender, race, and politics. Furthermore, the course will discuss the question of whether literature can justifiably be read in analogy to musical forms, and whether music as a language is also plausible in reverse. *Not offered in 2005-2006.*

399 **Senior Conference HU**

C. Pavsek, U. Schönherr

480 **Independent Study HU**

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 students to understand the dynamic relationship of urban spatial organization and the built environment to politics, economics, society and culture. Core introductory classes present analytic approaches that allow us to explore the changing forms of the city over time and analyze the variety of ways through which men and women have recreated urban life through time and across cultures. With these foundations, students pursue their individual interests through classes in planning, architecture, urban social and economic relations, urban history and the environmental conditions of urban life. Advanced seminars and the thesis bring together these discussions by focusing on specific cities and issues.

Professor Gary W. McDonogh, director

Assistant Professor Juan Manuel Arbona, on leave 2005-06

Assistant Professor Carola Hein, on leave 2005-06

Visiting Lecturer Daniela Sandler

Mellon Pre-Doctoral Fellow in Social Sciences Carla Shedd

Senior Lecturer Jeffrey A. Cohen

Senior Lecturer Daniela Holt Voith

Visiting Studio Critic Sam Olshin

Affiliated Faculty:

Professor David J. Cast

Professor Linda Gerstein

Professor Laurie Hart

Professor Steve McGovern

Professor Marc Howard Ross

Professor Robert E. Washington

Professor James C. Wright

Helen Taft Manning Associate Professor of History Madhavi Kale

Associate Professor Harriet Newburger

Assistant Professor Kalala Ngalamulume, on leave 2005-06

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 a Survey of Architecture (253, 254, or 255)) balance formal and socio-cultural approaches to the urban built environment and extend cross-cultural and historical comparisons of urban life. These courses should be completed as early as possible in the first and second years; at least two should be completed 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.

Finally, each student must select four courses that identify additional expertise to complement work in the major. These may include special skills in design, language or regional interests. Any minor, concentration or second major also fulfills this requirement. Students pursuing a second major should also consult with both departments concerning the thesis and other arrangements.

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 coherent

sequence and focus. Those Cities courses that are cross-listed with other departments or originate in them should be discussed carefully in planning for any overlapping majors or minors. Students should also note that many courses in the program are given on an alternate-year basis and that 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.

Given the interdisciplinary flexibility of the program, it is rare that the programs of any two cities majors will be the same. Certain recurrent emphases, however, reflect the strengths of the major and incorporate the creative trajectories of student interests:

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 also may be planned to incorporate design projects. Those students focusing 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.

Planning and policy. Students interested in planning and policy should develop a strong background in economics and in relevant courses on social divisions, politics and policy-making, and ethics. Students also should learn to balance their own experiences and commitments with a wider comparative framework of policy and planning options and implementation, using study abroad in the junior year as well as internships. Students also may wish to consider work with the City and Regional Planning at the University of Pennsylvania. Students working in policy and planning areas may consult with Juan Arbona or Gary McDonogh.

Students frequently have focused their interests in cities toward subsequent careers in law, mass media, medicine, public health, or the fine arts, including photography, drawing, and other fields. Moreover, 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 theory, and clear analytical writing and visual analysis. In all these cases, discussion with major advisers and other students in the major represent an important facet 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

Cities faculty and students participate actively in the Environmental Studies Concentration. 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 should begin early.

Volunteerism and Internships

In addition to regular coursework, the Cities Program promotes student volunteer activities

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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 their advisers and the praxis office 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

(Cross-listed as Geology 103)

B. Hoyle

136 Working with Economic Data (Cross-listed as Economics 136)

D. Ross

Not offered in 2005-06.

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. This class may also focus on specific themes like landscape architecture depending upon staff interests. *Not offered in 2005-06.*

185 Urban Culture and Society SO (Cross-listed as Anthropology 185)

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. (Satisfies the social justice requirement.)

190 The Form of the City: Urban Form from Antiquity to the Present

(Cross-listed as History of Art 190)

D. Sandler, J. Cohen

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

(Cross-listed as Classical and Near-Eastern Archaeology 203)

J. C. Wright

207 Topics in Urban Studies

J. Cohen

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. In 2005-06 this course will deal with Philadelphian architecture.

212 Medieval Architecture (Cross-listed as History of Art 212)

D. Kinney

Not offered in 2005-06.

213 Taming the Modern Corporation (Cross-listed as Economics 213)

M. H. Ross

214 Public Finance (Cross-listed as Economics 214)

H. Newburger

Not offered in 2005-06.

217 Research Design and Public Policy

J. Arbona

This class engages quantitative, qualitative, and spatial techniques in the investigation and analysis of urban issues. While the emphasis is on designing research strategies in the context of public policy, students interested in other areas should also consider this course. This course is designed to help students prepare for their senior thesis. Form and topic will vary. *Enrollment may be limited. Not offered in 2005-06.*

218 Global Cities

J. Arbona

Since the 1980s African, Asian, and Latin American countries (collectively referred to as the Third World, developing countries, or the global south), have experienced severe structural changes that intended to improve the country's capacity to pay their escalating foreign debt and make them more competitive in the global economy. This, in turn, led to a growing concentration of urban population living (and working) in poverty that highlights the contradictions of the current "development" paradigm. In this sense, cities throughout the Third World simultaneously represent the hopes and aspirations of "modern" urban living and the limits of the current political and economic system. The goal of this course is to introduce students to contemporary issues related to the urban built environment in the Third World and the impact related to recent political and economic changes. *Not offered in 2005-06.*

221 U.S. Economic History (Cross-listed as Economics 221)

S. Redenius

222 Introduction to Environmental Issues: Movements, Controversies and Policymaking in Comparative Perspective (Cross-listed as Political Science 222)

C. Hager

Not offered in 2005-06.

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223 Ancient Near Eastern Architecture and Cities

(Cross-listed as Classical and Near-Eastern Archaeology 223)

Staff

Not offered in 2005-06.

226 Introduction to Architectural and Urban Design

S. Olshin, D. H. Voith

An introduction to the principles of architectural and urban design. *Prerequisite:* 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. *Not offered in 2005-06.*

228 Problems in Architectural and Urban Design

S. Olshin, D. H. Voith

A continuation of Cities 226 at a more advanced level. *Prerequisite:* Cities 226 or other comparable design work and permission of instructor.

229 Comparative Urbanism (Cross-listed as Anthropology 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, including city and nature, race and immigration, colonialism and post-colonialism, and global exurbia. The theme for 2005-06 is global ex-urbia, using materials from Philadelphia, Los Angeles, Hong Kong, Paris, and Buenos Aires.

232 Latin American Urban Development: Brazilian Modernism

D. Sandler

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. In 2006, this class will focus on issues of modernity and modernism in the architecture and culture of Brazil.

233 Great Empires of the Ancient Near East

(Cross-listed as Classical and Near Eastern Archaeology 233)

M. Ataç

234 Environmental Economics (Cross-listed as Economics 234)

D. Ross

237. Urbanization in Africa (Cross-listed as History 237)

K. Ngalamulume

Not offered in 2005-06.

246 Women's Narratives on Modern Migrancy, Exile, and Diaspora

(Cross-listed as Anthropology 246 and Comparative Literature 245)

A. Seyhan

Not offered in 2005-06.

247 German Decadent: Munich 1890-1925 (Cross-listed as German 233)

D. Kenosian

248 Modern Middle Eastern Cities (Cross-listed as Political Science 248)

D. Harrold

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 2005-06.*

253 Survey of Western Architecture (Cross-listed as 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 2005-06.*

254 History of Modern Architecture (Cross-listed as History of Art 254)

D. Sandler

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 (Cross-listed as 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.

257 Unreal Cities: Bombay, London, New York (Cross-listed as History 257)

M. Kale

Not offered 2005-06.

261 Postmodernism and Visual Culture (Cross-listed as History of Art 261)

L. Saltzman

266 Schools in American Cities (Cross-listed as Education 266)

J. Cohen

267 History of Philadelphia: 1682 to Present (Cross-listed as History 267)

E. Shore

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270 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 2005-06.*

295 La Ville de Paris au XVIIe et XVIIIe siècles (Cross-listed as French 295)

Staff

Not offered 2005-06.

301 Recasting Globalization: Latin American Urban Social Movements

J. Arbona

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. *Not offered in 2005-06.*

302 Greek Architecture (Cross-listed as Classical and Near-Eastern Archaeology 302)

J. C. Wright

Not offered in 2005-06.

305 Ancient Athens: Monuments and Art

(Cross-listed as Classical and Near Eastern Archaeology 305)

S. Miller-Collett

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.

312 Medieval Cities (Cross-listed as History of Art 311)

D. Kinney

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 2005-06*

314 Topics in Social Policy (Cross-listed as Economics 314)

H. B. Newburger

315 Cities and Sanctuaries of the Ancient Mediterranean
(Cross-listed as Classical and Near-Eastern Archaeology 315)

J. C. Wright

Not offered in 2005-06.

319 Advanced Topics in German Cultural Studies

(Cross-listed as German and German Studies 321)

I. Meyer

Not offered in 2005-06.

324 Roman Architecture (Cross-listed as Classical and Near-Eastern Archaeology 324)

R. Scott

Not offered in 2005-06.

325. Topics in Social History: Comparative History of Advertising in the U.S. and Europe between 1850 and 1920 (Cross-listed as History 325)

E. Shore

Not offered in 2005-06.

331 Palladio and Palladianism (Cross-listed as History of Art 331)

D. J. Cast

Not offered in 2005-06.

334 Seminar on the Economics of Poverty and Discrimination

(Cross-listed as Economics 334)

H. Newburger

Not offered in 2005-06.

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. Topics may include mass media and the city, film, or questions of more general cultural production and reception involving media from local production and space through the Internet. *Not offered in 2005-06.*

336 East Asian Development (Cross-listed as Economics and East Asian Studies 335)

M. Rock

338 The New African Diaspora (Cross-listed as Sociology 339)

M. Osirim

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 2005-06.*

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348 Culture and Ethnic Conflict (Cross-listed as Political Science 348)

M. Ross

355 Topics in the History of London (Cross-listed as History and History of Art 355)

D. Cast

Not offered in 2005-06.

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, war and the city, or the construction of social and cultural distance in suburbs and downtowns.

365 Techniques of the City

G. McDonogh

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 cultural construction/identification the ideal 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 good and bad citizens and cities come to be defined, who defines such roles, and the impact of gender, race, movement, and power on such mappings. It also explores how we can move critically and practically beyond our own models to rethink global urbanism.

377 Topics in the History of Modern Architecture (Cross-listed as History of Art 377)

D. Sandler

Examination of specific topics in Modern Architecture, including individual cities, architects or themes such as home and interior space. In 2005, this course will focus on history and the urban environment in Berlin.

378 Formative Landscapes: The Architecture and Planning of American Collegiate Campuses

J. A. Cohen

An exploration of the architecture, planning, and visual rhetoric of American collegiate campuses from their early history to the present. Historical consideration of design trends and projected imageries will be complemented by student exercises involving documentary research on design genesis and contexts, discussion of critical reception, evidence of contemporary performance and perception, and digital presentation. *Not offered 2005-06.*

398, 399 Senior Seminar

G. McDonogh, D. Sandler

An intensive research and writing seminar required of all seniors, generally in Semester I.

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.

Prerequisite: Permission of instructor. *Enrollment limited to five students.*

Many 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 also 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 level. At Haverford, Judaic Studies courses are offered by the department of religion. Bryn Mawr also offers several courses which complement Haverford's offerings in Judaic studies. All of these courses are listed in the course guide under the heading "Hebrew and Judaic Studies."

COURSES

001, 002 **Elementary Hebrew**

A. Amitai

This course prepares students for reading contemporary texts and modern literary works, offering insight into Israeli society and culture, as well as classical religious texts. It covers grammar, composition, and vocabulary enrichment with primary emphasis on fluency in reading and writing, as well as the development of basic conversational skills. This is a year-long course.

211 **Primo Levi, the Holocaust, and Its Aftermath**

(Cross-listed as Italian 211 and Comparative Literature 211)

N. Patrino

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.

233 **History, Politics, and the Search for Security: Israel and the Palestinians**

(Cross-listed as History 290 and Political Science 233)

D. Harrold

Not offered 2005-06.

248 **Modern Middle East Cities** (Cross-listed as Cities and Political Science 248)

D. Harrold

Taking advantage of new scholarship on Cities, draws from diverse fields to bring different methods to the study of Middle Eastern cities and urbanization. Treats the negotiation of state control, urban planning and its alternations in urban practices, social movements and new spaces of politics, competing architectural visions, globalizations, and new local identities. Treats topics such as Islamic charities in Cairo, shopping malls as public space in Dubai, and restructuring of post-war Beirut. *Prerequisite:* Not open to freshmen. Completion of at least one other social science course.

283 **The Politics of the Modern Middle East**

(Cross-listed as History and Political Science 283)

D. Harrold

Using history, political science, political economy, film, and fiction as well as primary sources, the course seeks to deepen understanding of Islamic politics; colonialism; the anti-colonial and postcolonial projects of nationalism and development and their discontents; collective memory and popular culture; economic liberalism and reform; and issues of authenticity and modernity. Three broad areas will be emphasized: the legacy of colonialism and the importance of international forces; the role of Islam in politics; and the political and social effects of economic conditions, policies, and practices.

380 **Visual Culture and Holocaust** (Cross-listed as 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.

The study of history involves the critical analysis of the past. The curriculum in history is designed to encourage the development of 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, Chair

Associate Professor Paul Jefferson

Associate Professor Alexander Kitroeff

Associate Professor James Krippner

Assistant Professor Darin Hayton

Assistant Professor Bethel Saler

MAJOR REQUIREMENTS

1. Two semesters of 100 level work from the following array of courses, in any combination:

History 111a and b (Introduction to Western Civilization)

History 114 a and b (Introduction to Global History)

History 116 a and b (Global Mediterranean World)

History 118 a and b (Introduction to the History of Science)

History 120b (Chinese Perspectives on the Individual and Society)

2. Seven electives above the 100 level, at least two of which must be at the 300 (seminar) level. At least one of these seminars should be taken by the second semester of the junior year. The history department offers six fields: (1) United States history; (2) Early European history, pre-1763; (3) modern European history; (4) Latin American history; (5) East Asian history, and (6) History of Science. 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.

3. History 400a and b in the senior year, culminating in the writing of a senior thesis. All history majors will write a senior thesis. Students will receive a full course credit for each semester of the thesis. This decision reflects the work they will be expected to execute each semester with the first semester emphasizing sources (identifying, locating, transcribing) and the second semester focusing on writing (synthesis, argument, eloquence).

COURSE RESTRICTIONS

All of our 100-level courses 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

111a,b **Introduction to Western Civilization** SO

P. Jefferson, L. Gerstein, L. Graham

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. Each semester counts as an independent course.

114a,b **An Introduction to Global History** SO

J. Krippner, B. Saler

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.

116a **The Mediterranean World c.7th-c.1600**

A. Kitroeff

An introductory level course, designed as a window into the historian's craft, that examines the changes experienced by the peoples and cultures of the Mediterranean region, beginning with the rise of Islam in the 600s and ending with the "rise of the West" in the 1500s.

118a **Introduction to the History of Science**

D. Hayton

Although science is an essential feature of the modern world, it took nearly 4000 years to attain that status. This course surveys various sciences in the past focusing on both how and why humans have interrogated the natural world, how they have categorized the resulting knowledge, and what uses they have made of it. Topics include science and medicine in Antiquity, Islamic sciences, Byzantine and medieval sciences, early modern science, and the Scientific Revolution.

120b **Chinese Perspectives on the Individual and Society** SO

(Cross-listed in East Asian Studies)

P. Smith

A survey of philosophical, literary, legal, and autobiographical sources on Chinese notions of the individual and group responsibility in the traditional and modern eras, with special emphasis on how ideal and actual relationships between the individual and society vary across gender and class and over time. *Not offered 2005-2006.*

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.

204b **History of American Women 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 2005-2006.*

209a,b **Modern Latin America** SO

J. Krippner

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.

226a **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 **Statecraft and Selfhood in Early Modern Europe** SO

L. J. Graham

This course examines the political, social, and cultural responses to the perceived crisis of authority that followed the Reformation era in Europe. The crisis in faith was accompanied by 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, religion and popular culture, court society, and Baroque aesthetics.

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 emergence of a public sphere and new forms of sociability as distinguishing features of 18th-century European life. *Not offered 2005-2006.*

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.

229 Gender, Sex, and Power in Europe, 1550-1800 SO

L. J. Graham

This course traces the evolving definitions of gender and sexuality in Europe from the Renaissance to the French Revolution. Primary sources and theoretical readings explore the following topics: the construction of gender roles and sexuality in early modern Europe; the intersection of gender and power in sites such as the royal court, the law courts, the theater, the convent, and the workshop. Special attention will be paid to role of print in shaping debates about gender and sexuality. *Not offered in 2005-2006.*

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. *Not offered in 2005-2006.*

234b 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. *Not offered 2005-2006.*

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 2005-2006.*

237a History of the Occult and Witchcraft SO

D. Hayton

This course examines the historical situation that produced witchcraft and the occult sciences: How and why did people believe or claim to believe in witches, astrology, and magic? The second goal is to recognize how historians and recent authors (including film makers and artists) have used the past. Why are studies of witchcraft and astrology experiencing such a renaissance today? By combining a close reading of primary sources – ranging from texts and trial records to paintings and literature – with secondary sources, we will confront the challenges these activities pose for our understanding of the past and the present.

240b History and Principles of Quakerism SO (Cross-listed in Religion)

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.

243 African American Political and Social Thought SO

P. Jefferson

The golden age, 1895-1945. Deals with 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 2005-2006.*

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 2005-2006.*

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. *Not offered in 2005-2006.*

245a 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 2005-2006.*

246 Literature and Society in Modern Russian 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 2005-2006.*

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, with the instructor's consent. The first semester will cover the years 1620 to the Civil War.

256a,b Zen Thought, Zen Culture, Zen History SO

(Cross-listed in East Asian Studies and Religion)

H. Glassman

What are we talking about when we talk about Zen? This course is an introduction to the intellectual and cultural history of the style of Buddhism known as Zen in Japanese. We will examine the development and expression of this religious movement in China, Korea, Japan, and Vietnam.

258b Plagues, Diseases, and Epidemics in History (Cross-listed in General Programs)

D. Hayton

Virulent and terrifying epidemics are a recurring problem throughout history. This course examines the theories and strategies that people developed to explain the advent and spread of individual plagues and epidemics. The outbreaks of the Black Death, the French Disease (syphilis), typhoid and scarlet fevers, and, most recently, AIDS provide opportunities to examine how societies understand and categorize diseases.

260a Mid-Imperial China: Ming China, 1400 to 1600 SO

(Cross-listed in East Asian Studies)

P. Smith

Theme: Drama, fiction, and the world of sex, money, and morality in Ming China, 1400 to 1600. Not open to first year students. *Not offered 2005-2006.*

261b 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 7th 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 2005-2006.*

262b Chinese Social History SO (Cross-listed in East Asian Studies)

P. Smith

Surveys a rotating series of topics in the Chinese social and cultural history. *Prerequisite:* Sophomore standing or higher. *Not offered in 2005-2006.*

263 The Chinese Revolution SO (Cross-listed in East Asian Studies)

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 2005-2006.*

264 The Social History of Chinese Religions HU (Cross-listed in East Asian Studies)

Staff

This course surveys the place of religion in China's social, cultural, and political history dur-

ing the imperial and modern eras. The syllabus is organized chronologically, in an effort to locate major themes (Daoism, Buddhism, Neo-Confucianism, sectarianism, etc) in their appropriate historical context. The main goals of the course are: [1] to introduce the interdependent world of gods, ghosts, and ancestors and the ways they are worshipped – or kept at bay; [2] to underscore the importance of religious institutions in China's past and present; [3] to explore the scholarly literature in what is one of the most robust sub-fields in Chinese studies; and [4] to sample some of the sources available for the study of religion in Chinese society. *Prerequisite:* Sophomore standing or above. *Not offered in 2005-2006.*

265 Modern Japan SO (Cross-listed in East Asian Studies)

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 2005-2006.*

270a 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 2005-2006.*

281a,b Mexican Cultural History: Ancient and Colonial SO

J. Krippner

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. *Not offered in 2005-2006.*

282b Mexican Cultural History: Modern and Postmodern SO

J. Krippner

This course provides an introduction to Mexican cultural history from the late 18th century until 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. *Prerequisite:* History 111 or 224 or consent. *Not offered in 2005-2006.*

284b A History of North American Indian Peoples SO

B. Saler

This course surveys the histories of North American Indian peoples from origin stories to late 20th-century political struggles. We will concentrate on major themes in the histories of Native American peoples including oral traditions, European invasions, trading economies, religious revivals, U.S. Indian policies, and modern tribal identity. *Prerequisite:* Sophomore standing or higher. (Satisfies the social justice requirement.)

