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ACADEMIC CALENDAR 2010-11

SEMESTER I

AUG 25 (WED) FIRST YEAR AND TRANSFER STUDENTS ARRIVE
AUG 28/29 (SAT/SUN) RETURNING STUDENTS ARRIVE
AUG 29 (SUN) NON-ACADEMIC REGISTRATION
AUG 30 (MON) CLASSES BEGIN AT HAVERFORD AND BRYN MAWR
SEP 3 (FRI) LAST DAY TO UNCOVER NNG - CR/NO CR FROM PREVIOUS SEMESTER
SEP 6 (MON) LABOR DAY – CLASSES NOT IN SESSION
SEP 7 (TUE) FINAL ACADEMIC VERIFICATION AT HAVERFORD AND BRYN MAWR
SEP 7 (TUE) LAST DAY TO REGISTER - CLASS OF 2014
SEP 17 (FRI) LAST DAY TO REQUEST NNG, FIRST QUARTER COURSES ONLY
SEP 17 (FRI) LAST DAY TO DROP A CREDIT AT HAVERFORD AND BRYN MAWR
OCT 8 (FRI) LAST DAY TO REQUEST NNG, FULL SEMESTER COURSES ONLY
OCT 8 (FRI) FALL BREAK BEGINS AT 4:00 P.M.
OCT 18 (MON) CLASSES RESUME AT 8:30 A.M.
OCT 22 (FRI) END OF ½ SEMESTER COURSES
OCT 25/29 (MON-FRI) FACULTY REPORTS OF CONCERN TO CSSP DUE
OCT 29 (FRI) ACADEMIC FLEXIBILITY PROPOSALS DUE
OCT 29/31 (FRI-SUN) FAMILY WEEKEND AND HOMECOMING
NOV 11/12 (THU/FRI) REGISTRATION FOR SPRING SEMESTER
NOV 12 (FRI) LAST DAY TO REQUEST NNG, SECOND QUARTER COURSES ONLY
NOV 24 (WED) THANKSGIVING BREAK BEGINS AT 4:00 P.M.
NOV 29 (MON) CLASSES RESUME AT 8:30 A.M.
DEC 10 (FRI) CLASSES END AT HAVERFORD; OPTIONAL READING DAY
DEC 10 (FRI) ALL PAPERS (EXCEPT THOSE IN LIEU OF EXAMS) DUE
DEC 11/12 (SAT/SUN) READING PERIOD
DEC 13/17 (MON/FRI) FINAL EXAMINATIONS FOR ALL STUDENTS THROUGH FRIDAY AT 12:00 NOON
DEC 17 (FRI) SEMESTER I ENDS AT 12:00 NOON
JAN 3 (MON) FINAL GRADES DUE IN REGISTRAR’S OFFICE BY 12:00 NOON

SEMESTER II

JAN 18 (TUE) CLASSES BEGIN AT HAVERFORD AND BRYN MAWR
JAN 21 (FRI) LAST DAY TO UNCOVER NNG - CR/NO CR FROM PREVIOUS SEMESTER
JAN 25 (TUE) FINAL ACADEMIC VERIFICATION AT HAVERFORD AND BRYN MAWR
FEB 4 (FRI) LAST DAY TO REQUEST NNG, FIRST QUARTER COURSES ONLY
FEB 4 (FRI) LAST DAY TO DROP A CREDIT AT HAVERFORD AND BRYN MAWR
FEB 25 (FRI) LAST DAY TO REQUEST NNG, FULL SEMESTER COURSES ONLY
MAR 4 (FRI) END OF ½ SEMESTER COURSES
MAR 4 (FRI) SPRING BREAK BEGINS AT 4:00 P.M.
MAR 14 (MON) CLASSES RESUME AT 8:30 A.M.
MAR 16/18 (MON-FRI) FACULTY REPORTS OF CONCERN TO CSSP DUE
MAR 18 (FRI) ACADEMIC FLEXIBILITY PROPOSALS DUE
APR 1 (FRI) LAST DAY TO REQUEST NNG, SECOND QUARTER COURSES ONLY
APR 15 (FRID) RETURNING STUDENTS’ FINANCIAL AID APPLICATIONS DUE
APR 14/15 (THU/FRI) REGISTRATION FOR SEMESTER I, 2010
APR 15 (FRID) SOPHOMORE MAJOR WORK PLANS DUE IN REGISTRAR'S OFFICE
APR 29 (FRI) CLASSES END AT HAVERFORD AND BRYN MAWR
APR 29 (FRI) ALL PAPERS (EXCEPT THOSE IN LIEU OF EXAMS) AND LAB NOTEBOOKS DUE
APR/MAY 30-3 (SAT-TUE) READING PERIOD - SELF-SCHEDULED EXAMS MAY BE TAKEN
MON/TUES ONLY
MAY 2/4 (MON-WED) SENIOR COMPREHENSIVE EXAMINATIONS
MAY 4/7 (WED-SAT) FINAL EXAMINATIONS FOR SENIORS THROUGH SATURDAY AT 5:00 P.M.
MAY 9 (MON) SENIOR GRADES DUE IN THE REGISTRAR’S OFFICE BY 5:00 P.M.
MAY 4/13 (WED-FRI) FINAL EXAMINATIONS FOR UNDERCLASSMEN THROUGH FRIDAY AT NOON
MAY 13 (FRI) SEMESTER II ENDS AT NOON
MAY 15 (SUN) COMMENCEMENT - A.M. AT HAVERFORD; P.M. AT BRYN MAWR
MAY 20 (FRI) FINAL GRADES DUE IN THE REGISTRAR’S OFFICE BY 12:00 NOON
MAY 27/29 (FRI-SUN) ALUMNI WEEKEND
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THE COLLEGE