310b Religion and Gender in Premodern Japanese Literature SO

(Cross-listed in East Asian Studies and Religion)

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 2005-2006.*

317b Topics in Latin American History SO

J. Krippner

Seminar meetings, reports, and papers. May be repeated for credit with change of topic. Topic for 2005-2006: Visions of Mexico.

330a,b The American Family in Comparative and Historical Perspective SO

E. Lapsansky

The American family is, like families in every culture and time, the pivotal phenomenon of the society. In this course we will explore its current dimensions and meanings, and how these have changed over time. We will also take brief looks at families in other times and places, to provide comparative perspective. *Not offered in 2005-2006.*

333a Topics in History and Theory SO

B. Saler

Seminar meetings, reports, and papers. May be repeated for credit with change of topic. Topic for Fall 2005: Colonialism and Culture. This seminar will look at recent theories that have informed historical accounts of colonialism. This class combines theoretical readings with historical texts. *Prerequisite:* Senior or Junior class status or consent.

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 2005-2006.*

341a Topics in Comparative American History: Early Republic SO

B. Saler

Seminar meetings, reports and papers. May be repeated for credit with change of topic. *Not offered 2005-2006.*

342a,b Topics in African American Intellectual History SO

P. Jefferson

Topic: Modalities of American Pragmatism: The Metaphysical Club and After. Seminar meetings, reports, and papers. May be repeated for credit with change of topic. 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.

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 2005: 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.

347a Topics in East Asian History SO (Cross-listed in East Asian Studies)

P. Smith

Topic: Modern Chinese Political Culture. A survey of recent scholarship on the emergence of China's political culture from ca.1900 to the present, with a focus on such topics as civil society, the prospects for democratization, and the impact of economic globalization on political change. *Not offered 2005-2006.*

349a Topics in Comparative History SO (Cross-listed in East Asian Studies)

P. Smith

Seminar meetings, reports, and papers. May be repeated for credit with change of topic. Topic for fall 2003: Warriors and Outlaws in China and Japan. An examination of two great epic tales – *Tale of the Heike* and *Outlaws of the Marsh* – as sources for the comparative history of Japanese and Chinese culture and society. Previous exposure to Chinese or Japanese history helpful but not required. *Not offered in 2005-2006.*

350b Topics in the History of Science

D. Hayton

Seminar meetings, reports, and papers. May be repeated for credit with change of topic. Topic for spring 2006: Institutions of Knowledge. Does scientific knowledge reflect the context of its creation or is it immune to external influences? This course examines the ways that scientific and natural knowledge are affected by the social and political institutions that produce that knowledge. Readings focus on medieval and early modern institutions, including royal and imperial courts, universities, and professional and scientific societies.

354b Topics in Early Modern European History SO

L. J. Graham

Seminar meetings, reports, and research paper. May be repeated for credit with change of topic. Topics include: The Culture of Resistance; Crime, Law and Police in Early Modern Europe, Libertinage and Modernity. Topic for spring 2006: Libertinage and Modernity. How are eroticism, obscenity, and pornography related to political ideas and political change? This course explores these questions through primary texts and theoretical readings.

356b Topics in Modern European History (Cross-listed in Russian)

L. Gerstein

Seminar meetings, reports, and papers. May be repeated for credit with change of topic. Topic for spring 2006: Literature and Society in Modern Russia. The social context of the Russian novel in the 19th and 20th centuries and the uses of literature in a society of restricted political expression. Readings (in translation) in literary and historical sources.

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 spring 2006: Nationalism in Modern Europe. Seminar. Meetings focusing on the evolution of nationalist ideology, contemporary theories on nationalism, and the role of national identity in the European society.

400a,b Senior Thesis Seminar 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. *Prerequisite:* Senior History majors only.

480a,b,f,i Independent Study SO

Staff

Prerequisite: Consent of the instructor.

COURSES AT BRYN MAWR COLLEGE

101 **The Historical Imagination**

131 **Chinese Civilization**

203 **The High Middle Ages**

205 **Ancient Greece**

242 **American Politics and Society 1945-present**

247 **Topics in German Culture**

258 **British Empire: Imagining Indias**

264 **Passages from India: 1800-Present**

265 **American Colonial Encounters**

277 **Religion and Dissent in the Middle Ages**

283 **Modern Middle East/ North Africa**

303 **Topics in American History: Civil War and Memory**

326 **Topics in Chinese History and Culture**

357 **Topics in British Empire: Engendering the Nation in the British Empire**

368 **Topics in Medieval History: The Inquisition**

398 **Senior Thesis**

HISTORY OF ART

The curriculum in history of art immerses students in the study of visual culture. Structured by a set of evolving disciplinary concerns, students learn to interpret the visual through methodologies dedicated to the historical, the material, the critical and the theoretical. Majors are encouraged to supplement courses taken in the department with history of art courses offered at Swarthmore and the University of Pennsylvania. Majors are also encouraged to study abroad for a semester.

Professor David Cast, chair, on leave semester II

Professor Christiane Hertel

Professor Dale Kinney

Professor Steven Z. Levine

Professor Gridley McKim-Smith, on leave semester II

Professor Emeritus Barbara Miller Lane

Associate Professor Lisa Saltzman, acting chair, semester II

Assistant Professor Homay King

Lecturer Martha Easton

Lecturer Suzanne Spain

MAJOR REQUIREMENTS

The major requires 11 units, approved by the major advisor. A usual sequence of courses would include at least one 100-level course, four 200-level courses, two 300-level courses, and participation in senior conference. In the course of their departmental studies, students are strongly encouraged to take courses across media and areas, and in at least three of the following fields of study: Ancient and Medieval, Renaissance and Baroque, Modern and Contemporary, Film, and non-Western.

With the approval of the major advisor, courses in fine arts or with significant curricular investment in visual studies may be counted toward the fulfillment of the distribution requirements. Similarly, courses in art history taken abroad or at another institution in the United States may be counted. Generally, no more than two such courses may be counted toward the major requirements.

A senior paper, based on independent research and using scholarly methods of historical and/or critical interpretation must be submitted at the end of the spring semester. Generally 25-40 pages in length, the senior paper represents the culmination of the departmental experience.

HONORS

Seniors whose major average at the beginning of the spring semester is 3.7 or higher will be invited to write an honors thesis instead of the senior paper.

MINOR REQUIREMENTS

A minor in history of art requires six units: one or two 100-level courses and four or five others selected in consultation with the major advisor.

COURSES (Please note that this list may not be up-to-date for 2005-06.)

100 The Stuff of Art

S. Burgmayer

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

D. Kinney

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.

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.

106 Realisms from Caravaggio to Virtual Reality

G. McKim-Smith

A study of perceptions and definitions of reality and of the relation of the verisimilar to power, discourse and gender, with emphasis on controversies of the 16th and 17th centuries.

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.

110 Identification in the Cinema

Horne

An introduction to the analysis of film through particular attention to the role of the spectator.

190 The Form of the City (Cross-listed as Growth and Structure of Cities 190)

C. Hein

205 Introduction to Film HU (Cross-listed as English 205)

J. Kahana

206 Hellenistic and Roman Sculpture

(Cross-listed as Classical and Near Eastern Archaeology 206)

A. Donohue

210 Medieval Art HU

M. Easton

An overview of artistic production in Europe from antiquity to the 14th century. Special attention will be paid to problems of interpretation and recent developments in art-historical scholarship.

212 Medieval Architecture HU (Cross-listed as Growth and Structure of Cities 212)

D. Kinney

A survey of medieval building types, including churches, mosques, synagogues, palaces, castles, and government structures, from the fourth through the 14th centuries in Europe, the British Isles, and the Near East. Special attention to regional differences and interrelations, the relation of design to use, the respective roles of builders and patrons. *Not offered in 2005-06.*

230 Renaissance Art 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. *Not offered 2005-06.*

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.

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.

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.

249 Seventeenth- and 18th-Century Art in France HU

S. Levine

Close attention is selectively given to the work of Poussin, Le Brun, Watteau, Chardin, Boucher, Fragonard, Greuze, and David. Extensive readings in art criticism are required.

250 Nineteenth-Century Painting in France HU

S. Levine

Close attention is selectively given to the work of David, Ingres, Géricault, Delacroix, Courbet, Manet, Monet, Degas, and Cézanne. Extensive readings in art criticism are required.

251 Twentieth-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.

253 Survey of Western Architecture HU

(Cross-listed as Growth and Structure of Cities 253)

D. Cast and C. Hein

The major traditions in Western architecture are 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 covered.

254 History of Modern Architecture HU

(Cross-listed as Growth and Structure of Cities 254)

255 Survey of American Architecture (Cross-listed as Growth and Structure of Cities 225)

J. Cohen

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 and the implications of critical theory for the study, theory, and practice of visual representation.

266 Contemporary Art and Theory

L. Saltzman

America, Europe and beyond, from the 1950s to the present, in visual media and visual theory.

299 History of Narrative Cinema

H. King

From the advent of sound to the present in American, European, and Asian film.

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.

303 Art and Technology

G. McKim-Smith

A consideration of 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 – students are also encouraged to approach the laboratory in a spirit of creative scrutiny. Raw data neither ask nor answer questions, and it remains the province of the students to shape meaningful questions and answers. Students become acquainted with the technology involved in examining paintings and are encouraged to find fresh applications for available technology in answering art-historical questions.

306 Film Theory HU (Cross-listed as English 306)

J. Kahana

310 Medieval Art in American Collections HU

D. Kinney

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.

311 Topics in Medieval Art HU

M. Easton

Topics include illuminated manuscripts and the role of gender in medieval art.

321 Late-Gothic Painting in Northern Europe

M. Easton

A study of late medieval illuminated manuscripts and Early Netherlandish painting.

323 Topics in Renaissance Art HU

D. Cast

Selected subjects in Italian art from painting, sculpture, and architecture between the years 1400 and 1600.

324 Roman Architecture (Cross-listed as Classical and Near Eastern Archaeology 324 and Greek, Latin and Classical Studies 324 and Growth and Structure of Cities 324)

R. Scott

327 Feminist Film Theory and Practice

H. King

An intensive introduction to feminist film theory and films by feminist directors.

331 Palladio and Palladianism HU

D. Cast

A seminar on the diffusion of Palladian architecture from the 16th century to the present.

340 Topics in Baroque Art: Representation of Gender and Power in Habsburg Spain HU

G. McKim-Smith

Costumes and consumer culture in Spain and Latin America.

348 Advanced Topics in German Cultural Studies: Dresden

(Cross-listed as German and German Studies 321)

C. Hertel

349 Theories of Authorship in the Cinema HU

(Cross-listed as English and Comparative Literature 349)

H. King

The study of the author-director remains one of the primary categories through which film is to be understood; various directors and critical approaches to this topic will be studied.

350 Topics in Modern Art HU

S. Levine

354 Topics in Art Criticism HU

S. Levine

Individual topics in art-historical methodology such as psychoanalysis, feminism, post-structuralism, or semiotics.

355 Topics in the History of London HU (Cross-listed as 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.

377 Topics in the History of Modern Architecture HU

(Cross-listed as Growth and Structure of Cities 377)

B. Lane

380 Topics in Contemporary Art: Performance and Performativity HU

L. Saltzman

This seminar will explore the visual construction and deconstruction of gender. Artists to be considered are Duchamp, Picasso, Hoch, Cahun, Pollock, Frankenthaler, Rauschenberg, Johns, Warhol, Rivers, Schneeman, Wilke, Acconci, Sherman, Goldin, Rist, and Hatoum.

381 Topics in Japanese Art HU (Cross-listed as East Asian Studies 381)

M. Easton

A study of the visual culture of Japan from prehistory to the present, seen through the lens of history, literature, and religion. Trends in contemporary Japanese art in the late 20th and 21st centuries will also be considered, as will the cultural interaction of Japan, China, and the West.

398 Senior Conference HU

M. Easton, S. Levine

A critical review of the discipline of art history in preparation for the senior paper. *Required of all majors.*

399 Senior Conference HU

D. Cast, H. King

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.

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 Nicholas Patruno, chairperson
Professor and President of Bryn Mawr College Nancy Vickers
Assistant Professor Roberta Ricci
Lecturer Titina Caporale
Language Assistant Gabriella Troncelliti

At Haverford College
Instructor Ute Striker
Language Assistant Gabriella Troncelliti

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, with departmental approval, 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

T. Caporale, N. Patruno, R. Ricci, U. Striker

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

T. Caporale, R. Ricci, N. Patruno

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, T. Caporale

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 2005-06.*

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, P. Levi, and N. Ginzburg.

207 **Dante in Translation** HU

R. Ricci, N. Patruno, N. Vickers

An historical appraisal and critical appreciation of Dante's major works with a major focus on the *Vita Nuova* and the *Divine Comedy*.

211 Primo Levi: The Holocaust and Its Aftermath HU

(Cross-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 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.

212 Italia d'Oggi*N. Patruno*

This course, conducted in Italian, has as its primary focus the literary contributions of migrant writers who write in Italian. This so called "migrant literature," with its diverse cultural features and linguistic innovations, is rapidly becoming one of the most exciting literary phenomena of today's Italy. *Not offered 2005-06.*

225 Italian Cinema and Literary Adaptation*R. Ricci*

A survey, taught in English but also valid for Italian language credit for those who qualify to do reading and writing in Italian, of Italian cinema with emphasis placed on its relation to literature. The course will discuss how cinema conditions literary imagination, and how literature leaves its imprint on cinema. We will "read" films as "literary images" and "see" novels as "visual stories." The reading of the literary sources will be followed by evaluation of the corresponding films (all subtitled) by well-known directors, such as Visconti, Rosi, Bellocchio, the Taviani brothers, and Bertolucci. *Not offered 2005-06.*

301 Dante HU*R. Ricci, N. Patruno, N. Vickers*

A study of the *Divina Commedia* with a focus on "Inferno." *Prerequisite:* Two years of Italian or the equivalent.

304 Il Rinascimento HU*R. Ricci*

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 2005-06.*

399 Senior Conference*R. Ricci, N. Patruno*

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.

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 (six 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. Please note that 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 cogently 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.*)

GENERAL PROGRAMS

240b **Latin American and Iberian Cultures and Civilizations**

HISTORY

209a **Colonial Latin America**

209b **Modern Latin America**

POLITICAL SCIENCE

237a **Latin American Politics**

229b **Latino Politics in the U.S**

233b **Perspectives on Civil War and Revolution: Southern Europe and Central America**

239b **The United States and Latin America**

391a **Democracy and its Challenges**

SPANISH

All courses in Spanish at Haverford, Bryn Mawr, and Swarthmore count toward the concentration.

LINGUISTICS

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 field 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)

Professor Donna Jo Napoli (linguistics at Swarthmore)

Professor George Weaver (philosophy at Bryn Mawr)

Associate Professor Theodore Fernald (linguistics at Swarthmore)

Associate Professor Danielle Macbeth (philosophy)

Assistant Professor Shizhe Huang (East Asian studies, linguistics)

Assistant Professor Eric Raimy (linguistics at Bryn Mawr, Haverford, and Swarthmore), coordinator

MAJOR REQUIREMENTS

Students may major in linguistics through the Linguistics department at Swarthmore College (<http://www.swarthmore.edu/SocSci/Linguistics/>). Contact the department for more details.

MINOR REQUIREMENTS

Students may minor in linguistics by completing six 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 Linguistics 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

This course investigates the sound patterns found in human languages. Phonetics is the study of these patterns from a physical and perceptual perspective while phonology is the study of sound patterns from a cognitive perspective. Activities in the class will expose students to the methodologies used by both perspectives (articulatory description and acoustic analysis for phonetics and formal theoretical models for phonology) and show the necessity and utility of both approaches in understanding the nature of sound patterns in human language.

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.

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. *Prerequisite:* At least two out of Linguistics 001, 030, 040, 043, 045, and 050. *Not offered in 2005-06.*

LING 062 (Swarthmore) Structure of American Sign Language SO

D. Napoli

In this course, we look at the linguistic structures of American Sign Language. *Prerequisite:* One of Linguistics 001, 045, or 52 and one of Linguistics 40 or 50. *Not offered in 2005-06.*

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

E. Golonka

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. *Not offered in 2005-06.*

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. *Not offered in 2005-06.*

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 in the latter half of the course. Specific topics covered include experimental 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 2005-06.*

GNPRH 239 Introduction to Linguistics HU (Cross-listed in General Studies at Bryn Mawr)

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 104 or consent of instructor.

GNPRH 242a Chinese Language in Culture and Society HU

(Cross-listed in East Asian Studies)

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.

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. *Prerequisite:* One 100-level philosophy course or permission of instructor. *Not offered in 2005-06.*

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. *Prerequisite:* Sophomore standing or permission of instructor. *Not offered in 2005-06.*

All linguistics courses offered at Swarthmore College will be accepted for elective credit. Below is a sample of linguistics courses regularly offered at Swarthmore College.

LING 001 Introduction to Language and Linguistics

LING 018 Language Policy in the United States

LING 025 Language, Culture, and Society

LING 026 Language and Meaning

LING 030 Languages of the World

LING 043 Morphology and the Lexicon

LING 052 Historical and Comparative Linguistics

LING 054 Oral and Written Language

LING 055 Writing Systems, Decipherment, and Cryptography

LING 057 Movement and Cognition

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

Professor Lynne Butler

J. McLain King Professor of Mathematics Curtis Greene

Associate Professor Yung-sheng Tai

Associate Professor Robert Manning (on leave 2005-06)

Assistant Professor Joshua Sabloff

Visiting Assistant Professor John Flynn

Visiting Assistant Professor Mark Skandera

Senior Lecturer Jeffrey Tecosky-Feldman

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. None of Math 299, Math 399, Math 460 and Math 480 used for senior paper preparation may be counted toward these requirements.

(4) The senior seminar. This requirement consists of Mathematics 399e 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,b Calculus I NA/QU

M. Skandera, J. Tecosky-Feldman

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. The intensive section offered each spring, Math 113b, is designed for students who need and desire extra help with precalculus concepts; it meets for three 2-hour sessions each week. *Prerequisite:* Math 113a requires a solid background in precalculus mathematics; Math 113b requires instructor consent.

114d,g Introductory Integral Calculus NA/QU

M. Skandera, J. Tecosky-Feldman

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 and Complex Numbers NA/QU

L. Butler, M. Skandera, J. Tecosky-Feldman

Infinite sequences and series, Taylor approximations, polar coordinates and complex numbers. The significance of these topics in mathematics and their applications in the natural sciences are discussed. *Prerequisite:* Math 114 or advanced placement.

116e,h **Calculus Applications: Probability Distributions** NA/QU

L. Butler, M. Skandera

Probability distributions and their applications in the natural and social sciences; the concept of probability and conditional probability; discrete and continuous random variables; expected value and variance; applications of the binomial, Poisson, exponential and normal distributions; and the Central Limit Theorem. *Prerequisite:* Math 114 or advanced placement.

117e,g **Calculus Applications: Multivariable Optimization** NA/QU

Staff

Introduction to multivariable differential calculus: partial derivatives and gradients; unconstrained and constrained optimization; and applications of the Lagrange Multiplier Theorem to economic models. Students who earn a half credit for Math 117 may not also earn a full credit for Math 121, since the first half of Math 121 duplicates most of what is taught in Math 117. *Prerequisite:* Math 114 or advanced placement.

121a,b **Calculus III** NA/QU

C. Greene, J. Flynn

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. Students who earn a half credit for Math 117 may not also earn a full credit for Math 121, since the first half of Math 121 duplicates most of what is taught in Math 117. *Prerequisite:* Math 114 and 115 or 116 or 117, or advanced placement.

215a,b **Linear Algebra** NA/QU

C. Greene, Y. Tai

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. *Prerequisite:* Math 114 and 115 or 116 or 117, or 121, or advanced placement.

216b **Advanced Calculus** NA

Y. Tai

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

J. Sabloff

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. *Prerequisite:* Math 215 and either Math 121 or 216, or instructor consent. Corequisite of Math 299 for students who have not had Math 216 or math at the 300 level.

318b Analysis II NA

J. Sabloff

A rigorous development of the integral, series of functions, Fourier series and the implicit function theorem. Other advanced topics (such as Hilbert spaces, 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

Y. Tai

A rigorous treatment of fundamental algebraic structures. Topics include: axioms for integers, modular arithmetic, polynomials, rings, fields, and introduction to groups. *Prerequisite:* Math 215 and either Math 121 or 216, or instructor consent. Corequisite of Math 299 for students who have not had Math 216 or math at the 300 level.

334b Algebra II NA

Y. Tai

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.

399e,i Senior Seminar NA

L. Butler, J. Flynn, C. Greene, J. Sabloff, M. Skandera, Y. Tai, J. Tecosky-Feldman

Seminar for students writing senior papers, dealing with the oral and written exposition of advanced material. *Prerequisite:* Open to senior mathematics majors.

ELECTIVES

103a Introduction to Probability and Statistics NA/QU (Cross-listed in General Programs)

J. Flynn

Basic concepts and methods of elementary probability and quantitative reasoning, with practical applications. Topics include: sample average and standard deviation, normal curves, regression, expected value and standard error, and confidence intervals and hypothesis tests.

104b Calculus: Concepts and History NA/QU (Cross-listed in General Programs)

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 achievements of Archimedes and his predecessors, the course will follow the historical progression of the concepts of function, derivative, and integral, including developments such as fractals. In addition to regular problem sets, students will be required to write essays explaining the important concepts of the course. 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). *Prerequisite:* Not ordinarily open to students who have studied calculus previously. *Not offered in 2005-06.*

123b Community Math Teaching Project NA/QU (Cross-listed in Education)

J. Sabloff

A service-learning course in which students teach "math labs" to high school geometry students. Students will develop effective teaching methods through pedagogical theory and practice, and will explore the context in which mathematics is taught in high school.

203b Statistical Methods and Their Applications NA/QU

Staff

An introduction to statistical methods used to analyze data in the natural and social sciences. It covers probability distributions, the binomial and Poisson distributions, the exponential and normal distributions, expected value and variance, confidence intervals and hypothesis testing, comparison of two samples, regression, and analysis of variance. *Prerequisite:* Math 114 or advanced placement.

204a Differential Equations NA/QU

J. Sabloff

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. *Prerequisite:* 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: analytic geometry, conic sections, Platonic solids and polyhedra, tessellations of the plane, projective, hyperbolic, 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 instructor consent.

210a Linear Optimization and Game Theory NA/QU

(Cross-listed in Computer Science and Economics)

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 121 and instructor consent, or Math 215.

218b Probability NA/QU

Staff

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 instructor consent. *Not offered in 2005-06.*

220a,b Elementary Complex Analysis NA

Staff

Line integrals; complex derivatives; Cauchy's theorem and residue calculations; elementary conformal mapping; harmonic functions. *Prerequisite:* Math 121 or 215. *Not offered in 2005-06.*

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. *Prerequisite:* Math 121 or 216, and experience with Mathematica or a programming language, or permission of the instructor. *Not offered in 2005-06.*

235a Information and Coding Theory NA/QU

(Cross-listed in Computer Science and Economics)

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. *Not offered in 2005-06.*

299d,h Bridge to Advanced Mathematics NA

C. Greene

An introduction to deductive reasoning, mathematical proof, and fundamental ideas of higher mathematics. Emphasis will be placed on developing strategies for understanding and constructing proofs. Topics include basic logic, set theory, and relations. *Prerequisite:* Math 121 and Math 215. Concurrent registration in Math 317 or Math 333.

335a Topology I NA

J. Flynn

Generalizes topological concepts from Euclidean spaces to arbitrary topological spaces, and introduces elements of algebraic topology. Concepts covered include continuity, connectedness, and compactness. The course culminates in an exploration of the fundamental group and covering spaces. *Prerequisite:* Math 317 and 333 or instructor consent.

336b Topology II NA

Staff

Not offered in 2005-06.

340b Analysis of Algorithms NA (Cross-listed in Computer Science)

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. *Prerequisite:* Math/Computer Science 231, Computer Science 206, and some additional mathematics at the 200 level, or instructor consent. *Not offered in 2005-06.*

345b Theory of Computation NA (Cross-listed in Computer Science)

S. Lindell

Introduction to the mathematical foundations of computer science: Finite state automata, formal languages and grammars, Turing machines, computability, unsolvability, and computational complexity. *Prerequisite:* Math/Computer Science 231, Computer Science 206, and some additional mathematics at the 200 level, or consent of instructor.

349a,b Mathematical Methods in Economics NA (Cross-listed in Economics)

L. Butler

Explores advanced topics in linear algebra (quadratic forms), analysis (the implicit and inverse function theorems) and geometry (convexity and fixed point theorems) used in economics. Applications include nonlinear optimization and noncooperative games. *Prerequisite:* Math 317 or instructor consent. *Not offered in 2005-06.*

390b Advanced Topics in Algebra NA

L. Butler

Prerequisite: Math 333 or instructor consent.

391b Advanced Topics in Geometry and Topology NA

J. Flynn

Prerequisite: Math 333 and Math 317.

392a,b Advanced Topics in Analysis NA

Staff

Not offered in 2005-06.

394a,b Advanced Topics in Theoretical Computer Science NA

(Cross-listed in Computer Science)

S. Lindell

A study of the asymptotic properties of resource-bound computation with an emphasis on the use of logical and physical analysis techniques. *Prerequisite:* Students should have completed a 300-level course in Computer Science. *Not offered in 2005-06.*

395a Advanced Topics in Combinatorics NA

M. Skandera

Topics in algebraic and enumerative combinatorics: symmetric functions, positivity problems, integer partitions, Young tableaux. *Prerequisite:* Math 333 or instructor consent.

396a,b Advanced Topics in Probability and Statistics NA

Staff

Not offered in 2005-06.

397a Advanced Topics in Applied Mathematics NA

R. Manning

Not offered in 2005-06.

460f,i Teaching Assistantship in Mathematics NA

J. Tecosky-Feldman

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 Independent Study NA

L. Butler, J. Flynn, C. Greene, J. Sabloff, M. Skandera, Y. Tai, J. Tecosky-Feldman

Prerequisite: Instructor consent.

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**

225 **Introduction to Financial Mathematics**

231 **Discrete Mathematics**

295 **Select Topics in Mathematics**

301, 302 **Introduction to Real Analysis**

303, 304 **Abstract Algebra**

311 **Partial Differential Equations**

312 **Topology I**

390 **Number Theory**

501 **Graduate Real Analysis I**

502 **Graduate Real Analysis II**

505 **Graduate Topology I**

MATHEMATICAL ECONOMICS

Mathematics and economics are complementary disciplines. Most branches of modern economics use mathematics and statistics extensively, and some important areas of mathematical research have been motivated by economic problems. Economists and mathematicians have both made important contributions to the other discipline. Economist Kenneth Arrow, for example, did path-breaking work in the field of mathematical optimization; and in 1994 mathematician John Nash was awarded the Nobel Prize in economics for introducing a theory of equilibrium in non-cooperative games that has become central to contemporary economic theory. Haverford's Area of Concentration in Mathematical Economics enables students in each of the disciplines not only to gain proficiency in the other, but also to understand the ways in which they are related and complementary.

Students enrolling in the Area of Concentration in Mathematical Economics must be majoring in either mathematics or economics. Mathematics majors pursuing the concentration take four economics courses that provide a solid grounding in economic theory, as well as two mathematics electives on topics that have important applications in economics. Economics majors in the concentration take four mathematics courses (all beyond the level of mathematics required for the economics major), and two economics electives that involve significant mathematics.

Economics students with a variety of backgrounds and career interests benefit from completing the Area of Concentration in Mathematical Economics. The mathematics courses required by the concentration are extremely valuable for students interested in pursuing graduate study in economics. A strong mathematical background is also an asset for students going on to business school or public policy school. Completing the concentration is also advantageous to students looking for employment in a wide variety of economics-related jobs requiring quantitative and analytical skills, in government, business, and finance.

The Area of 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, fixed point theorems in topology. In intermediate and advanced courses in economics, mathematics majors can see how these tools and methods are applied in another discipline.

Professor Lynne Butler, Mathematics Department representative

Associate Professor Richard Ball, Economics Department representative and Concentration Coordinator

REQUIREMENTS

I. For students majoring in mathematics, the requirements of the concentration consist of six courses:

(A) Three required economics courses:

- (i) Economics 101 (Introduction to Microeconomics)
- (ii) Economics 102 (Introduction to Macroeconomics)
- (iii) Economics 300 (Intermediate Microeconomics)

(B) One additional elective in economics

(C) Two mathematics electives on topics with significant relevance or applicability to economics. (These courses may be counted toward fulfillment of the mathematics major as well as the mathematical economics area of concentration.)

II. For students majoring in economics, the requirements of the concentration consist of six courses:

(A) Three required mathematics courses:

- (i) Math 117 or 121 (Multivariable Calculus) or Math 216 (Advanced Calculus)
- (ii) Math 215 (Linear Algebra)
- (iii) Math 317 (Analysis I)

(B) One additional elective in mathematics

(C) Two economics electives involving significant applications of mathematical methods. (These courses may be counted toward fulfillment of the economics major as well as the mathematical economics area of concentration.)

The three electives required for the concentration (parts (B) and (C) of the requirements above) should be chosen in consultation with the concentration coordinator. Examples of mathematics electives that are relevant to economics include Math 203 (Statistical Methods and Their Applications) and Math 210 (Linear Optimization and Game Theory; cross-listed as Econ 210). Examples of economics electives with significant mathematical content include Econ 210 (Linear Optimization and Game Theory; cross-listed as Math 210) and Econ 311 (Theory of Non-Cooperative Games). The economics and mathematics departments at Bryn Mawr, Swarthmore, and the University of Pennsylvania offer a number of courses that may be used as electives for the concentration.

The Area of Concentration in Mathematical Economics focuses on the complementarities between the two disciplines; the minors in mathematics and economics are designed to provide a basic foundation in each discipline, but not necessarily with an inter-disciplinary orientation. A student majoring in economics may choose to pursue either the Area of Concentration in Mathematical Economics or a minor in mathematics, but not both; and a student majoring in mathematics may choose to pursue either the Area of Concentration in Mathematical Economics or a minor in economics, but not both. A student double-majoring in economics and mathematics will not also be given credit for completing the Area of Concentration in Mathematical Economics.

MUSIC

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 composition/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**

Professor **Richard Freedman**

Associate Professor **Ingrid Arauco**, chairperson

Associate Professor **Heidi Jacob**, director of the Haverford-Bryn Mawr Orchestral Program

Associate Professor **Thomas Lloyd**, director of the Haverford-Bryn Mawr Choral Program

Visiting Assistant Professor **Thomas Hong**

Visiting Assistant Professor **David Kasunic**

Visiting Assistant Professor of Music and Comparative Literature **Marianne Tettlebaum**

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. Among artists recently featured have been 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: three courses chosen from 221a, 222b, 223a, 224b, 325b.

3) Two 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 325 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 credit course equivalent is required of music majors in their senior year. The senior experience in music may be fulfilled through an independent study project (usually a composition, performance, or research paper pursued in the context of Music 480) or through enhancement of a regular advanced course offering to include an independent study component. The format of the senior experience will be determined prior to the beginning of the student's senior year, after consultation with the department.

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 experience.

COURSES

THEORY AND COMPOSITION

110a **Musicianship and Literature** 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, set of variations, or other homophonic piece is the final project. Three class hours plus laboratory period covering related aural and keyboard harmony skills. *Prerequisite:* Music 110 or consent of instructor.

204b **Tonal Harmony II** HU

I. Arauco

Continuation of Music 203, introducing chromatic harmony and focusing on the development of sonata forms from the Classical through the Romantic period. Composition of a sonata exposition is the final project. Three class hours plus laboratory period covering related aural and keyboard harmony skills. *Prerequisite:* Music 203

265a,b **Symphonic Technique and Tradition** HU

I. Arauco, Curt Cacioppo

In this course, we will be familiarizing ourselves with significant orchestral repertory of the past three centuries, learning to read the orchestral score, studying the capabilities of various orchestral instruments and how they are used together, and tracing the evolution of orchestral writing and orchestral forms from the Classical period to the present. Short exercises in scoring for orchestra; final project is a presentation on a major orchestral work of your choice.
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 204 or consent of instructor.

303a **Advanced Tonal Harmony** HU

I. Arauco

Study of late 19th-century harmonic practice in selected works of Liszt, Wagner, Brahms, Faure, Wolf, Debussy, and Mahler. Exploration of chromatic harmony through analysis and short exercises; final composition project consisting of either art song or piano piece such as nocturne or intermezzo. Musicianship lab covers 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.

325b **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 303a or 224.

PERFORMANCE

102f,i **Chorale** HU

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

Christine Cacioppo

Music 107 is an introduction to music and the art of playing the piano. The course consists of a weekly hour-long session on Tuesday evenings (lecture, directed listening, or playing workshop) plus an individual lesson of 20 minutes at an arranged time. A short paper on the listening assignments is required, as is playing on the class recital at the end of the term (these together will comprise the final exam). *Enrollment limited to 16 students (5 spaces for*

majors/minors).

207a,b Topics in Piano HU

Curt Cacioppo

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. Topic for Fall 2005: American Roots. Topic for Spring 2006: Transatlantic Connections. *Prerequisite:* Audition and consent of instructor.

214f,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.

215f,i Chamber Music HU

H. Jacob

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.

216f,i Orchestra HU

T. Hong

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

T. Lloyd (vocal), H. Jacob (instrumental), Curt Cacioppo (piano)

Students should be participating in a departmentally directed ensemble or activity (Chorale, Orchestra, etc.) as advised by their program supervisor. All students in the private study program perform for a faculty jury at the end of the semester. 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. *Prerequisite:* Departmental audition and consent of supervisor.

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, and 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.

112 **Opera** HU

D. Kasunic

A survey of the history of opera, focusing on the most influential operas, their forms and the cultural, aesthetic, and political desires that shaped them. The goal of the course is to teach students the art of close listening, that is, to privilege their hearing over their seeing. Audio and visual recordings will be supplemented by a course packet of primary and secondary source readings. No previous musical training or coursework required.

132b **Writing Beethoven** HU (Cross-listed in Writing Program)

R. Freedman

An exploration of Beethoven's life and works, considered in the context of changing aesthetic and cultural values of the last two centuries. Students will listen to Beethoven's music, study some of his letters and conversation books, and read some of the many responses his art has engendered. In their written responses to all of this material, students will think about Beethoven's music and artistic personality as well as about the ideas and assumptions that have guided the critical reception of art and life. They will learn to cultivate their skills as readers and listeners while improving their craft as writers.

221a,b **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 and 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.

222a **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 instructor.

223b **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.

224a,b **Romantic Music** HU

R. Freedman

Music by Chopin, Schumann, Verdi, Wagner, Brahms, and Mahler (among others), with spe-

cial 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 musicological literature on 19th-century music. *Prerequisite:* Music 110, 111, or consent of instructor.

250 Music in the Literary Imagination, 1800-1949 HU
(Cross-listed in Comparative Literature)

D. Kasunic

An inquiry into the role of music in European and American literature during the 19th and early 20th centuries. Authors and composers studied will include Goethe, Beethoven, Balzac, Chopin, Wagner, Forster, Proust, and Mann. *Prerequisite:* Any full-credit course in music, or consent of instructor. Students with reading knowledge of French and German will be encouraged to work in original languages.

251a,b Music, Film, and Narrative HU
(Cross-listed in Comparative Literature)

R. Freedman

An introduction to music and film, with special attention to works from the 1930's through the 1950's 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. *Prerequisite:* Music 203 or equivalent knowledge of music theory.

252 Music and the "Origin of Language" in the Eighteenth Century HU
(Cross-listed in Comparative Literature and German)

M. Tettlebaum

Examines the preoccupation of 18th-century thinkers with the origin of language and its relationship to music. Considers why thinkers so often turn to music to discuss language and what assumptions about the nature of music and language underlie their accounts. Readings by Rousseau, Herder, Goethe, Hoffmann; works of music by Mozart, Reichardt, Schubert. The ability to read music is not necessary.

258 Vienna at the Turns of Centuries: Art, Politics, and Culture HU
(Cross listed in Comparative Literature, German, and Humanities)

M. Tettlebaum

An exploration of the musical, literary, cultural, and political climate of Vienna, at the end of the 18th century and the beginning of the 20th century. We will study representative artworks from the two periods, as well as their relationships. *Prerequisite:* Sophomore standing.

276 Piano in the Age of Chopin HU

D. Kasunic

An inquiry into piano manufacture, composition and pedagogy during the first half of the 19th century, the era of the pianist-composer, when the piano came into its own and assumed its status as the foremost solo musical instrument. Piano performance in class to demonstrate points, though not required, will be encouraged. *Prerequisite:* Music 110 or 111 or consent of instructor.

358 Art and Aesthetic Theory HU

(Cross-listed in Comparative Literature, German, Philosophy, and Humanities)

M. Tettlebaum

An examination of the relationship between art and aesthetic theory that will take as its model the rich and complex essays of Theodor Adorno. We will study the works of music and literature Adorno discusses and will examine models of aesthetic theory proposed by previous philosophers. *Prerequisite:* One 200-level course in COML, GERM, MUSC, or PHIL, or consent of instructor.

359 Disciplining Art: The Rise of Aesthetic Theory HU

(Cross listed in Comparative Literature, German, Humanities, and Philosophy)

M. Tettlebaum

An examination of the rise of aesthetics as a branch of philosophical inquiry. The aim is to determine what defines aesthetics as a discipline and evaluate its contribution to the study of art. Readings by Kant, Schiller, Hegel, Nietzsche, Freud, and Adorno. *Prerequisite:* a 200-level course in any of the cross-listing disciplines or permission of the instructor.

480a,b,f,i Independent Study HU

I. Arauco, Curt Cacioppo, R. Freedman, T. Lloyd

Prerequisite: Approval of department and consent of instructor.

DIVERSE TRADITIONS

149 Native American Music and Belief HU

Curt Cacioppo

Surveys the principal styles of Native North American singing in ceremonial and secular contexts; discusses contemporary Indian musical cross-overs and the aesthetic of multi-culturalism; emphasizes class participation in singing traditional Indian songs. (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. *Enrollment limited to 35 students.* (Satisfies the Social Justice requirement.) *Prerequisite:* Sophomore standing or higher.

228a,b Musical Voices of Asia HU

(Cross-listed in East Asian Studies)

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 past 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 Departments of Psychology and Biology at Haverford and Bryn Mawr. Haverford students in the concentration are required to complete all of the traditional coursework in their major (including laboratory work) while also taking a broad range of courses in the natural and behavioral 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, 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

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

Associate Professor Kimberly Cassidy, psychology at Bryn Mawr

Associate Professor Deepak Kumar, computer science at Bryn Mawr

Associate Professor Anjali Thapar, psychology at Bryn Mawr

Associate Professor Rebecca Compton, psychology at Haverford

Assistant Professor Douglas Blank, computer science at Bryn Mawr

Assistant Professor Andrea Morris, concentration advisor in biology at Haverford

REQUIREMENTS FOR HAVERFORD STUDENTS COMPLETING THE NBS CONCENTRATION (PSYCHOLOGY OR BIOLOGY MAJORS ONLY)

A core course in biological psychology (HC Psychology 217 or BMC Psychology 218; can count toward the requirements of the psychology major).

A minimum of one semester of introductory coursework in complementary discipline (BMC Biology 101 or 102 or HC Biology 200 for Psychology majors; BMC Psychology 101

or 102 or (two of the following three) HC Psychology 103, 104, 107 for biology majors). Must be taken before the senior year.

Two full-semester courses (200 or 300 level) containing NBS-relevant material, from the list below, one of which must be from outside the major discipline. The NBS course taken within the major discipline can also count toward major requirements. 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 or biology major) must be undertaken on a topic relevant to neuroscience, and approved by an NBS faculty member. Students working with faculty members outside the major department must meet the usual research requirements of the senior project within the home department.

BIOLOGY AT BRYN MAWR COLLEGE

202 **Neurobiology and Behavior**

250 **Computational Models in the Sciences**

271 **Developmental Biology**

303 **Animal Physiology**, *not offered in 2005-2006*

304 **Cell and Molecular Neurobiology**, *not offered in 2005-2006*

313/314 **Integrative Organismal Biology I/II**

321 **Neuroethology**

BIOLOGY AT HAVERFORD COLLEGE

309 **Molecular Neurobiology** (a half-semester course)

330 **Laboratory in NBS: Molecular Development** (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**

372 **Artificial Intelligence**

PSYCHOLOGY AT BRYN MAWR COLLEGE

323 **Cognitive Neuroscience: Trends in Human Memory**

350 **Developmental Cognitive Disorders**, *not offered in 2005-2006*

395 **Psychopharmacology**

397 **Laboratory Methods in the Brain and Behavioral Sciences**

NEURAL AND BEHAVIORAL SCIENCE

PSYCHOLOGY AT HAVERFORD

221 **Primate Origins of Society**

240 **Psychology of Pain and Pain Inhibition**, *not offered in 2005-2006*

260 **Cognitive Neuroscience**

250 **Biopsychology of Emotion and Personality**

320 **Evolutionary Human Psychology**, *not offered in 2005-2006*

330 **Laboratory in NBS: Behavioral Neuroscience** (a half-semester course)

350 **Biopsychology of Stress**, *not offered in 2005-2006*

340 **Human Neuropsychology**, *not offered in 2005-2006*

PEACE AND CONFLICT STUDIES

The goal of the bi-college concentration is to help focus students' coursework around specific areas of interest 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. The peace and conflict studies concentration 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: the introductory course, General Programs 111a; either Political Science 206 or General Programs 322; and 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 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.