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STATEMENT OF PURPOSE

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

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

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

The School became a College in 1856, with the right to grant degrees. By the turn of the 20th century under the leadership of such presidents as Thomas Chase and Isaac Sharpless, the College had become a nationally-known institution, competing for students and faculty with leading institutions in the nation.

Haverford’s evolution as a college encompassed both a richer liberal arts curriculum ranging from the natural sciences to the fine arts.

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 four Haverford libraries provide resources and services that support the liberal arts curriculum. Magill Library houses the majority of the collections in the social sciences and humanities, while branch libraries in the Koshland Integrated Natural Science Center for biology, chemistry, computer science, mathematics, physics, and psychology; the Observatory for astronomy; and Union Building for music serve the needs of students and faculty in those departments. The libraries are home to several special collections, including the Quaker Collection, an internationally important source of materials by and about Quakers.

Tripod, the integrated library system shared with Bryn Mawr and Swarthmore Colleges, provides members of the tri-college community with access to a combined collection of 2.4 million volumes, including a wide variety of manuscripts, music scores, and audio-visual resources. The system, available at http://tripod.brynmawr.edu/, also includes access to thousands of full-text electronic journals, citations to periodical articles and parts of books, and permits users to request items from the other consortium libraries. Regular delivery of circulating materials makes Tripod resources available within 24 hours to students and faculty. Another important gateway to Haverford’s collections and services is the Library’s website (http://www.haverford.edu/library). Web pages include announcements of events and staff information, virtual reference assistance, video tutorials, access to news sources, dozens of indexing/abstracting services, course guides, electronic forms and many online reference sources.

In addition to the Library’s own collections and those off campus to which Haverford faculty and 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.

The Quaker Collection began in 1833 when the Board of Managers decided to gather “an important reference library, especially for works and manuscripts relating to our own Religious Society.” Today, the Quaker Collection is an internationally significant repository for both printed and manuscript material about the Society of Friends and includes the journals of important Friends, the papers of leading Quaker families and individuals, Meeting records, archives of Quaker organizations, and material documenting Friends’ work with Native Americans and in East Asia. The Roberts Collection contains more than 20,000 manuscript letters, including a complete set of the signers of the Declaration of Independence, and famous authors, statesmen, educators, artists, scientists, ecclesiastics, and monarchs. The Philips Collection of rare books, mostly of the Renaissance period, includes among its outstanding items first editions of Dante, Copernicus, Leo Africanus, Cervantes, the King James Bible, Milton, and the four folios of Shakespeare. The Rufus M. Jones Collection, donated by this widely known Quaker philosopher and teacher (Haverford, 1885), consists of his collection of books on mysticism, a complete collection of his published writings, his personal papers, and a reconstruction of his study at 2 College Circle.