Professor Marc Howard Ross, Coordinator at Bryn Mawr College

Visiting Assistant Professor Leslie Dwyer, Coordinator at Haverford College

Professor Laurie Kain Hart, Haverford College

COURSES AT HAVERFORD COLLEGE:

ANTHROPOLOGY

- 201a **Human Rights, Development and International Activism**
- 234b **Violence, Terror and Trauma** (*not offered in 2005-06*)
- 257a **Political Anthropology** (*not offered in 2005-06*)
- 258a **Politics of Culture and Identity**
- 257b **Ethnic Conflict** (*not offered in 2005-06*)
- 322b **Field Methods in Peace and Conflict Studies** (*not offered in 2005-06*)
- 324b **Post-Conflict Trauma and Psychosocial Repair**

GENERAL PROGRAMS

- 111b **Introduction to Peace and Conflict Studies**
- 201a **Human Rights, Development, and International Activism**
- 322b **Field Methods in Peace and Conflict Studies** (*not offered in 2005-06*)

HISTORY

- 234b **Nationalism and Politics in the Balkans** (*not offered in 2005-06*)
- 240b **History and Principles of Quakerism**

POLITICAL SCIENCE

- 141a **International Politics**
- 232b **Peace Building: Reintegration, Reconciliation, and Reconstruction**
(*not offered in 2005-06*)
- 235b **African Politics**

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- 245a **The State System**
249b **Human Rights and Global Politics** (*not offered in 2005-06*)
338a **Topics in Comparative Politics: Ethnic and Ideological Conflict**
(*not offered in 2005-06*)
391a01 **Political Philosophy: From Theory to Practice**
391a02 **Democracy and Global Governance**
391a3 **Democracy and its Challenges**

RELIGION

- 240b **History and Principles of Quakerism**
264a **Religion and Violence**

SOCIOLOGY

- 235b **Class, Race, and Education** (*not offered in 2005-06*)

COURSES AT BRYN MAWR COLLEGE:

ANTHROPOLOGY

- 206 **Conflict and Conflict Management: A Cross-Cultural Approach**
354 **Identity, Ritual, and Cultural Practices in Contemporary Vietnam**

EDUCATION

- 266 **Schools in American Cities**

HISTORY

- 200 **European Expansion and Competition: History of Three Worlds**

PHILOSOPHY

- 344 **Development Ethics**

POLITICAL SCIENCE

- 111 **Introduction to Peace and Conflict Studies**
141 **Introduction to International Politics**
206 **Conflict and Conflict Management: A Cross-Cultural Approach**
210 **Human Rights, Conflict and Transitional Justice: No Justice, No Peace?**
233 **History, Politics and the Search for Security: Israel and the Palestinians**
241 **The Politics of International Law and Institutions**
283 **Introduction to the Politics of the Modern Middle East and North Africa**
316 **Ethnic Group Politics**
347 **Advanced Issues in Peace and Conflict Studies**
348 **Culture and Ethnic Conflict**

PSYCHOLOGY

- 208 **Social Psychology**

SOCIOLOGY

- 205 **Social Inequality**
215 **Challenge/Dilemma of Diversity**
266 **Schools in American Cities**

PHILOSOPHY

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 Kathleen Wright, chairperson

Professor Ashok Gangadean

John Whitehead Professor of Philosophy L. Aryeh Kosman

Professor Danielle Macbeth

Assistant Professor Jerry Miller

Visiting Assistant Professor Jeremy Fantl

Visiting Assistant Professor Emily S. Lee

Jill Stauffer, Mellon Post-Doctoral Fellow

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.

103a **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 2005-06.

104a **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*. Not offered 2005-06.

105a **Love, Friendship, and the Ethical Life** HU

(Cross-listed in Gender and Sexuality Studies)

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*). Not offered 2005-06.

106b **The Philosophy of Consciousness and the Problem of Embodiment** HU

(Cross-listed in Gender and Sexuality Studies)

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' *Meditations* and Spinoza's *Ethics*), and contemporary postmodern and feminist philosophy (Foucault's *The History of Sexuality* and Irigaray's *Speculum of the Other Woman*).

107a **Happiness, Virtue, and the Good Life** HU

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*.

108b Modern Theories of Consciousness HU

A. Kosman

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. *Not offered 2005-06.*

109 Philosophy and the Good Life HU (Cross-listed as Writing Program 109b)

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 2005-06.*

110a Mind and World HU

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.

111b The Wicked and the Worthy HU

J. Miller

The possibility of "doing good" in the world presumes that one can distinguish between good and bad actions, people, and consequences. But on what basis are we to make such distinctions? What grounds, if anything, our definitions of good and bad? How can we be certain that our actions, and thus our own selves, are not evil? This course examines such concerns through a survey of the history of ethical philosophy. In digging up the "root of all good," we will consider as well questions of self-interest, justice, freedom, and duty. Readings include selections from Plato's *Republic*, Mill's *Utilitarianism*, Kant's *Groundwork of the Metaphysics of Morals*, and Nietzsche's *Beyond Good and Evil*.

114a Truth, Lies, and Illusions HU

J. Fantl

Most of us believe that physical objects exist, that we can trust those closest to us, and that certain religious and scientific claims are true. Many of us think that, at some deep level, the government is fundamentally trustworthy. But all of these claims are, to varying degrees, undermined by the possibility that we are deceived about them, either by ourselves or by others. Our senses can deceive us, our friends can deceive us, our government can deceive us. How paranoid should we be? We will look at this question from a philosophical perspective (through Plato and Descartes, among others), and will also consider some practical lessons that Conspiracy Theories can teach us. How do we tell the legitimate Conspiracy Theories from the wildly implausible? Whom do we trust?

INTERMEDIATE LEVEL COURSES: These courses require one course at the 100 level or its equivalent, or consent of the instructor.

210b 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. *Not offered 2005-06.*

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 developed 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.

220b Medieval Philosophy HU

A. Kosman

This course will be devoted to a critical and interpretive reading of selected texts of medieval philosophy. We will read and discuss three major works of Islamic, Jewish, and Christian philosophical thought, Ibn Tufayl's *Hayy Ibn Yakzan*, Moses Maimonides' *Guide for the Perplexed*, and Thomas Aquinas' *Summa Theologica*, in addition to other short selections from medieval philosophy.

221b 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 beings in the world. *Not offered 2005-06.*

222a Early Modern British Philosophy HU

J. Fantl

An examination of British empiricist philosophy, starting from Locke's empiricism and proceeding through Berkeley and Hume and closing with the 18th-century Scottish philosopher, Thomas Reid. We will discuss worries that Locke's empiricism leads either to skepticism or idealism, as well as the more specific issues of personal identity, the worth of human testimony, and the evaluation of religious belief.

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.)
Not offered 2005-06.

226a 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*.

227b 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*. *Not offered 2005-06.*

228b The Logos and the Tao HU

(Cross-listed in Comparative Literature and in East Asian Studies)

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 2005-06.*

232a African-American Philosophy HU

(Cross-listed in Africana Studies)

J. Miller

This course introduces students to popular standards of African American philosophical, theological, and political thought from the 19th century to the present. Emphasis will be placed on themes of liberation, racial ontology, justice, and subjectivity. Also of concern will be how these thinkers challenge and/or reaffirm modernist philosophical approaches to knowledge, truth, and good. (Satisfies the social justice requirement.) *Not offered 2005-06.*

233b Philosophy and Race HU

(Cross-listed in Africana Studies)

J. Miller

This course meditates on the curious relation of race to modern Western intellectual thought. Although typically considered of secondary philosophical importance, references to race appear regularly in works by canonical philosophers. This suggests, in contrast, that race has played a not-insignificant role in reflections on consciousness, identity, and value. In addition to examining Kant's anthropological writings and Hegel's discussion of Africa in the *Philosophy of History*, we will discuss readings by Sartre, Fanon, Foucault, Alain Locke, and Nietzsche. (Satisfies the social justice requirement.) *Enrollment limited to 35.*

241b Hindu Philosophy HU

A. Gangadean

A critical exploration of classical Hindu thought (Vedanta) in a global and comparative context. Special focus on selected *Principal Upanishads*, a close meditative reading of the *Bhagavad Gita* and an in-depth exploration of Shankara's *Brahmasutra Commentary*.

242a Buddhist Philosophy HU
(Cross-listed in East Asian Studies)

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. *Not offered 2005-06.*

259a Social and Political Philosophy

J. Stauffer

A critical exploration of the role reason and the passions-benevolence, sympathy and hope, as well as fear and hatred-play in political philosophy, with special attention to the liberal tradition.

251a Philosophy of Mind HU

D. Macbeth

The focus of this course is the question of the place of mind in nature, in the world. What sort of a thing is a mind? What is it to be conscious? Can there be freedom of the will in a physical world? Could a computer ever be correctly described as thinking? Do animals have minds? Our aim is to clarify what we are asking when we ask such questions, and to begin at least to formulate answers.

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 2005-06.*

253b Analytic Philosophy of Language HU

D. Macbeth

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. *Not offered 2005-06.*

254b 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 2005-06.*

255a Truth and Knowledge HU

D. Macbeth

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. *Not offered 2005-06.*

256 Ethics and the Law HU

J. Fantl

To what extent should legal systems take morality into account? We will look at a variety of ways this question manifests itself in legal theory and policy issues. Should legal punishment be doled out in accordance with moral desert? Should laws protect the moral good even if there is limited benefit to society as a whole? More theoretically, is there an automatic duty to obey the law, or should we allow our moral dispositions to help us decide which laws to obey?

257b Critical Approaches to Ethical Theory HU

J. Miller

Following Hegel's critique of Kantian morality, some theorists have abandoned the search for the holy grail of ethics—a transcendental and universal formula for determining good and evil. Instead they have attempted to "revalue" the nature of value. This course examines these pragmatists, psychoanalytic, and poststructuralist efforts to redefine ethics as irreducibly inflected through history, subjectivity, and language. In tracing the conditions for and limitations of ethics, we shall think deeply about concepts such as community, agency, and responsibility. Authors include Rorty, Freud, Derrida, Lyotard, and Irigaray. *Not offered 2005-06.*

258a Philosophy of the Body HU

(Cross-listed in Gender and Sexuality Studies)

E. Lee

This course brings together two kinds of theories about the body: phenomenological theories (Maurice Merleau-Ponty) and feminist theories (Linda Alcoff, Judith Butler, Gail Weiss, Iris Young, and John Zuern).

260a Historical Introduction to Logic HU

D. Macbeth

Our aim is two-fold: first, to understand – in the sense of having a working knowledge of – both traditional Aristotelean and modern quantificational logic (translating sentences into logical notation, assessing the validity of arguments, constructing proofs, and so on); and second, to understand logic, why it matters, what it can teach us (both as philosophers and as thinkers more generally), and how it "works" in the broadest sense. *Not offered 2005-06.*

277 Modern Christian Thought HU (Cross-listed as Religion 277)

D. Dawson

281 Modern Jewish Thought HU (Cross-listed as 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.

310b Topics in the Philosophy of Literature HU

(Cross-listed in Comparative Literature)

A. Kosman

Not offered 2005-06.

310b Topics in Ancient Greek and Roman Philosophy HU

A. Kosman

This course will be devoted to a close reading of Aristotle's *Nicomachean Ethics*, together with some selected commentary.

321 Topics in Early Modern Philosophy HU

A. Kosman

Not offered 2005-06.

323b Topics in 19th Century Philosophy HU

Staff

Not offered 2005-06.

331a Topics in Recent Anglo-American Philosophy HU

D. Macbeth

Not offered 2005-06.

332a Topics in 20th-Century Continental Philosophy HU

(Cross-listed in Gender and Sexuality Studies)

J. Miller

This course concentrates on the work of French theorist/historian Michel Foucault. This semester we focus on his writings on power and sex, the impact of which on theories of political resistance, body consciousness, and sexual identity and oppression is difficult to overestimate. In addition to Foucault's own writings, we will read a number of critiques and applications of Foucauldian ideas in areas of feminist philosophy, queer theory, literary criticism, and political philosophy.

332b Topics in 20th-Century Continental Philosophy

J. Stauffer

This course will focus on close readings of some philosophical works by the French-Jewish-Lithuanian thinker of ethics, Emmanuel Levinas, as well as on secondary readings and critiques of his work. We will consider the challenge he levels at the western philosophical tradition in terms of its conceptualizations of freedom, sovereignty, responsibility, personal identity, subjectivity and subjection, ethics and politics. We will pay particular attention to the relationship between ethics and politics and/or justice, though there will also be room for determining course directions according to individual student interests.

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*. *Not offered 2005-06.*

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). *Not offered 2005-06.*

342b Topics in Asian Philosophy HU

(Cross-listed in East Asian Studies)

A. Gangadean

Not offered 2005-06.

351 Topics in the Philosophy of Mind HU

D. Macbeth

Not offered 2005-06.

353b Topics in the Philosophy of Language: Metaphor and Meaning HU

(Cross-listed in Comparative Literature)

A. Gangadean

354a Topics in Metaphysics

D. Macbeth

Not offered 2005-06.

355a Topics in Epistemology: Skepticism HU

J. Fantl

An examination of philosophical skepticism and responses to it, both historical and contemporary. Topics will include the nature of knowledge and structure of justification, Common Sense solutions, and the importance of contextual factors in knowledge.

356b Topics in Social and Political Philosophy: Feminist Epistemology HU

(Cross-listed in Feminist and Gender Studies)

E. Lee

One of the central contributions of feminist theory is to rethink what counts as knowledge when we take the function of gender seriously. Feminist epistemology challenges us to think critically about the criteria used when we determine a claim to be a knowledge claim. In the first half of this course, we will examine the first feminist theories to question epistemology from a feminist perspective (Sandra Harding, Evelyn Fox Keller, and Lynn Harkinson Nelson). In the second half, we will discuss the contributions made by third wave feminist theorists to this debate about epistemology (Chandra Talpade Mohanty, Maria Lugones, and Linda Alcoff).

357b Topics in Aesthetics HU

Staff

Not offered 2005-06.

370 Topics in Ethics HU

A. Kosman

Not offered 2005-06.

399c Senior Seminar HU

Fantl, Kosman, Macbeth, Miller

This one-semester credit course, spread over the whole of senior year, has several components: (a) Participation in the Altherr Symposium, including four meetings devoted to preparation for the symposium, (b) Participation in the Distinguished Visitors series, (c) The writing of a senior essay, and (d) 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.*

403-414f,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

Staff

COURSES OFFERED AT BRYN MAWR COLLEGE

101 Historical Introduction to Philosophy: Greek Philosophy HU

103 Introduction to Logic HU

202 Culture and Interpretation HU

204 Readings in German Intellectual History

(Marx, Nietzsche, Freud, and the Rhetoric of Modernity)

211 Theory of Knowledge HU

212 Metaphysics HU

213 Introduction to Mathematical Logic HU

221 Ethics HU

222 Aesthetics HU

228 Western Political Philosophy: Ancient and Early Modern HU

230 Discrete Mathematics

231 Western Political Philosophy (Modern) HU

238 Science, Technology, and the Good Life HU

300 Nietzsche, Kant, Aristotle: Modes of Practical Philosophy HU

303 Advanced Mathematical Logic HU

310 Philosophy of Science HU

318 Philosophy of Language

326 Relativism: Cognitive and Moral

327 Political Philosophy in the 20th Century HU

329 Wittgenstein HU

336 Plato's Later Dialogues

338 Phenomenology: Husserl and Heidegger HU

347 Philosophy of Perception

367 Hegel: Philosophy of Right

399 Senior Conference

PHYSICS

The physics curriculum introduces students to concepts and methods that 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.

The department offers several courses that can be taken with no prerequisites or prior experience in physics: Physics 107b treats fluid motions in both physical and biological systems, 108b covers applications of the physical sciences to modern medicine, and 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 department also offers a half-credit course, Astronomy/Physics 152i, intended for first-year students who are considering a physical science major and wish for an opportunity to study some of the most recent developments in astrophysics.

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; Astronomy/Physics 152i is highly recommended, but not required.

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 observational cosmology, nonlinear physics and fluid dynamics, extragalactic astronomy, biophysics, and nanoscience. Courses numbered 413 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 142. (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 138.)

A concentration in computer science is available for physics majors. This program is described on page 116.

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 or the Engineering 3/2 Program with Caltech. Detailed information is available through the department chair. (See Special Academic Programs, page 39.) Students interested in materials science should also consult the related offerings in materials chemistry through Haverford's chemistry department.

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

John and Barbara Bush Professor in the Natural Sciences **Jerry P. Gollub**

Bettye and Howard Marshall Professor of Natural Sciences **R. Bruce Partridge** (on leave Fall 2005)

Associate Professor **Suzanne Amador Kane**

Associate Professor **Walter F. Smith**

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 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. One of the four "core" 300-level lecture courses in physics at Haverford or Bryn Mawr: 302 (Advanced Quantum Mechanics), 303 (Statistical Physics), 308 (Advanced Classical Mechanics) or 309 (Advanced Electromagnetism & Modern Optics)
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

Staff

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. 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 times and an exploration-based class format. *Prerequisite:* Calculus at the level of Mathematics 113a or equivalent should be taken prior to or concurrently with this course.

102b **Classical and Modern Physics II** NA/QU

Staff

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

Staff

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

Staff

Three class hours and one laboratory period. A continuation of Physics 105a, covering electricity and magnetism, optics, and special relativity. *Prerequisite:* Mathematics 114 or equivalent.

107b **Fluids in Nature** NA

J. Gollub

An exploration of the role of fluid phenomena in nature and life, including: The basic principles governing fluid motion; the role of fluid dynamics in understanding the weather and the ocean circulation; and the functioning of organisms that live in fluids, or utilize fluids internally for circulation. Some examples that will be discussed during the course include: how organisms adapt to take advantage of their local fluid environment; the diverse mechanisms they use to pump fluids; how hurricanes work; how fluid motion spreads fires; why the eyes of fish are not in the front; how insects walk on water; the dynamics of flight; the physics of rain; and much more. Intended primarily for students not majoring in the sciences. As understanding of integration and differentiation at the level of Mathematics 113a will be helpful.

108b **Physics in Modern Medicine** NA

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.

110b **About Time** 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. *Not offered in 2005-06.*

152i Freshman Seminar in Astrophysics NA (Cross listed in Astronomy)

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. *Prerequisite:* Physics 101a or 105a and concurrent enrollment in Physics 102b or 106b (or Bryn Mawr equivalents.)

211f Laboratory in Electronics and Wave Physics NA

J. Gollub, 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 spectroscopy, superconductivity, scanning tunneling microscopy, electron diffraction, spin resonance, and laser spectroscopy. 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. *Prerequisite:* Physics 102b or 106b and Mathematics 114b or 120a or equivalent.

214b Introductory Quantum Mechanics NA/QU

J. Gollub

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 quantum computing, will be discussed. Multi-electron atoms and nuclei will be considered if time allows. Physics 212i, a related laboratory half-course, is normally taken concurrently and is required for majors. *Prerequisite:* 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). Applications studied include mammography, osteoporosis screening, applications of PET and MRI brain scans in neuroscience, and the use of imaging techniques in cancer radiation therapy planning. Seven

laboratories accompany the three weekly lectures. This course is appropriate for students planning on majoring in any of the natural science departments and considering careers in biomedicine. *Prerequisite:* Physics 102 or 106, Math 114 or 121, and at least one course at the 200 level in the natural sciences.

302b **Advanced Quantum Mechanics** NA

Staff

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 2006-07 and alternate years.*

303a **Statistical Physics** NA

Staff

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 2005-06 and alternate years.*

308a **Advanced Classical Mechanics** NA

Staff

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. *Prerequisite:* Physics 106b or 213a, or Bryn Mawr equivalent. *Offered in 2006-07 and alternate years.*

309b **Advanced Electromagnetism & Modern Optics** NA

S. Boughn

Boundary value problems, multipole fields, dielectric and magnetic materials; electromagnetic waves, propagation in dielectric media, conductors and waveguides; gauge transformations, radiating systems. *Prerequisite:* Physics 106b or 213a or Bryn Mawr equivalent. *Offered in 2005-06 and alternate years.*

311 **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. *Prerequisite:* Mathematics 121a and 204b or the equivalent, and Physics 214b. *Not offered in 2005-06.*

313 **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. *Prerequisite:* Physics 214b and 302b. *Not offered in 2005-06.*

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 2006-07 and alternate years.*

320a 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. *Prerequisite:* Biology 200 and either Physics 214b or Chemistry 304a, or the Bryn Mawr equivalents, or permission of the instructor. *Offered in 2005-2006 and alternate years.*

322b Solid State Physics NA*W. Smith*

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. *Prerequisite:* Physics 214b. *Offered in 2005-2006 and alternate years.*

326a Advanced Physics Laboratory NA*S. Amador Kane*

Design, execution, and analysis of significant experiments, which change from year to year. Those presently available include studies of microfluidics, laser tweezers, x-ray diffraction and materials synthesis, superconductivity, sensor technologies, and chaotic dynamics. The course emphasizes the effective use of contemporary experimental tools, including low-noise measurement techniques, laboratory computers, and optical methods. *Prerequisite:* Physics 212i or consent of instructor. *Offered in 2005-06 and alternate years.*

399f,i Senior Seminar NA*S. Amador Kane, W. Smith*

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.

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, 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), nanolith-

ography 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. *Prerequisite:* 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. *Prerequisite:* Open to senior physics and astronomy majors.

480a,b,f,i Independent Study NA

Staff

Prerequisite: Consent of the instructor.

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, the problems of international relations, and the study of global governance and transnational actors.

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 Harvey Glickman, emeritus

Professor Robert A. Mortimer

Professor Sidney R. Waldman

Associate Professor Anita Isaacs, chairperson

Assistant Professor Stephen J. McGovern

Assistant Professor Cristina Beltrán

Assistant Professor Craig Borowiak

Assistant Professor Susanna Wing

MAJOR REQUIREMENTS

Courses fall into five subfields of the discipline of political science: American politics (A); comparative politics (C); international politics (I); global theory (GT); and political theory (T). To enter the major, two one-semester courses are required from the following: 121, 123, 131, 141, 143, 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 five subfields, with work at the intermediate or advanced level in at least two subfields, prior to taking the research 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 politics courses, and so forth.

All senior majors write a thesis and do an oral defense of the thesis 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, including its oral defense and the quality of course work.

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**

S. Wing, A. Isaacs

An introduction to basic concepts and themes in comparative politics analyzed through case studies from around the world. Themes include political authority and governance structures; political culture and identity politics; political participation and representation; and political economy.

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.

143a,b **The Politics of Globalization (GT) SO**

C. Borowiak

An introduction to the major academic and policy debates over globalization and global governance. Key themes will include: sovereignty; free/fair trade; immigration; anti-globalization and violence; democratic governance and international economic institutions; and the global justice movement.

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. Readings 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**

(Cross-listed as 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.

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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, or consent of instructor.

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, or consent of instructor.

227a Urban Politics (A) SO

S. McGovern

Examines power and politics at the local level of government, particularly of large American cities. Explores various paradigms of urban politics based on whether (1) the market or government plays the primary role in addressing societal problems; and (2) policy making is concentrated among elites or dispersed widely among the citizenry. *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 protection, transportation, education, crime, and the management of regional sprawl. *Prerequisite:* Political Science 121 or 123, 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 the 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,GT) 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.

235b African Politics (C) SO

S. Wing

Analysis of political change in Africa from the colonial period to contemporary politics. Selected case studies will be used to address central themes including democracy, human rights, gender, interstate relations, economic development, and globalization. *Prerequisite:* One course in political science 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 political science 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 political science or consent of instructor. (Satisfies the social justice requirement.)

239a The United States and Latin America (I) 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 political science, 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 political science or one course in Latin American studies, 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

(Cross-listed as 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.

249 Human Rights and Global Politics (G) SO

C. Borowiak

Critically examines the principles, history, and practice underlying the international human rights regimes. Will explore theoretical debates over the cultural specificity of human rights, policy debates over national sovereignty and international law, and questions of accountability for human rights abuses. Attention will also be paid to the impact of globalization and the role of civil society in the human rights movement. (Satisfies the social justice requirement.)

250 Politics, Markets, and Theories of Capitalism (GT) SO

C. Borowiak

Theoretical approach to the role of politics and markets in modern capitalism. Draws from the history of political economic thought (including Adam Smith, Marx, Karl Polanyi, Schumpeter, and Hayek) and from contemporary political economists to address the meanings of "capitalism" and the effects of global markets on domestic politics. *Prerequisite:* One political science course or consent of instructor.

251 Global Civil Society (GT) SO

C. Borowiak

An introduction to the theories and debates behind the concept of a global civil society, and the role of transnational civil society actors in shaping global governance. Case studies of specific transnational networks, movements, and coalitions will be examined.

Prerequisite: One political science course or consent of instructor.

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.)

263b Women and Politics (C, I) SO

S. Wing

Analysis of the complex issues surrounding women as political actors and the ways in which citizenship relates to men and women differently. Selected cases from the United States, Africa, Latin America, and Asia are studied as we discuss gender, domestic politics, and international relations from a global perspective. *Prerequisite:* One course in political science or consent of instructor.

264b Political Economies in Developing Countries SO

S. Wing

Explores concepts and dynamics of political and economic reform in developing countries and the social and international context in which policy is formulated and implemented. Combines theories of development with case studies from Africa, Latin America, and Asia. *Prerequisite:* One course in comparative politics or international relations, or consent of instructor.

265b U.S. Foreign Policy in the New World Disorder

H. Glickman

Consideration of the major policy areas, regional and global, at issue in contemporary U.S. foreign policy. In association with the Great Decisions Program of the national Foreign Policy Association, an analytic seminar leading to a Student Town Meeting with foreign policy experts. Occasional guest commentators. Topics considered: Grand strategy, the war on terrorism; rebuilding Afghanistan and Iraq; the European (dis)connection; Asian face-offs; Africa's unending crisis. *Prerequisite:* One social science course.

266 American Political Thought from Founding to Civil War (A or T) SO

C. Beltrán

An examination of American historical thinking on a variety of political topics dealing with the American founding. Beginning with the nation's birth in conquest and its repeated struggles over social subordination, we will explore some of the most important ways in which both dominant and dissident figures have handled such themes as revolution, authority, community, equality, liberty, slavery, and war. The course examines American responses to fundamental questions about the appropriate scope of federal and state power, the workings of con-

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stitutional democracy, the meaning of citizenship and national identity, and the character of American political culture. *Prerequisite:* Political Science 121, 151, or consent of instructor. *Enrollment limited to 30.*

268 American Political Thought: Post-Civil War (A or T) SO

C. Beltrán

An examination of American historical and contemporary thinking on a variety of political topics. The course explores American responses to fundamental questions about the appropriate scope of federal and state power, the workings of constitutional democracy, the meaning of citizenship and national identity, and the character of American political culture. An exploration of both the mainstream tradition and some branches of the counter tradition of political ideas in America, focusing on the themes of community, equality, authority, liberty, and individualism. *Prerequisite:* Political Science 121, 151, 266, or consent of instructor. *Enrollment limited to 30.*

325 Grassroots Politics in Philadelphia SO

S. McGovern

Advanced seminar on city politics, public policy, and grassroots activism. Traditional seminar format combined with an experiential learning component featuring intensive internships with city government agencies, public interest groups, or community-based organizations in Philadelphia. *Prerequisite:* two courses in political science and/or urban studies, or consent of instructor; limited to juniors and seniors. (Satisfies the Social Justice requirement.) *Enrollment limited to 15.*

326a,b Topics in American Politics (A) SO

S. Waldman

Selected problems in institutional, behavioral, and public policy analysis in the American political system. Topic: Parties and Elections. *Prerequisite:* One course in American government or consent of instructor.

338a Topics in Comparative 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 comparative politics and a course in Peace and Conflict Studies or consent of instructor.

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.

359a Feminist Political Theory (T) SO

C. Beltrán

An advanced seminar focusing on the ways in which feminist theory can inform and shape our understanding of Western political thought. *Prerequisite:* One course in political theory 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

S. McGovern

Topic: Democracy in America

(3) Research Seminar in Political Theory and International Relations

C. Borowiak

Topic: Democracy and Global Governance

(4) Research Seminar in Political Theory

C. Beltrán

Topic: Political Philosophy: Theory, Practice, and Politics

(5) Research Seminar in Comparative Politics

S. Wing

Topic: Developmental (Dis)orders: Law, Contracts, and Culture

A. Isaacs

Topic: Democracy and its challenges

392b Senior Thesis 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.

POLITICAL SCIENCE

COURSES OFFERED AT BRYN MAWR COLLEGE

- 121 **American Politics**
- 131 **Comparative Politics**
- 141 **International Politics**
- 205 **European Politics**
- 206 **Conflict & Conflict Management**
- 228 **Western Political Philosophy (Ancient and Early Modern)**
- 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**

PSYCHOLOGY

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**

Emeritus Professor **Sidney I. Perloe**

Professor **Marilyn G. Boltz**

Associate Professor **Wendy F. Sternberg**, *chair*

Associate Professor **Rebecca J. Compton**

Assistant Professor **Benjamin Le**

MAJOR REQUIREMENTS

Four of the following half-semester introductory courses – 103 Biological Foundations of Behavior, 104 Foundations of Cognition, 105 Foundations of Personality, 106 Foundations of Social Behavior, and 107 Foundations of Emotion; 200 Experimental Methods and Statistics, or Bryn Mawr 205. Six additional psychology courses beyond the introductory level, with at least one taken from each of the following groups: a) Complex Human Behavior – 214, 224, 250, 311, 325; b) Biological Psychology – 217, 221, 240, 250, 260, 340, 350; c) Cognition – 213, 220, 238, 260, 340. Two of these six courses must be taken with laboratory. Lab courses should be completed by the end of the junior year. 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 (see page 275) or other institutions (with permission of the department) are accepted as fulfilling major requirements.

MINOR REQUIREMENTS

The Haverford minor in psychology consists of six credits in psychology including: Four of the following half-semester introductory courses – 103 Biological Foundations of Behavior, 104 Foundations of Cognition, 105 Foundations of Personality, 106 Foundations of Social Behavior, and 107 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 – 214, 224, 250, 311, 325; b) Biological Psychology – 217, 221, 240, 250, 260, 340, 350; c) Cognition – 213, 220, 238, 260, 340.

NEURAL AND BEHAVIORAL SCIENCE

Haverford psychology majors may also elect to do a concentration in neural and behavioral sciences. 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

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

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.

105g **Foundations of Personality** SO

D. Davis

Theories of personality and psychopathology and their application to psychological development and individual differences. *Not offered in 2005-2006.*

106h **Foundations of Social Behavior** SO

B. Le

An introduction to the wide range of topics encompassed by empirical and social psychology, including examinations of scientific studies illustrating the basic processes of human behavior and employed in applied settings. Topics include social-cognitive procedures, intra-and inter group dynamics, attitude formation, and interpersonal relationships.

107g **Foundations of Emotion** SO

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.

200 **Experimental Methods and Statistics** SO/QU

B. Le

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 in-depth treatment of statistics as applied to psychology research. Lab exercises focus on designing experiments, collecting data, applying statistical methods (using a commercial data analysis software package), and presenting data through written assignments. *Prerequisite:* One semester of introductory psychology.

213 **Memory and Cognition** SO

M. Boltz

An interdisciplinary study 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. *Prerequisite:* Psychology 104 or consent of instructor. *Not offered in 2005-2006.*

214 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 105 or consent of the instructor.

217 Biological Psychology NA (Cross-listed in Biology)

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 (103) or biology, or consent of instructor.

220 The Psychology of Time SO

M. Boltz

An examination of the various ways in which time is experienced and influences psychological behavior. Topics include: the perception of rhythm, tempo, and duration; temporal perspective; societal concepts of time; neural substrates of temporal behavior. *Prerequisite:* Psychology 104 or consent of the instructor.

221 The Primate Origins of Society SO (Cross-listed in Biology)

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.

222 Evolution and Human Behavior SO

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. *Prerequisite:* Any course with substantial examination of evolution (e.g., Psychology 103, 221, BMC Anthropology 101, 236), or permission of the instructor. *Not offered in 2005-2006.*

224 Social Psychology SO

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. *Prerequisite:* Psychology 106 or 107. *Not offered in 2005-2006.*

238 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 104 or consent of instructor.

240 Psychology of Pain and Pain Inhibition NA

W. Sternberg

An overview of the psychological study of pain perception and its inhibition. Topics to be covered include nervous system mechanisms underlying pain sensation and pain inhibition, pain as a scientific discipline, and pain as a clinical problem. *Prerequisite:* Psychology 103 or permission of the instructor. *Not offered in 2005-2006.*

250 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 103 or 107 or consent of the instructor.

260 Cognitive Neuroscience NA

R. Compton

An examination of the neural basis of higher mental functions such as object recognition, attention, memory, spatial functions, language, and decision-making. Major themes include mind/brain relationships, localization of function, and the plasticity of the brain. *Prerequisite:* Psychology 103, 104, or 107.

309 Abnormal Psychology SO

D. Davis

A review of major clinical and theoretical literature pertaining to the definition, etiology, and treatment of important forms of psychopathology; optional working contact with patients in a mental health setting. Limited enrollment. *Prerequisite:* Psychology 105 or equivalent or consent of instructor. *Not offered in 2005-2006.*

311 Advanced Personality Psychology: Freud 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 105 or consent of instructor.

313 Laboratory in Memory and Cognition SO

M. Boltz

This half-credit laboratory correlate to Psychology 213 (Memory and Cognition) will focus on the methods used to investigate the nature of perception, memory, and other cognitive behaviors. These various methodologies will be employed within a set of empirical studies designed to investigate particular topic areas within the field of cognition. *Prerequisite:* Psychology 104 and 200, and either prior or concurrent enrollment in Psychology 213. *Not offered in 2005-2006.*

314 Laboratory in Adolescence Psychology SO

D. Davis

This half-credit 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. *Prerequisite:* Psychology 200 and prior or concurrent enrollment in Psychology 214.

320 Laboratory in the Psychology of Time SO

M. Boltz

An overview of the different methodologies used in the psychological study of time. During laboratory sessions, students will explore some different temporal phenomena through the use of the empirical method and both the collection and analysis of statistical data. A half-credit course. *Prerequisite:* Psychology 200, and prior or concurrent enrollment in Psychology 220.

324 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. A half-credit course. *Prerequisite:* Psychology 200 and prior or concurrent enrollment in Psychology 224. *Not offered in 2005-2006.*

325 The Psychology of Close Relationships SO

B. Le

This course is designed as an in-depth examination of the field of close relationships. The major theories of close relationship will be emphasized, including examinations of evolutionary, attachment, interdependence, and cognitive approaches. In addition, research related to topics such as attraction, relationship development and maintenance, relationships and health, infidelity, violence in intimate relationships, and jealousy will be explored, with methodical concerns discussed within the context of each topic. *Prerequisite:* Psychology 106 or 107 or consent of the instructor.

328 Laboratory in the Psychology of Language SO

Staff

This laboratory correlate to Psychology 238 (Psychology of Language) will focus on those methods used to investigate language comprehension and production, and the influence of various psychosocial factors upon these behaviors. *Prerequisite:* Psychology 104 and 200, and either prior or concurrent enrollment in Psychology 238.

330 Laboratory in Neural and Behavioral Science: Behavioral Neuroscience NA

W. Sternberg

A half-semester lab course introducing neuroscience methodology focused primarily on behavioral, endocrinological, and pharmacological perspectives to understanding nervous system function. Both gross neuroanatomy and the microstructure of the nervous system will be covered. *Prerequisite:* Psychology 103 or Psychology 217 (preferred, but not required).

340 Human Neuropsychology SO

R. Compton

This seminar 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). Though the course will focus primarily on human clinical populations, contributions from studies of non-human animals and brain-imaging studies of neurologically intact humans will also be considered. *Not offered in 2005-2006.*

350 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. *Prerequisite:* Psychology 103 and 217. *Not offered in 2005-2006.*

351 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.

360 Laboratory in Cognitive Neuroscience NA

R. Compton

An examination of methodologies used to study the neural basis of higher mental functions. Students will utilize both cognitive and electrophysiological (EEG, ERP) recording methods, and will examine methodological issues in hemodynamic neuroimaging and the study of patient populations. A half-credit course. *Prerequisite:* Psych 103, 104, or 107; Psych 200; concurrent enrollment in Psych 260.

390a,b Senior Thesis SO

Staff

Open to senior psychology majors doing a one semester thesis in current semester.

391a,b Senior Research Tutorial in Cognition SO

M. Boltz

Open to senior psychology majors.

392a,b Senior Research Tutorial in Personality SO

D. Davis

Open to senior psychology majors. *Not offered in 2005-2006.*

393a,b Senior Research Tutorial in Social Psychology SO

B. Le

Open to senior psychology majors.

394a,b Senior Research Tutorial in Biological Psychology NA

W. Sternberg

Open to senior psychology majors; preference given to Neural and Behavioral Science concentrators.

395a,b Senior Research Tutorial in Emotion SO

R. Compton

Open to senior psychology majors.

460 Teaching Assistant SO

Staff

Leading discussion sections or helping with other course work in introductory psychology.

Open to selected majors.

480 Independent Study SO

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 also count toward the advanced course requirement 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 358 **Political Psychology of Group Identification**

Psychology 398 **Cognitive Issues in Personality and Social Psychology**

RELIGION

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

Associate Professor Anne M. McGuire

Associate Professor Tracey Hucks (on leave 2005-06)

Associate Professor Kenneth Koltun-Fromm

Associate Professor Naomi Koltun-Fromm, chair

Visiting Assistant Professor John Lardas

Visiting Assistant Professor Sarah Schwarz

Visiting Assistant Professor Barbara von Schlegel

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.

The major program must satisfy the following requirements:

a. Six courses within one of the department's three areas of concentration:

A. Religious 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.

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- 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 departmental 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

101b 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.

109a, b Introduction to Islam [A]

B. von Schlegell

An introduction to the religion of Islam. We will consider Islamic doctrines, practices, and religious institutions in a variety of geographic settings from the rise of Islam in the seventh century to the present. The Qur'an, the sayings of Muhammad, legal texts, and mystical works will be our foundation. We will also read from the scholarship on Islam. We will also look at Islam in the immediacy of the world today and, briefly, in the media. Among the topics we cover are the Qur'an as scripture and as liturgy, the Muhammadan idea of prophethood, and the spread of Islam.

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.

121a Varieties of Judaism in the Ancient World [A] HU

N. Koltun-Fromm or S. Schwarz

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 or S. Schwarz

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.

130a Material Religion in America [C] HU

K. Koltun-Fromm

An introduction to various forms of religious material practices in America. We will examine how persons and communities interact with material objects and media to explore and express religious identity. Topics may include religion and sports, dance and ritual, food and dress, and the visual arts.

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.

134a American Spiritualities [A, C] HU

J. Lardas

With the continuing development of American religious pluralism, the weakening of public faith, and the expansion of moral attitudes, "spirituality" has become quite common in descriptions of contemporary American culture. As a practice that cuts across racial, ethnic, class, and gender lines, how are we to understand this particular form of religiosity? The goals of this course encompass the study of different forms of spirituality in the United States past and present. The course will familiarize the student with mainstream as well as alternative spiritual practices, from Catholic Devotions and the Lakota Sundance to Pentecostal worship and the spontaneous bop prosody of Jack Kerouac.

INTERMEDIATE COURSES

201a Introduction to Buddhism [A] HU (Cross-listed as 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.

203b **The Hebrew Bible and Its Interpretations** [A, B] HU

N. Koltun-Fromm or S. Schwarz

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.)

206a **History and Literature of Early Christianity** [A, B] HU

A. McGuire or S. Schwarz

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 13 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.

219a **Women and Islam** [C] HU

B. von Schlegell

This course challenges us to question how Muslim women practice and interpret their reli-

gion. For the last half-century women who are born into Islam and those who convert to it have been engaged in a feminist struggle. We will start with a brief introduction to Islam. Then we will turn to gendered images in traditional Islam and how modern Muslim women relate to them in both traditional and untraditional ways. With that in mind, we will discuss readings by and about Muslim women in pre-modern times and into the present.

220b Islamic Mysticism [A, B] HU

B. von Schlegell

What is Sufism (Islamic Mysticism)? Based on classical readings by "orthodox" or "Five-Pillar" Sufi Muslims, we explore both the sober and the intoxicated styles of seeking God. The God-human relationship, the Qur'an, sacred biographies, society, dreams, miracles, and the cosmic significance of sex and death. The course includes studies of contemporary Sufi men and women throughout the world.

221b 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.

222b 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.

234a Religion in American History to 1865 [A, C] HU

J. Lardas

This course surveys American religious history until 1865. It will begin by looking at the interaction between European colonists and established Native American traditions. It will then trace the contours of this initial pluralism as the nation expanded from the 17th to the 19th century. On the one hand, this course will pay particular attention to certain forms of Protestant faith and experience in the pre-Civil War period and how they generated a set of social and cultural attitudes. On the other hand, it will chart the erosion of Protestantism's institutional authority as these attitudes were shaped by other traditions and larger patterns of American cultural development.

235b Religion in American History: 1865 to the Present [A, C] HU

J. Lardas

This course undertakes a cultural history of American religion from the end of the Civil War

to the present “war on terrorism.” In addition to looking at liturgical forms of religion and surveying various religious movements and groups during this time period, we will explore 1) how cultural forms serve as vehicles of religious meaning; 2) how religious values are expressed and/or criticized in everyday social life; and 3) the place of religion in the recent history of American modernity.

240b History and Principles of Quakerism [A,C] SO

(Cross-listed as 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.

255a Anthropology of Religion [C] SO (Cross-listed as Anthropology 255a)

For course description see Anthropology 255b.

256a Zen Thought, Zen Culture, Zen History [A] HU (Cross-listed as East Asian Studies 256a)

H. Glassman

For course description see East Asian Studies 256a.

277a Modern/Postmodern Christian Thought [C] HU (Cross-listed as 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, and 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 (Cross-listed as 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.

284a American Judaism [A] HU

K. Koltun-Fromm

An exploration of the cultural, social, and religious dynamics of American Judaism. The course will focus on the representation of Jewish identity in American culture, and examine issues of Jewish material, gender, and ritual practices in American history. We will study how Jews express identity through material objects, and how persons work with objects to produce religious meaning.

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.

299b Theoretical Perspectives in the Study of Religion [A, B, C] HU

J. Lardas

An introduction to the history of the study of "religion" in the modern West. Beginning with Kant's distinction between natural and revealed religion we will follow the curious and contested history of second-order reflection upon religion as it has been carried out in theological, philosophical, psychological, anthropological, and sociological spheres. Readings may include: Kant, Schleiermacher, Hegel, Marx, Nietzsche, Freud, Tylor, Durkheim, Weber, James, Otto, Benjamin, Eliade, Geertz, Foucault, Douglas, Smith, Haraway, Derrida, and Asad.

SEMINARS AND INDEPENDENT STUDY

All religion department seminars may be repeated for credit with change of content.

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. Topics include 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.

311a Seminar in Islam: Muhammad [A, B] HU*B. von Schlegell*

For Muslims, the Prophet Muhammad is the genealogical and spiritual heir of the biblical Abraham. They believe he was chosen to bring a final revelation, the Qur'an, to the world and as such he inspires their devotion. For scholars the Qur'an and the teachings of Muhammad were part of a unique configuration of political and military successes by the Arabs who worked with or out of a new religion to produce an Islamic world empire. The people of that empire, many hold, made Muhammad's story a myth. In modern times Muhammad has been fashioned as a revolutionary, an advocate of democracy, a Marxist, a rationalist, and even the first Muslim feminist. We examine sources and biographies from Muslim and non-Muslim authors. We also read critical studies of "the historical Muhammad."

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***338b Seminar in American Religion [A, C] HU***J. Lardas***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.

360a,b Seminar in Modern Religious Thought [B, C] HU

(Cross-listed as Comparative Literature 360a,b)

D. Dawson or K. Koltun-Fromm

Advanced study of a specific topic in the field. *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:* Religion 301, 303, or 305 and the approval of the Department of Religion.

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.

Coordinators:

Grace M. Armstrong, E.M. Schenck 1907 Professor of French at Bryn Mawr

Nicholas Patruno, Professor of Italian at Bryn Mawr

María Cristina Quintero, Professor of Spanish at Bryn Mawr

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 advisors 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).

COURSES

FIRST LANGUAGE AND LITERATURE

FRENCH

French 101-102 or 101-105; 103-105 or 103-102

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 206.

Four courses at the 200 level.

Two courses at the 300 level.

SECOND LANGUAGE AND LITERATURE

FRENCH

101-102 or 101-105; 103-105 or 103-102

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 Seminar). 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

Professor Elizabeth C. Allen, chair

Assistant Professor Timothy C. Harte

Lecturer Sharon Bain

At Haverford College:

Professor of History Linda G. Gerstein

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 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

S. Bain, 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

S. Bain, Staff

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.

221 **The Serious Play of Pushkin and Gogol** HU

E. Allen

This course explores major contributions to the modern Russian literary tradition by its two founding fathers, Aleksander Pushkin and Nikolai Gogol. Comparing short stories, plays, novels, and letters written by these pioneering artists, the course addresses Pushkin's and Gogol's shared concerns about human freedom, individual will, social injustice, and artistic autonomy, which each author expressed through his own distinctive filter of humor and playfulness. *Not offered in 2005-06.*

223 **Introduction to Russian Folklore**

S. Bain

This interdisciplinary course introduces students to major issues in Russian and Eastern European folklore including epic tales, fairy tales, calendar and life-cycle rituals, and folk beliefs. The course also presents different theoretical approaches to the interpretation of folk texts as well as emphasizes the influence on folklore on literature, music, and art. No knowledge of Russian is required.

225 **Dostoevsky: Daydreams and Nightmares**

E. Allen

A survey of novels, novellas, and short stories highlighting Dostoevsky's conception of human creativity and imagination. Texts prominently portraying dreams, fantasies, delusions, and visual and aural hallucinations, as well as artists and artistic creations, permit exploration of Dostoevsky's fundamental aesthetic, psychological, and moral beliefs. Readings include *The Double*, *White Nights*, *Notes from the Underground*, *The Idiot*, *The Brothers Karamazov*, "The Gentle Creature," and "The Dream of a Ridiculous Man."

235 **The Social Dynamics of Russian**

S. Bain

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. *Prerequisite:* Russian 201-202 or taken concurrently. *Not offered in 2005-06.*

252 **Russian and Soviet Cinema: Revolution, Repression, and the Sublime**

T. Harte

This course explores the major trends and most significant works of Russian and Soviet cinema. Emphasis placed on the wildly disparate phases of Soviet and Russian cinema: Russia's early silent films; the innovations of the 1920s; Stalinist cinema; "thaw" films; and post-Soviet experimentation. All films shown with subtitles; no knowledge of Russian required. *Not offered in 2005-06.*

RUSSIAN AT BRYN MAWR COLLEGE

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 2005-06.*

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 2005-06.*

277 Nabokov in Translation HU

T. Harte

A study of Vladimir Nabokov's writings in various genres, focusing on his fiction and autobiographical works. The continuity between Nabokov's Russian and English works is considered in the context of the Russian and Western literary traditions. All readings and lectures in English. *Not offered in 2005-06.*

305, 306 Advanced Russian: Syntax, Stylistics, and Expression HU

G. Pahomov

This course 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.

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 2003-04: the Russian short story. *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

Staff

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.

331/531 The Structure of Modern Russian II: Pragmatics

Staff

This seminar introduces advanced undergraduate and graduate students to the study of pragmatic norms in contemporary spoken and written Russian. Based on the understanding of language as a series of actions or communicative functions, the course will explore topics in speech act theory, politeness theory, and relevance theory. Discussions will also address practical issues for the acquisition of Russian, such as cross-cultural pragmatics, interlanguage pragmatics, and the teaching of foreign languages. *Not offered in 2005-06.*

343/543 Russian Avant-Garde Culture

T. Harte

This seminar focuses on the radical, "avant-garde" transformations that occurred in Russian culture at the beginning of the 20th century. Particular emphasis will be placed on how the interaction of artists in a variety of artistic media resulted in one of Russian culture's most innovative periods. Seminar discussion will cover the painting, poetry, prose, music, ballet, and film produced in Russia between 1890 and 1932. Topics include Russia's reevaluation of its cultural heritage through neo-primitive art, the Russian avant-garde's mystical, Eastern underpinnings, the primacy of music for avant-garde artists, and the emergence of abstract, dynamic art. *Not offered in 2005-06.*

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.

RUSSIAN AT BRYN MAWR COLLEGE

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

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

Associate Professor William F. Hohenstein, chairperson

Assistant Professor Suava Zbierski-Salameh

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

101 **Sociology and Philosophy** SO

M. Gould

An examination of the relationships between normative and empirical theory, focusing on the contribution of empirical theory to the resolution of normative questions.

110 **Sociology and Philosophy** SO

M. Gould

An examination of the relationships between normative and empirical theory, focusing on the contribution of empirical theory to the resolution of normative questions.

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.

207 **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

An introduction to the use of statistics in sociological research. Students are required to write a research proposal. This semester the subject will be capital punishment.

225 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,b Topics in Sociology SO

Staff

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

245 East European Societies and Policies: 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 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,b 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*. (Satisfies the social justice requirement.)

252a 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 responsibility for organizing the course. (Satisfies the social justice requirement.)

Prerequisite: Sociology 155a or b, or consent of instructor.

255 Global Capitalism at the End of the 20th Century: Capitalism with Capitalists SO

S. Zbierski-Salameh

The course will examine the emergence of new forms of capitalism in the late 20th and early 21st centuries. It will explore how societies building capitalism in the contemporary period differ from the originators of capitalist development and how this late development affects the integration of the new capitalist economies into the global economy. The course will have a dialogue format; it will include a series of on-campus discussions with intellectuals and activists from both the United States and Eastern Europe. These colloquies will include theo-

retical analyses of the new forms of capitalism and an examination of how the global economy impinges on people as capitalism emerges. (Satisfies the social justice requirement.)

265b Peasants and Agrarian Transformations: Rural Backgrounds 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 and tradition.

275a,b 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. *Prerequisite:* Soc 155a or b or consent of the instructor.

277a Political Sociology SO

S. Zbierski-Salameh, 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.

297a Economic Sociology SO

M. Gould

The sociological analysis of economic systems and the sociological reconstruction of micro-economic theory. *Prerequisite:* Soc 155a or b, Econ 101, or consent of the instructor.

298b Law and Sociology: Islamic Constitutionalism SO

M. Gould

An examination of the jurisprudential consequences derived from the sociological reconstruction of microeconomic and philosophical theories.

315b Quantitative Methods SO

W. Hohenstein

An introduction to the use of statistics in sociological research.

354a Sociology of Knowledge SO

W. Hohenstein

European and American theories of the social factors influencing the development of knowledge. The role of the intellectual in contemporary America, and the epistemological assumptions behind procedural rules in the social sciences. Theoretically, the course focuses on the concepts of space and time. Empirically, the focus of this semester will be monasteries and prisons.

356a,b Seminar in Social Theory SO

W. Hohenstein

Topic: 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 SO

Staff

Thesis work, two semesters required of majors in their senior year.

460b **Teaching Assistance** SO

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,f,h,i **Independent Study** SO

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 student's advisor, the course 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

Associate Professor Ramón García-Castro, chair

Assistant Professor Graciela Michelotti

Visiting Assistant Professor Asima Saad Maura

Visiting Instructor Ayde 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 300-level courses 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.

001a **Elementary Spanish** HU

A. Perez, A. Saad-Maura

Development of basic phonetic and structural skills. Greatest emphasis is placed on spoken Spanish, with grammar and written exercises, to develop oral proficiency. Compulsory attendance to two one-hour tutorial sessions. This is a two-semester course. You need both semesters to receive credit. Students must register in the same section in the spring semester even if the instructor changes. Students who have had no Spanish must register in section 01.

Enrollment limited to 18 students.

002b **Elementary Spanish** HU

A. Saad-Maura, R. García-Castro, R. Castillo-Sandoval

Development of basic phonetic and structural skills. Greatest emphasis is placed on spoken Spanish, with grammar and written exercises, to develop oral proficiency. Includes compulsory attendance to two weekly tutorial sessions. This is a two-semester course. You need both semesters to receive credit. *Prerequisite:* Spanish 001. *Enrollment limited to 18 students.*

101a **Intermediate Spanish** HU

R. García-Castro, G. Michelotti, A. Saad-Maura

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:* Span 001, placement, or consent of the instructor. *Enrollment limited to 18 students.*

102a,b **Advanced Intermediate Spanish** HU

R. Castillo-Sandoval, R. García-Castro, G. Michelotti

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:* Span 101, or consent of the instructor. *Enrollment limited to 18 students.*

203b **Writing the Jewish Trajectories in Latin America** HU

(Cross listed in Comparative Literature)

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,b **Studies in the Spanish American Novel** HU (Cross-listed in Comparative Literature)
R. García-Castro

Introduction to selected short 20th-century Spanish American novels or stories by García Márquez, Bombal, Cortázar, García Ramis, Puig, Senel Paz, etc. *Prerequisite:* Spanish 102 or consent of the instructor. *Enrollment limited to 25 students.*

207 **Fictions of Spanish American History** HU (Cross-listed in Comparative Literature)
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
(Cross-listed in Comparative Literature)

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
(Cross-listed in Comparative Literature)

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, placement, or consent of instructor. *Enrollment limited to 25 students.*

220 **Spanish-American Contemporary Literature** HU
(Cross-listed in General Programs and Comparative Literature)

R. García-Castro

Study of 20th-century Spanish American writers in translation, including García Márquez, Parra, Puig, Cardenal, and Borges. Course taught in English.

225 **Evita & Her Sisters** HU

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 spheres are constantly being reshaped to conform with the cultural demands of each particular cultural 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 Juan 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:* Spanish 102 or consent of the instructor. *Enrollment limited to 25 students.*

230a Medieval and Golden Age Spain: Literature, Culture, and Society HU

I. Burshatin, A. Saad-Maura

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, placement, or consent of the instructor. *Enrollment limited to 25 students.*

235a Spanish American Theater HU (Cross listed in Comparative Literature)

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

(Cross-listed in General Programs)

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.

248a 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,b **Quixotic Narratives** HU (Cross-listed in Comparative Literature)

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' 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.*

273 **The Invention of Pablo Neruda: Poetics and Politics** HU

R. Castillo-Sandoval

This course deals with the principle works of Pablo Neruda's long career as a poet. Close readings of his major poems will be accompanied by an examination of the criticism and reception of Neruda's poetry at different stages of his trajectory. Special attention will be paid to the creation and elaboration of Neruda's image as a poet, cultural icon, and political figure in Chile and in the Spanish-speaking world. *Prerequisite:* Spanish 102 or placement at 200 or 300 level. *Enrollment limited to 25 students.*

280b **Inter-American Dialogue: Cuba on my Mind** HU

I. Burshatin, R. Castillo-Sandoval

The goal of this course is to foster dialogue and understanding between Americans and Cubans by familiarizing students with the writing, thought, and other cultural expressions of contemporary Cuba. Students write several short papers during the semester (including a travel journal of their trip to Cuba) and submit a final research paper based, in part, on their experiences on the island (the one-week trip to Cuba during spring break is required). Course taught in English. *Prerequisite:* Application which demonstrates student interest in participating in activities that will facilitate personal one-on-one contacts in Cuba.

298 **Latin America and the American Empire** HU (Cross-listed in History)

R. Castillo-Sandoval, J. Krippner-Martinez

An interdisciplinary exploration of the relations between Latin America and the United States, with focus in the genesis and development of patterns of cultural contact, political conflict, and responses to economic and political domination and invention. The Spanish colonial legacy will be used as a backdrop for comparison and contrast with the rise of U.S. hegemony in the hemisphere after 1898. Latin America traditional elite notions of cultural nationalism, pro-anti-Americanism, historical destiny, nation-building, etc. will be examined along with the discourse of historical and cultural identity articulated more recently by non-elite groups at national and continental level. U.S. presence in particular cases (Cuba and Puerto Rico, Mexico, Chile, Nicaragua, El Salvador, Guatemala, Colombia) will be documented through essays, fiction, film, and other forms of popular culture, and analyzed with the aid of scholarship produced by U.S. and Latin American authors. Course will be taught in English. (Satisfies the social justice requirement.)

307b **Taller Literario: Writing Short Fiction in Spanish** HU

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 12 students.*

310b **The Family in the Novels of the Past 40 Years of Spanish America** HU

(Cross-listed in Comparative Literature)

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; *Elogio de la madrastra*, by Mario Vargas Llosa; 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.

313 **Literature of the Caribbean** HU

R. García-Castro, A. Saad-Maura

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.

315a **Novísima literatura hispanoamericana** HU (Cross-listed in Comparative Literature)

R. García-Castro

Intended to show the latest developments in Spanish American prose as seen in recent works by Gabriel García Márquez, Isabel Allende, Guillermo Cabrera Infante, Pedro Lemebel, Roberto Castillo-Sandoval, and others. *Prerequisite:* A 200-level course or consent of instructor.

317a **Novels of the Spanish American “Boom”** HU (Cross-listed in Comparative Literature)

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, *Cantar de ciegos*; Carpentier, *El arpa y la sombra*; and others.

Prerequisite: A 200-level course or consent of instructor.

320a **Spanish American Colonial Writings** HU (Cross-listed in Comparative Literature)

A. Saad-Maura

Representative writings from the textual legacy left by Spanish discovery, conquest, and colonization of the New World. Emphasis will be placed on the transfiguration 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.

324 **Sexual Minorities in the Spanish-Speaking World** HU

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. (Satisfies the social justice requirement.) *Prerequisite:* A 200-level course or consent of the instructor.

325 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 Chungara, 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 (Cross-listed in Comparative Literature)

I. Burshatin

Study of the dissenting voices of gender and sexuality in Spain and Spanish America and U.S. 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, Don Gil de las calzas verdes, Teresa de Avila, Gloria Anzaldúa, and Reinaldo Arenas. (Satisfies the social justice requirement.) *Prerequisite:* A 200-level course or consent of the instructor.

340b 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*. (Satisfies the social justice requirement.) *Prerequisite:* A 200-level course or consent of the instructor.

352a Evita and Her Sisters HU (Cross-listed in Comparative Literature)

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.

380 Just Wars and Utopias: The Indians, National Identity, and Ideology in Spanish America HU (Cross-listed in Comparative Literature)

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. (Satisfies the social justice requirement.) *Prerequisite:* A 200-level course in Spanish or consent of the instructor.

385b Popular Culture, Cultural Identity and the Arts in Latin America HU
(Cross-listed in Comparative Literature)

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,f,i Independent Study HU

Staff

Prerequisite: Consent of the instructor.

490a,b Senior Departmental Studies HU

G. Michelotti

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 IN 2004-2005:

206 *Composición avanzada*

211 *Borges y sus lectores*

215 *"Memoria negra": la literatura afro-hispánica en Africa y las Américas*

231 *El cuento y la novela corta*

265 *Escritoras españolas*

308 *Teatro del siglo de oro*

309 *La representación de la mujer*

318 *Adaptaciones literarias en el cine español*

329 *Brown Affect: Narrating Latina/o Lives*

398 *Senior Seminar*

WRITING PROGRAM

As a vital part of academic study, personal expression, and civic life, writing merits concerted attention in a liberal education. The Writing Program encourages students to become rigorous thinkers and versatile writers who can communicate with a range of audiences, construct cogent arguments, and craft effective prose. We offer courses in writing and rhetoric, administer a Writing Center, and work with faculty from all disciplines to improve the teaching of writing.

All first-year students take a writing seminar. Taught by faculty from across the College, the seminars explore a particular theme or field of study while emphasizing writing as a means of inquiry, analysis, and persuasion. The courses come in three varieties: WS-D sections adopt the perspective of a particular academic discipline; WS-T sections focus on a given topic; and WS-I sections support individualized study. To help students negotiate the demands of academic writing, courses include practice in critical reading, argumentation, style, and editing.

The Writing Program also offers a limited number of advanced courses in writing, rhetoric, and cultural studies. Students interested in creative writing can find those courses listed under the English department.

*Assistant Professor Faye S. Halpern, Acting Director of College Writing
and Director of the Writing Center*

William R. Kenan Jr. Professor of English Kimberly Benston

Professor C. Stephen Finley

Professor Emma Jones Lapsansky

Professor Robert A. Mortimer

Associate Professor Naomi Koltun-Fromm

Associate Professor Steven Lindell

Associate Professor Danielle Macbeth

Associate Professor Jennifer Punt

Assistant Professor Hank Glassman

Assistant Professor Duane W. Kight

Assistant Professor Debora Sherman

Associate Dean of the College and Director of Athletics Gregory Kannerstein

Senior Lecturer in Education Alice Lesnick

Visiting Associate Professor William di Canzio

Visiting Assistant Professor Stephen Hock

Visiting Assistant Professor Dorian Stuber

Visiting Instructor Kristin Lindgren

WRITING SEMINARS

104a Family Matters HU

F. Halpern

A first-semester course with individual tutorials that prepares students for a second-semester topical or discipline-based writing seminar by thinking about that taken-for-granted but extremely complicated issue of family. First, we will analyze short stories that feature characters wondering about their obligations to their families. Then we will argue, along with some philosophers, the question of "What do parents owe their children?" Finally, we will travel to Samoa to examine Margaret Mead's "objective" claims about how best to raise children. (Satisfies the social justice requirement. Does not satisfy the writing requirement.) Open only to first-year students as assigned by the Director of College Writing. *Enrollment limited to 10 students.*

106b **Children of the Night and Their Music** HU

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). Open only to first-year students as assigned by the Director of College Writing.

109b **Philosophy and the Good Life** HU

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*. May not be taken for credit if you've taken any other odd numbered 100-level philosophy course.

110b **The Folktale** HU

J. Russo

Readings from a variety of folktale traditions, including the collections of the Grimm brothers and Calvino. We will consider folktales as entertainment and as symbolic representations of the world, the role of the magical and fantastic, the distinction between folktales and fairytales, and the relations of folktales to other orally performed narratives. We will consider folktale not only as text but as performance. Open only to first-year students as assigned by the Director of College Writing. *Not offered in 2005-06.*

111 **Conspiracy Theories and the Challenge of Belief** HU

J. Fantl

An examination of the difficulties involved in separating fact from fiction in the world around us. Focusing primarily on conspiracies, we will look at works by philosophers, historians, sociologists, and psychologists, and examine both intellectual and practical aspects of this issue. Open only to first-year students as assigned by the Director of College Writing. *Not offered in 2005-06.*

112b **Metamorphosis and Metaphor** HU (Cross-listed in General Programs)

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. Open only to first-year students as assigned by the Director of College Writing. *Not offered in 2005-06.*

115a My Blog, Myself SO

D. Davis

A review of self-expression on the Internet, with special attention to weblogs produced in adolescence and adulthood and the psychology of such biographical discourse. Discussions will focus on existing biographical materials available on the Net, on discussions of these by psychologists, and on our own experience of reflecting on each other's writing. Open only to first-year students as assigned by the Director of College Writing. *Not offered in 2005-06.*

116a Illness, Medicine, and Storytelling HU

K. Lindgren

An exploration of the narrative dimension of disease. We will examine the forms that stories of illness take and the purposes they serve, and also how doctors such as Freud and Oliver Sacks have shaped the genre of the case history. Open only to first-year students as assigned by the Director of College Writing. *Not offered in 2005-06.*

117a,b Disability and Difference HU

K. Lindgren

An exploration of disability in a variety of genres and contexts. The texts for the course include memoirs that chronicle the experience of living with disability or parenting a disabled child; essays that examine contested definitions of impairment, disability, and normalcy; and representations of disability in case histories, works of fiction, and film. We will ask: How is the "normal" body constituted by discourses of disability and difference? What is the relationship between the disabled body and the rhetorics of medicine, democracy, gender, race, class, and social justice? (Satisfies the social justice requirement.) Open only to first-year students as assigned by the Director of College Writing.

118a,b Satire and Irony HU

F. Halpern

An investigation into this most provocative of literary modes through close reading of both theorists and practitioners of it – from Jonathan Swift to Mark Twain to Dave Eggers. We will consider the powers and pitfalls of irony and satire. Open only to first-year students as assigned by the Director of College Writing.

121a,b The Marginal and Mainstream in Theater HU

W. diCanzio

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. (Satisfies the social justice requirement.) Open only to first-year students as assigned by the Director of College Writing.

123a,b Community, Race, and Xenophobia in Film HU

W. diCanzio

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? (Satisfies the social justice requirement.) Open only to first-year students as assigned by the Director of College Writing. *Not offered in 2005-06.*

WRITING PROGRAM

125b College Sports World HU

G. Kannerstein

Analyzes the role of sport as a social institution in American culture and, more specifically, investigates the past, present, and future of intercollegiate athletics in the U.S. Early college sports (1860-1920) will be examined through the eyes of several novelists. The role of the Ivy League and the media in "inventing football," thus shaping the entire college sports scene, will likewise be a topic for analysis. The course will also study the history of Haverford College athletics, which represent both a mainstream and alternative path in the development of intercollegiate sports. Open only to first-year students as assigned by the Director of College Writing.

126a,b Passion, Proof, and Persuasion: The Nature of Scientific Inquiry NA (Cross-listed in Biology)

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. Open only to first-year students as assigned by the Director of College Writing.

127b Two Pathologies: Infections and Inequalities HU

R. Guyer

An exploration of clinical and social issues associated with infectious diseases and epidemics. Among the topics considered are responses to the ill, the effect of language on perceptions of illness, and contemporary dilemmas regarding prevention measures, therapies, and quarantine.

128a,b Reading Sacred Texts (Cross-listed in Religion)

N. Koltun-Fronm

An introduction to reading sacred texts in an academic setting. In this course we will apply a variety of methodological approaches – literary, historical, sociological, anthropological, or philosophical – to the reading of religious texts, documents, and materials. Open only to first-year students as assigned by the Director of College Writing.

129 The Lotus Sutra: Text, Image, and Practice HU (Cross-listed in East Asian Studies and Religion)

H. Glassman

An exploration of the *Lotus Sutra*, arguably the most important text in the history of East Asian Buddhism. We will examine its narrative and doctrinal dimensions, study artistic representations of its stories, and explore the practice and cult of the text. Open only to first-year students as assigned by the Director of College Writing.

132b Writing About Beethoven HU (Cross-listed in Music)

R. Freedman

An exploration of Beethoven's life and works, considered in the context of changing aesthetic and cultural values of the last two centuries. Students will listen to Beethoven's music, study some of his letters and conversation books, and read some of the many responses his art has engendered. In their written responses to all of this material, students will think about

Beethoven's music and artistic personality as well as about the ideas and assumptions that have guided the critical reception of art and life. They will learn to cultivate their skills as readers and listeners while improving their craft as writers. Open only to first-year students as assigned by the Director of College Writing. *Not offered in 2005-06.*

133 The American West in Fact and Fiction

E. Lapsansky

An examination of the imagery of the American West. Using visual and verbal images, this course explores such diverse aspects of the West as cowboys, cartography, water rights, race and social class, technology, religion, prostitution, and landscape painting. Open only to first-year students as assigned by the Director of College Writing.

136a Self-Understanding and Self-Deception HU

A. Kosman

What are the ways in which we come to understand ourselves, and how do we manage sometimes to deceive ourselves? In this course we read works from several genres, including literature, psychology, and philosophy that concern the nature of our self-understanding. The course will concentrate on critical reading of these texts, developing thoughtful modes of class conversation that further such readings, and developing skills of critical writing in relation to them. Open only to first-year students as assigned by the Director of College Writing. *Not offered in 2005-06.*

138 Critical Issues in Education: Politics and Practices SO (Cross-listed in Education)

A. Lesnick

An examination of major issues concerning educational reform through readings, discussions, writing, and 3-4 visits to a school context. Among the issues to be explored are the complexity of U.S. education; the meaning of childhood, culture, freedom, and difference; and the possibilities for educational reinvention and empowerment. Open only to first-year students as assigned by the Director of College Writing.

145b Light and the Colors of Life NA (Cross-listed in Chemistry)

Staff

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 ground scale. We will also examine the chemistry of pigments used in art and medicine. This writing intensive seminar will feature class discussions of the tutorials and regular small group tutorials on writing. Open only to first-year students as assigned by the Director of College Writing. *Not offered in 2005-06.*

147 The History of Mechanical Thought NA (Cross-listed in Computer Science)

S. Lindell

An exploration of the history of computer and information systems, from early number systems to binary logic, and from the abacus to the modern computer. We will also explore what makes a machine automatic, or a general purpose calculating machine. Open only to first-year students as assigned by the Director of College Writing.

150a,b Introduction to Literary Analysis HU (Cross-listed in English)

K. Benston, S. Finley, S. Hock, D. Sherman, D. Stuber

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,"

WRITING PROGRAM

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. Open only to first-year students as assigned by the Director of College Writing.

244b **Prose Style** HU (Cross-listed in General Programs)

F. Halpern

A consideration of style in historical context and contemporary practice, paired with opportunities for students to perform various writing styles. Starting with how style has been framed in rhetorical theory, we will develop a vocabulary for discussing style, analyze a range of prose and literature, and experiment with rendering different styles in our own writing. Moreover, we will examine the style/content dichotomy, the relation of style to ideology, the concept of voice in writing, and the myriad ways we define (and practice) eloquence.

Prerequisite: First-year writing seminar. *Not offered in 2005-06.*

255b **Rhetoric of Slavery, Visions, and Revisions** HU

(Cross-listed in Africana Studies and General Programs)

F. Halpern

An examination of the different ways writers have represented “the peculiar institution” in the 19th century and today. We will look at these slave narratives and novels not as documents to be evaluated according to their historical accuracy but as persuasive texts. How did different authors represent the crime of slavery? What has changed over time and what do those changes reveal about our contemporary understandings of race in America? The course will culminate in the case of Nat Turner, whose confession was recorded at the time, rewritten over a century later by the novelist William Styron, and recently made the focus of a controversial documentary. (Satisfies the social justice requirement.) *Prerequisite:* First-year writing seminar.

460i **Teaching Assistant** HU

F. Halpern

480b,i **Independent Study** HU

F. Halpern

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)

STUDENT SERVICES AND ACTIVITIES

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RESIDENCE HALLS

Haverford College is a residential institution. With 99 percent of our students living on campus, Haverford's residence halls offer a community where students can fully participate in the college experience. 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 housing where there are full kitchens. Residents in these areas 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 their 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) Students who observe the laws of Kashruth, may sign an agreement that they may not eat food prepared in the dining center because they are 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 their option during room draw 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 that the dining center cannot guarantee that vegan items are always 100 percent pure. The kitchen prepares food for hundreds of persons at every meal, 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.

HEALTH PROGRAM

The Haverford College Health Services 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, a massage therapist, and a substance abuse educator.

Clinic hours: Monday through Wednesday 8:00 a.m. to 7:00 p.m., Thursday 8:00 a.m. to 9:00 p.m., and Friday 8:00 a.m. to 5:00 p.m. during the academic year. 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 practitioners, massage therapist, regis-

tered dietitian, 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's insurance plan with BCS Insurance Company (for a full list of MultiPlan participants, visit <http://www.multiplan.com>, and for any questions regarding benefits, contact Administrative Concepts at 888-293-9229 or aci@msn.com); 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. Health forms may be printed out from the Haverford College Health Services Web page, <http://www.haverford.edu/health-services/welcome.html>. 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, educational, 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;

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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; 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 office 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. Conducted in January, these events are located in Boston, Chicago, New York, Philadelphia, San Francisco, and Washington, D.C.; additionally, the consortium sponsors the Coast-to-Coast Virtual Fair and "First Look," a resume referral program.

In the spring, not-for-profit/public service career fairs are held in New York, Boston, and on campus for Philadelphia-area organizations. These 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 fairs by alumni of the sponsoring institutions.

Weekly workshops address topics such as career research, job search strategies, summer jobs and internships, resume writing and interview skills. Mock interviews are not only performed by staff, but also by employers and alumni in our formal Mock Interview Day program.

The Office co-sponsors a Graduate and Professional School Admissions Fair and Panel. Throughout the year, seminars, receptions, 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 breaks observing a field and/or executing short-term projects on site in our Extern Program.

Newsletters and targeted messages, carrying news items, job and internship listings, and a schedule of career development events on both campuses, are e-mailed to students regularly. Seniors also receive a newsletter 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. Visit our Web page at: <http://www.haverford.edu/cdo>.

WRITING CENTER

The Haverford College Writing Center, now re-located into the Strawbridge Room in Magill Library, lower-level, is staffed by specially trained student writing advisors and directed by a member of the Writing Program faculty. Make an appointment online or drop in on Sunday from 2-11 PM or Monday through Thursday 8-11 PM. The Center provides helpful handouts as well as concrete advice about your writing no matter what stage of the process you're in, from brainstorming a thesis to working on organization to undangling your participles. Come in with writing assignments from all disciplines or even an application essay. For more information or to make an appointment via our on-line scheduler, see our Web site: <http://www.haverford.edu/writingprogram/writingcenter/>.

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

The Office of Multicultural Affairs provides primary support and assistance 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, students and administrators to recruit and retain students and faculty of color; develops varied programs and learning opportunities designed to increase the community's understanding of and sensitivity to issues related to multiculturalism, toward the goal of creating a diverse socio-cultural campus wide community.

Programs include bringing speakers and artists to campus, organizing trips to cultural events off campus, workshops, seminars, and work projects and internships that engage students in the cultural communities with which they are familiar and those which are new to them. Learning opportunities might involve dialogue sessions, non-academic discussion groups, film, working with social justice/human rights organizations, and visiting culturally specific communities.

The OMA facilitates large or small group conversations between people with differing perspectives and serves as a resource to the community in efforts to resolve social conflicts, especially those which have racial or cultural overtones. International student affairs are administered by the Office of Multicultural Affairs, as is the Mellon Mays Undergraduate Fellowship Program.

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

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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 curriculum 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, 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 *The 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

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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 inter-collegiate competition. All students have access to all athletic facilities as described on page 16.

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 Sexual and Gender Alliance (SAGA) 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.

ADMISSION

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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 strongly recommended 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 \$60, drawn to the order of Haverford College. This application fee is not refundable.

First year applicants must take the College Board SAT-I (all three tests, including Writing) or the ACT and two SAT-II subject tests before the deadline for the decision plan chosen. Results of tests taken in the spring of 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 and three SAT II subject tests (including Writing); 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 315).

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 \$31,466 for the 2005-06 academic year. The residence fee is \$9,840 for the academic year. There is also a Students' Association fee of \$294 per year. These fees—tuition, residence and Students' Association (but excluding the College's optional accident and health insurance plan, for which see page 312)—total \$41,600 for the year. There is also a \$20 fee for each semester Chemistry laboratory course.

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.

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. Students who finish the seven-semester program without completing all degree requirements will be required to enroll for a final semester at full tuition if the number of credits needed is more than one. In the event that these students enter their eighth semester at Haverford needing a single credit or less for degree completion as certified by the dean and registrar of the College, the tuition charge will be at the Special Student rate of \$4,050.

A ninth-semester student is charged at the Special Student rate of \$4,050 per credit.

A student carrying only Non-Collegiate Supervised Academic Work, referred to as "off-campus credits" or "OC credits," is charged at the Special Student rate of \$4,050 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 \$500 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 \$170 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 Key Education Resources and Citibank. 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 2005-06, no refunds will be made after November 11, 2005 and March 31, 2006. For purposes of these calculations, each week ends on a Friday and excludes fall and spring break weeks.

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 312.

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 to 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, all electronic versions of our admission application, and on the Financial Aid section of the College's Web site. All students applying for admission to Haverford and interested in College financial aid

must read this information 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 all available on the Financial Aid section of the College's website.

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 1998 (Class of 2002)

Size at entrance	322
Graduated 3 years later	1
Graduated 4 years later	275
Graduated 5 years later	13
Graduated 6 years later	2
Total graduated	274, 91.0%

SCHOLARSHIP FUNDS,
FELLOWSHIPS, AND PRIZES

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Haverford Graduates*339

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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 are 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.

The African American Scholarship provides assistance to students whose background and character shows them to have a high level of commitment to building successful multicultural communities.

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.

The Botstiber Scholars Fund is awarded to a student with demonstrated financial need who is a talented person of good moral character and who wishes to improve his/her education and knowledge in the fields of science, technology and/or commerce.

The Richard J. Botti Scholarship Fund, established in 2003, gives preference to students with financial need who exhibit some or all of the following traits: entrepreneurship, leadership, a commitment to community service, and are well-rounded both academically and socially.

The Norman and Mildred Bramall Scholarship Fund, established in 1991 by a bequest from Norman Bramall, forty-year tennis coach at the College, is awarded to a student with demonstrated financial need.

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.

The LGB Educational Scholarship Fund, established in 2005 by the Brodsky Foundation, assists students with demonstrated financial need, with preference given to students in their third or fourth year who are enrolled in the Education Program and have indicated a desire to pursue a career in teaching after graduating Haverford.

The Caribbean Student Scholarship Fund, provides assistance to Haverford students with demonstrated financial need, with preference given to international students from Caribbean nations outside the United States who come to Haverford and possess high academic aptitude, personality and character.

Stephen G. Cary '37 Memorial Scholarship Fund, established in 2004 to honor the lifetime contributions and continuing inspiration to Haverford College and its students of Stephen G. Cary. It is designed to provide fiscal assistance to Haverford students who have a demonstrated financial need, with preference towards those who possess an exemplary academic record, a strong character, and are members of the Society of Friends.

SCHOLARSHIP FUNDS, FELLOWSHIPS, AND PRIZES

William Henry Chamberlin Scholarship Fund, established in 1969 by a bequest from William H. Chamberlin '17.

Agnes Fang Chih Chen Fund, established by her brother, Francis J. Chen '40, in her fond memory, in support of the BiCo East Asian Studies Program.

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.

The Class of 1912 Scholarship provides assistance to students whose background and character shows them to have a high level of commitment to building successful multicultural communities.

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.

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.

The Class of 1949 Memorial Scholarship is awarded at the end of sophomore year for academic excellence and participation in extracurricular activities and community service. This fund supports students whose background and character shows them to have a high level of commitment to building successful multicultural communities.

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 1954 Scholarship Fund, established by the Class of 1954 at its 50th Reunion. Preference is given to those students with academic promise who have a true financial hardship.

Class of 1955 Scholarship Fund, established in 1980 by the Class of 1955 at its 25th reunion in honor of Archibald MacIntosh.

Class of 1963 Scholarship Fund, established by members of the Class in 2003 on the occasion of their 40th reunion, will provide financial aid for students who reflect the Class' passions for integrity, volunteerism and public service.

Class of 1970 Scholarship Fund, established by the class in 1971 on the occasion of its 10th reunion.

Class of 1971 Scholarship Fund, established in 2003 by Martin A. Kamarck '71, provides financial aid to students who exemplify the qualities of the members of the Class of 1971.

Class of 1973 Scholarship Fund, established in 1998 by the Class of 1973 at its 25th reunion.

Class of 1978 Scholarship Fund, established in 2003 by the members of the Class of 1978 on the occasion of their 25th reunion. This scholarship will assist a student with demonstrated financial need, who possesses high academic promise, a passionate and determined spirit and a personal commitment to service.

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.

The 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 with demonstrated financial need who have completed at least one year of college. Preference is given to those student having traits of potential leadership. In addition to the scholarship recipients, nine students with demonstrated financial need are selected from the sophomore, junior and senior classes in recognition of outstanding leadership on campus.

Daniel E. Davis, Jr. Memorial Scholarship established to provide 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.

Dwrling Family Scholarship Fund, established to provide aid to a student with financial need. Preference is given to a student from a public school in a state underrepresented at Haverford.

The Walter R. Faries Scholarship Fund, established in 2004, provides assistance to students who possess leadership qualities rather than scholastic ability alone.

SCHOLARSHIP FUNDS, FELLOWSHIPS, AND PRIZES

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.

Faculty Scholarship Fund, established in 2003, is supported by current and emeriti members of the Haverford Faculty.

The Walter R. Faries Scholarship Fund, established in 2004, provides assistance to students who possess leadership qualities rather than scholastic ability alone.

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.

The Gant Family Scholarship, established in 2002 by the Gant Family Foundation, will provide financial aid for students, with preference given to students with superior drive and potential from economically disadvantaged families.

The Gerlach Family Scholarship Fund, established in 2003 by William B. Gerlach '81 to honor the lives of Thomas B. Gerlach '50 and his sons and their loyalty to Haverford. This scholarship is to assist students with financial need, with a preference given to students possessing superior drive, promising scholarship and good character.

The Thomas Glasser Scholarship, established in 2004, shall provide assistance to worthy students with demonstrated financial need.

The Calvin Gooding, Jr. '84 Memorial Scholarship, established in 2002 by classmates and friends, will provide assistance to students whose background and character shows them to have a high level of commitment to building successful multicultural communities and who

exhibit superior drive and demonstrated financial need. Calvin's many friends and admirers 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.

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.

G. Holger Hansen Scholarship Fund, established in 2002, will provide student scholarships at Haverford College with preference given to students interested in the study of Religion.

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.

The William Randolph Hearst Foundation Scholarship Fund, established in 1992 for students whose background and character shows them to have a high level of commitment to building successful multicultural communities and who reside in the United States after their studies.

The Eric L. Henderson '86 Memorial Fund, established in 1997 in memory of Eric L. Henderson '86, will assist students whose background and character shows them to have a high level of commitment to building successful multicultural communities.

Samuel E. Hilles Memorial Scholarship, established in 1935 by Mina Colburn Hilles in memory of her husband, Samuel E. Hilles, Class of 1874.

SCHOLARSHIP FUNDS, FELLOWSHIPS, AND PRIZES

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.

The Virginia Sturgis House and James House, Jr. Memorial Scholarship, established in 2004, provides assistance to Haverford students with demonstrated financial need, with preference given to students pursuing a major in Fine Arts, or who possess a passionate interest in the visual or performing arts.

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 Scholarship provides assistance to students whose background and character shows them to have a high level of commitment to building successful multicultural communities.

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.

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.

Eric R. Kandel Scholarship Fund, established in 2002 by Paul Kandel '83, in honor of his father, will provide financial aid to students majoring in biology with preference given to women students and/or students taking neurobiology courses.

Jacob and Evelyn Katz Scholarship, established in 2004 by their son, Dr. Robert S. Katz '72. This scholarship will provide financial assistance to Haverford students with demonstrated financial need, with a preference given to students majoring in History who possess high academic potential, personality and character.

The Lewis C. Kibbee Memorial Scholarship Fund, provides assistance to worthy students with demonstrated financial need.

Lili Kibel Scholarship Fund, established in 2002, will provide assistance to students who exemplify the character, talent, and qualities of Lili Kibel.

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.

Judith Fondiller Klein Memorial Scholarship Fund, established by Alan M. Klein '81 and David B. Klein '85 in 2003 in loving memory of their mother, Judith Fondiller Klein. This scholarship is to assist students with financial need, with a preference given to students possessing high scholarship, personality and character.

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.

The Roger Lane Scholarship Fund, established in 1998 to assist Haverford students whose background and character shows them to have a high level of commitment to building successful multicultural communities and 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

SCHOLARSHIP FUNDS, FELLOWSHIPS, AND PRIZES

awarded to students who best exemplify qualities of determination, perseverance and concern for others, and who intend to pursue a career in medicine.

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.

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.

Sarah Marshall Scholarship Fund, established in 1897 by the bequest from Sarah Marshall.

Yamile Marti-Haidar 2003 Scholarship, established in 2003, will provide financial aid to students whose background and character shows them to have a high level of commitment to building successful multicultural communities.

The Slavica S. Matacic Scholarship, established in 1999 for students whose background and character shows them to have a high level of commitment to building successful multicultural communities.

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.

The Seamus McElligott '91 Memorial Scholarship, established in 2005 by Mr. and Mrs. James G. McElligott, will provide assistance to students with demonstrated financial need, and with preference given to student athletes whose background and character shows them to have a high level of commitment to building successful multicultural communities.

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.

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.

The Minority Student Scholarship, established by an anonymous donor, will assist students whose background and character shows them to have a high level of commitment to building successful multicultural communities.

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.

The Native American Fund provides assistance to students whose background and character shows them to have a high level of commitment to building successful multicultural communities and who work on related projects.

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.

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.

SCHOLARSHIP FUNDS, FELLOWSHIPS, AND PRIZES

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.

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.

José Padin Scholarship Fund, established in 1966 by Pauline A. Padin in memory of her husband, Dr. José Padin '07. This fund provides assistance to students whose background and character shows them to have a high level of commitment to building successful multicultural communities.

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.

The Parachini Family Fund, established in 1998, provides financial assistance to international students and students whose background and character shows them to have a high level of commitment to building successful multicultural communities.

Parents Scholarship Fund, established in 2003, is supported by current and past parents of Haverford alumni who have chosen to "Give the Gift of Haverford" to help future generations of students attend the College.

The Bruce Partridge Scholarship Fund, established in 2004, provides assistance to students from the Arab World.

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 1940s 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.

The 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 students whose background and character shows them to have a high level of commitment to building successful multicultural communities and who have strong academic and extracurricular records.

Elizabeth and Elisha Roberts Scholarship Fund, established to provide scholarship assistance to students with financial need.

The Charles Apel Robinson '28 Memorial Scholarship, provides assistance to International students with demonstrated 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.

Malcolm and Harriet Rosen Memorial Scholarship, established in 2003, provides financial assistance to students from financially disadvantaged families. Preference to be given to students committed to pursuing advanced coursework in both natural sciences and humanities.

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 1976 by Friends' Freedmen's Association, supports students whose background and character shows them to have a high level of commitment to building successful multicultural communities.

September 11th Scholarship Fund, established to provide financial assistance for children of victims of that day's tragic events.

Mary Sharpless Sanford Scholarship was established in 2003 by our husband Frederic G. Sanford from the Class of 1962. The Fund will provide financial aid for students with superior drive and potential from economically disadvantaged families.

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.

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.

SCHOLARSHIP FUNDS, FELLOWSHIPS, AND PRIZES

John P. and Danila C. Spielman Scholarship, established to provide fiscal assistance to Haverford students possessing exemplary academic merit, strong character and demonstrated financial need.

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.

Tritton Family Scholarship, established in 2003 by Haverford College President Thomas R. Tritton and his family. This scholarship will assist a student with demonstrated financial need, who possesses high academic promise, a determined spirit, and a personal commitment to making the world better.

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.

Miles Hodsdon Vernon Foundation Endowed Scholarship Fund, established to provide scholarship assistance to students with financial need.

The Versal Scholarship, established to provide financial aid to students with preference to upperclassmen in the natural sciences.

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 was established to provide scholarship assistance to students in the sciences whose background and character shows them to have a high level of commitment to building successful multicultural communities.

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.

The Mary Ellen Wolfinger (MEL) Memorial Scholarship, established in 2003 by her husband Charles H. (Chud) Wolfinger from the Class of 1940, will provide scholarship assistance to deserving students based on financial need.

The Wu International Student Scholarship, established in 2005, provides assistance to international students with demonstrated financial need.

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.

Jan and Barry Zubrow Scholarship Fund, established in 2003, provides financial aid to students who, in their accomplishments, demonstrate leadership qualities as well as high academic achievement.

SCHOLARSHIP FUNDS, FELLOWSHIPS, AND PRIZES

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.

Officers: Chapter President, Stan Miller; Vice-President and Treasurer, Howard Sacks '78; Secretary, Philip Bean.

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.

The Economics Department Thesis Prize, for the most outstanding empirical and/or theoretical application of economics in the senior thesis written work.

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.

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.

Stephen G. Cary Award, for the senior(s) who have made the greatest overall impact on the Haverford Athletic Program.

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.

SCHOLARSHIP FUNDS, FELLOWSHIPS, AND PRIZES

Irving Finger Prize in Biology, established in 2003 by family, friends and alumni in memory of Irving Finger, Professor of Biology from 1957 to 1994. It is awarded to a graduating senior (or seniors) in Biology for outstanding growth and accomplishment in the major.

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.

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.

Kaye Prizes in Theatre Arts are awarded to two students, regardless of class year, 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. One prize is to be given for performance-related work (e.g. acting, dancing, singing, conducting, directing); the other, for craft-based work in theatre (e.g. set design, lighting, costuming, production management.) These prizes were established by Laurence Kaye '83, and his parents, William Kaye '54 and his late wife, Cynthia.

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 sci-

ence, 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.

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.

SCHOLARSHIP FUNDS, FELLOWSHIPS, AND PRIZES

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.

SC Student Life Award, presented by Students Council to the senior, who, through hard work, persistence, and concern for his or her peers, has made the greatest contribution to student life on campus.

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.

The Service Leadership Award, for a graduating senior who will make outstanding contributions to social and/or environmental change through a project or program of their initiation. This award is designed to both nurture a graduating senior as they begin to dedicate their life to service action, as well as to develop a network of alumni doing model work in the field.

Andrew Silk Summer Internships in Journalism: Established in memory of Andrew Silk, Class of 1976, a summer journalism internship is awarded annually to a Haverford or Bryn Mawr student who is active on campus publications and interested in a career in journalism.

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.

The Ian Walker Fund, established in 2002 by friends, family, and classmates, serves as a memorial to honor Ian Walker, a member of the Class of 1950. It shall function as a prize fund and be awarded to a junior or senior at Haverford majoring in English.

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 204 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 22 full-time officers and three part-time officers, as follows:

- 1 Director
- 1 Captain (associate director)
- 1 Safety Coordinator (assistant director)
- 1 Card Access Administrator
- 3 Sergeants (full-time)
- 3 Corporals (full-time)
- 11 Security Officers (full-time)
- 3 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 programs 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

SAFETY AND SECURITY

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

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.

FACILITIES MAINTENANCE AND SECURITY

The staff of the Facilities 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 Facilities 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 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 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.

CARD ACCESS

In August 2003, Haverford College implemented a new card access system utilizing the new Haverford ID Card "The HaverCard." Card readers were installed around campus, one at every dorm entrance. Existing card readers were upgraded in academic areas such as computer and science labs, with new readers being added all the time.

This system allows for a more secure environment here at Haverford. Propped exterior doors have now become a thing of the past; so have lost and duplicate keys. If a card is reported lost it can be instantly turned off. A replacement card can be created within minutes and instantly activated with the same permissions that the old card had. Cards are issued via the Department of Safety & Security.

This flexible system allows students 24-hour access to their individual dorm as well as access to all other dorms at reduced hours. Access to academic areas is granted by the individual departments and controlled through Safety & Security.

Card access is part of a larger initiative revolving around the HaverCard, which will expand on existing student services such as dining and library privileges.

Starting in the Fall of 2005, we are planning to implement card use on laundry machines and vending machines, with more services to follow.

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 deans' 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" vis-

SAFETY AND SECURITY

iting 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 an ID card, which allows access via proximity card readers, as well as 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 granted 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, 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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Thomas R. Tritton, President

B.A., Ohio Wesleyan University; Ph.D., Boston University

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

EMERITI

Thomas A. Benham, Professor of Engineering, Emeritus

B.S. and M.S., Haverford College

R. Christopher Cairns, Professor of Fine Arts, Emeritus

B.A., Oberlin College; M.F.A., Tulane University

John R. Cary, Professor of German, Emeritus

B.A., Haverford College; Ph.D., The Johns Hopkins University

William C. Davidon, Professor of Mathematics, Emeritus

B.S., M.S., and Ph.D., University of Chicago

Harvey Glickman, Professor of Political Science, Emeritus

B.A., Princeton University; M.A. and Ph.D., Harvard University

Christopher G. Goff, Professor of Biology, Emeritus

B.A., Amherst College; M.A. and Ph.D., Harvard University

Marcel M. Gutwirth, John Whitehead Professor of French, Emeritus

B.A., Columbia College; M.A. and Ph.D., Columbia University

Douglas H. Heath, Professor of Psychology, Emeritus

B.A., Amherst College; M.A. and Ph.D., Harvard University

Holland Hunter, Professor of Economics, Emeritus

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Joanne Hutchinson, Professor of English, Emeritus

B.A., M.A., and Ph.D., Temple University

Richard Luman, Professor of Religion, Emeritus

B.A., M.A., and Ph.D., University of Iowa

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Colin F. MacKay, John Farnum Professor of Chemistry, Emeritus

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Slavica S. Matacic, Professor of Biology, Emeritus

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Charles Stegeman, Professor of Fine Arts, Emeritus
Academie Royale des Beaux Arts, Brussels

Susan M. Stuard, Professor of History, Emeritus
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Martha Wintner, Senior Lecturer in English, Emeritus
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Koffi Anyinéfa, Professor of French
Licence de Lettres, Université du Bénin, Lomé (Togo); M.A. and Ph.D., Universität Bayreuth

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Cristina Beltrán, Assistant Professor of Political Science
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B.A., M.A., M.Phil., and Ph.D., Yale University

Susan Benston, Visiting Assistant Professor of English
B.A., Yale University; M.D., Yale School of Medicine

FACULTY

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Craig Thomas Borowiak, Assistant Professor of Political Science

B.A. Carleton College; Ph.D., Duke University

Stephen P. Boughn, John Farnum Professor of Astronomy

B.A., Princeton University; M.S. and Ph.D., Stanford University

Israel Burshatin, Barbara Riley Levin Professor of Spanish and Comparative Literature

B.A., Queens College; M.A., M.Phil., and Ph.D., Columbia University

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Curtis Cacioppo, Ruth Marshall Magill Professor of Music

B.Mus., Kent State University; M.A., New York University; M.A. and Ph.D., Harvard University

Roberto Castillo Sandoval, Associate Professor of Spanish

B.A., Kenyon College; M.A., Vanderbilt University; A.M. and Ph.D., Harvard University

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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, 2005 are C. Zwarg (Humanities), R. Scarrow (Natural Sciences), W. Sternberg (Social Sciences), K. Benston and J. Punt (faculty representatives to the Board of Managers).

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M. Boltz, *chairperson*; J. Sabloff, K. Wright

Committee on Admission

B. Partridge, *chairperson*; A. Kitroeff, D. Sedley

(The dean of the College and dean of admission and financial aid are ex-officio members of this committee)

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Faculty Secretary: Douglas Davis

Faculty Marshal: Aryeh Kosman

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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 2004-05 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.

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Pía Barros

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Professor Emerita, Department of Classics, Princeton University

Henry Finkelstein

Painting Faculty, National Academic of Design, New York, NY

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Professor of Philosophy, University of Texas, Austin
Ph.D., University of California, Santa Barbara

Flying Words Project, Peter Cook (deaf poet and storyteller) and Kenny Lerner (faculty at Rochester Institute of Technology)

Karen Gallas

Teacher - Researcher and Poet

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Professor of Physics, Yale University

Michael Goodhart

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“Disabilities Awareness Week”

“Signs and Voices: Language, Arts, and Identity
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Altherr Symposium and the Desjardins Colloquium

“Making This Life Significant: Taking Creativity Seriously”

The Global Dialogue Institute, “What the Bleep Do We Know?”

Margaret Gest Center for Cross-Cultural Study of Religion;

“Is There Common Ground Between Religions? A Baha’i Perspective”

COLLEGE VISITORS ON SPECIAL FUNDS

2004-2005

"A Dialogue on Science and Spirituality IV: Exploring the Emerging Integrative Paradigms & Integral Medicine"

Andrew Silk Journalism Panel: "Political Coverage in a New Media Environment"

Howard Teaf Business Society Panel Discussion: "Adding Israel to Your Investment Portfolio: Public and Private Options"

"Medicine in Africa Workshop"

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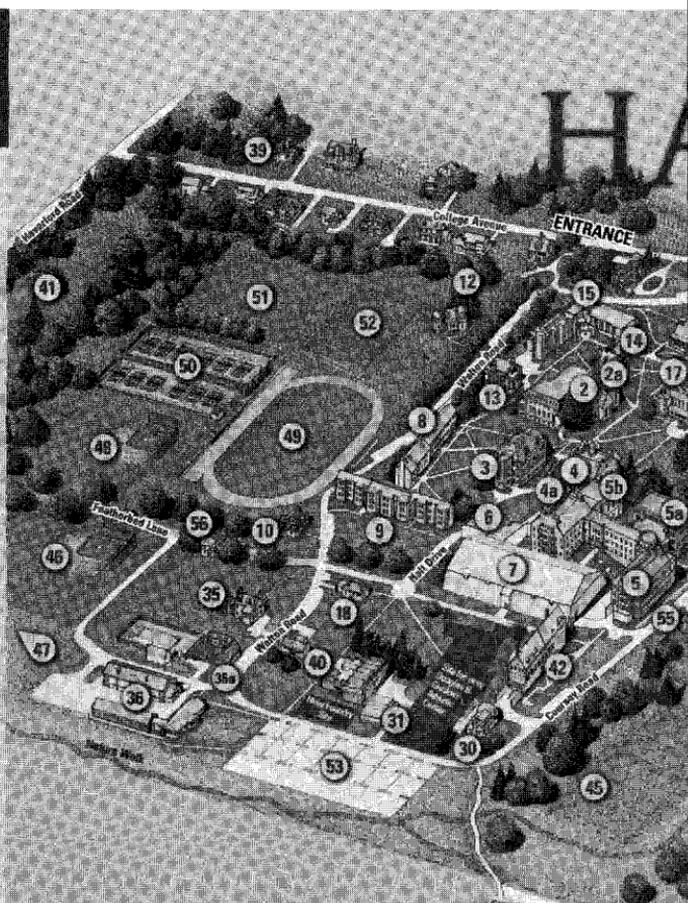
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Haverford College does not discriminate in education or employment on the basis of sex, sexual orientation, race, color, age, religion, national origin, physical disability, or handicap. This policy is consistent with relevant governmental statutes and regulations, including those pursuant to Title IX of the Federal Education Amendments of 1972 and Section 504 of the Federal Rehabilitation Act of 1973. Inquiries concerning Title IX and other policies of non-discrimination may be referred to the Affirmative Action Officer, or to the Director of the Office for Civil Rights, Department of Health, Education and Welfare, Washington, D.C.

CAMPUS MAP

FAIRBROOK CAMPUS MAP

1. Founders Hall
2. Magill Library
- 2a. C.C. Morris Cricket Library
3. Hall Building
4. Ryan Gymnasium
- 4a. Sesquicentennial Squash Courts
5. Marian E. Koshland Integrated Natural Sciences Center
- 5a. Sharpless Hall
- 5b. Hilles Hall
6. Locker Building
7. Alumni Field House
8. Leeds Field
9. Gummere Hall
10. Drinker House
11. Haverford College Apartments
12. Strawbridge Observatory
13. Morris Infirmary (Health Services)
14. Chase Hall
15. Stokes Hall
16. Dining Center
17. Gest Center
18. Safety & Security Department
19. Barclay Hall
20. Roberts Hall
21. Union Hall
22. Jones Hall
23. Lunt Hall
24. Confort Hall
25. Lloyd Hall
26. Cadbury House
27. Duck Pond
28. Skating House
29. President's House
30. Ira DaA. Reid House
31. Foundry
32. Yarnell House
33. La Casa Hispánica
34. Friends Meeting House
35. Woodside Cottage
36. Facilities Management Complex
- 36a. John Silver Greenhouse
37. 19 Old Railroad Avenue
38. 10 Old Railroad Avenue
39. 710 College Avenue
40. Betty Bohannon Marshall Fine Arts Center
41. Ryan Pinetum
42. Whitehead Campus Center
43. Merion Field
44. Cope Field
45. Orchard Field
46. Class of 1995 Field
47. Featherbad Fields
48. Class of 1916 Field
49. Walton Field/Johnson Track
50. Bramall & Marshall Tennis Courts
51. Class of 1922 Field
52. Class of 1889 Field
53. South Parking Lot
54. John A. Lester Cricket Pavilion
55. Phebe Anna Thorne School
56. 1 Featherbad Lane



PROMINENT CAMPUS BUILDINGS

The Whitehead Campus Center (42) houses the admission office, bookstore, mailroom, central receiving, conference office, the Cantor Fitzgerald Gallery, distinguished visitors office, and cafe.

The James P. Magill Library (2) with about 445,000 volumes, including a preeminent collection in Quaker history and thought.

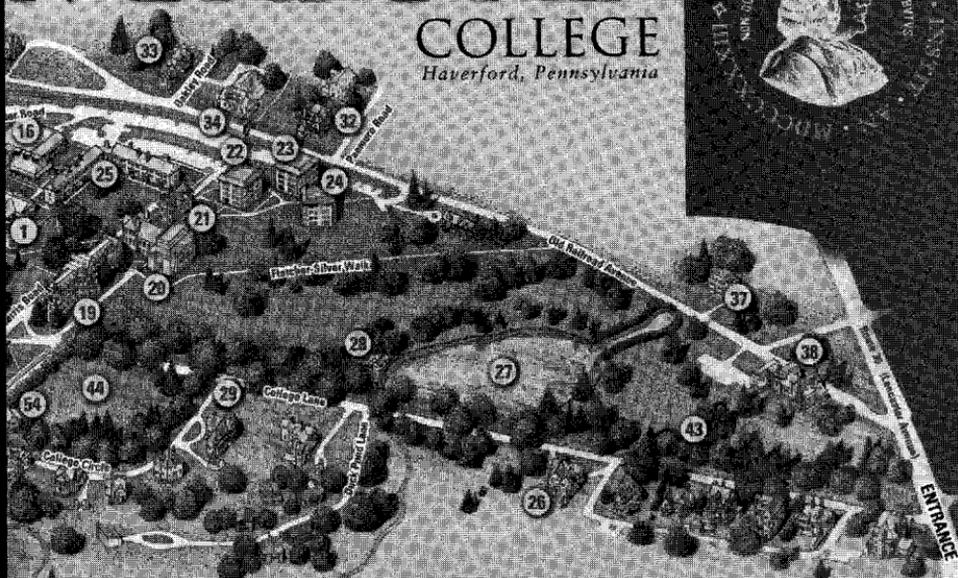
Founders Hall (1) houses the offices of the president, provost, vice president for finance and administration, and vice president for institutional advancement.

The Strawbridge Memorial Observatory (12) houses several telescopes and other astronomical instruments as well as classrooms and a library.

Stokes Hall (15) houses administrative, computer language learning, conference office, and an audio

HAVERFORD COLLEGE

Haverford, Pennsylvania



Marion E. Koshland Integrated Natural Sciences Center (5) encompasses Sharpless and Hilles Halls and houses the departments of biology, chemistry, computer science, mathematics, physics, and psychology.

The Gest Center for the Cross Cultural Study of Religion (17) houses offices and classrooms of the philosophy, religion, and sociology departments.

Union Music Center (21) contains the music library, classrooms, practice rooms, and MacCrate Reclinal Hall.

Roberts Hall (20) contains faculty offices and the 750-seat Marshall Auditorium.

The Betty Bohannon Marshall Fine Arts Center (40) contains photography darkrooms (both black-and-white and color), classrooms, studios for painting and sculpting, storage areas, student exhibition space, and faculty offices.

The Alumni Field House (7) provides extensive facilities for track, basketball, tennis, volleyball, and other sports. **Chase Hall (14)** for the offices of the deans and registrar and Chase Auditorium.

Morris Infirmary (13) the nation's first college infirmary constructed as a separate building.

The Dining Center (18) contains several large and small dining areas.

Barclay Hall (19) houses students in single, double, and triple rooms and suites.

Jones (22), Lunt (23) and Comfort (24) Halls (the North Dorms) contain four- and five-person suites and single rooms.

Lloyd Hall (25) has mostly suites for six. **Loeds Hall (8)** accommodates students in singles, doubles, and suites for five. **Gummers Hall (9)** has single rooms and suites for three and four.

The Haverford College Apartments (11) a 168-unit complex which abjoins the campus. The two-bedroom apartments include a living room, kitchen, and bathroom.

La Casa Hispanica (33) is a faculty apartment and housing for several Spanish-speaking students.

Cadbury House (26) contains a faculty apartment and housing for students.

Yarnall House (32) single and double rooms for students.

Drinker House (10), 710 College

Avenue (39), and Ira OxA, Reid House (Black Cultural Center) (30) also offer housing for students.

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