Other special collections include the J. Rendel Harris Collection of ancient codices; the Christopher Morley Collection; and the Haverford Photograph Collection of 3,250 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 on-line 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, multiple digital imaging systems, ultracentrifuges for preparative and analytical uses, refrigerated centrifuges, spectroscopic tools such as UV-vis spectrophotometers and a circular dichroism spectropolarimeter, two BD Biosciences fluorescence activated cell sorters, JELV transmission and scanning electron microscopes, a Nikon confocal microscope, stereo and immunofluorescence microscopes, FPLC and HPLC instruments, scintillation and gamma counters, ELISA readers, and densimeters.

Facilities in the Chemistry Department, located in the East Wing of the KINSC, enable students to use modern and state-of-the-art research grade 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. Eight additional laboratories provide space in which students conduct research jointly with the faculty. There is a laser laboratory equipped with nitrogen-dye, neodymium-YAG, Argon ion, and diode lasers and detection systems for time-resolved fluorescence and Raman spectroscopic studies. Computational facilities include Windows and UNIX-based workstations which allow students to explore molecular structure and properties using Gaussian, GAMESS and Insight/Discover computational packages. Major equipment items available for use by students in structured courses and in research tutorial work include two Bruker Nuclear Magnetic Resonance spectrometers (one Avance 200 and one ARX 300), an Agilent 1100 LC Liquid Chromatograph/Mass spectrometer, a PE Clarus-500 Gas Chromatograph/Mass Spectrometer, a Nicolet Magna 550 and two Perkin-Elmer Spectrum 1000 Fourier transform infrared spectrometers, a Bruker Vertex 70 FT-IR with photovoltaic MCT detector and temperature dependent sample capability, a Nicolet 6700 FT-IR, equipped with a NXR FT-Raman Module, a SPEX Fluorolog-2 fluorimeter, Hitachi F-7000 Fluorescence Spectrophotometer, Agilent Model 8453 UV/VIS Spectrophotometer, JASCO V570, Perkin Elmer Lambda 2, and Shimadzu 160U UV-visible spectrophotometers, Hi-Tech SF51 and Olis RSM stopped flow spectrometers, an MBraven Unilab glove box, a Perkin-Elmer 341 polarimeter, a Princeton Applied Research 273 electrochemical analyzer, Advanced Measurement Systems Voltammetry System, three Rainin high-performance liquid chromatographs, equipped with a Dynamax Model UV-1 detector (two systems) or a Dynamax Model-UV-DII detector (one system), and one Hewlett-Packard HPLC with a DAD detector, a GE AKTApurifier FPLC system with a Frac-920 fraction collector, a Bio-Rad BioLogic Workstation, two VirTis benchtop lyophilizers, a GBC-Difftech MMA powder X-ray diffractometer, a Accusys 211 Atomic Absorption Spectrophotometer, an Applied Biosystems 433A Peptide Synthesizer, equipped with a Perkin Elmer Series 200 UV/Vis detector, a Rainin PS3 automated peptide synthesizer, and a ProteinSolutions DynaPro dynamic light scattering instrument, CEM Microwave Accelerated Reaction System, TGA Q-500 Thermogravimetric Analyzer, Agilent GC/MS System, Fischer Isotemp Freezer, and Fischer Muffle Furnace. In addition to these items, more standard laboratory equipment such as gas chromatographs, colorimeters, Büchi Rotavapor instruments with Thermo Neslab RTE 740 circulation baths, vacuum lines, Carbotite PF30 ovens and various convection and vacuum ovens, Carbotite CWF 100 box furnaces, pH meters, Mettler and Sartorius micro, analytical and regular balances, gas generators, and high-precision electrical and optical equipment are available and used in instructional work.

The computer science, mathematics, and physics programs, housed in the Hilles and Harris wings of the KINSC, use computers for symbolic manipulation, scientific/numerical computation, and the acquisition and analysis of laboratory data. The Computer Science Department maintains two laboratories. The Computer Science Teaching Lab (KINSC H110) is the primary workspace for students completing course assignments. Computer Science classes are held in this lab, as well as lectures from visiting researchers. There are ten Linux workstations, plus a Linux lab server. The instructor can make presentations using the lab server or a laptop in conjunction with an AV system. Students in the Teaching Lab can access their work on the local CS server or on the campus storage server. Secure remote access is available via standard Internet tools (e.g., ssh, sftp, scp, cvs). A laser printer is available in this room for student use.

Students can enter the Teaching Lab at any time of the day using the campus One Card (student ID). Student Lab Assistants staff this room in the evenings (Sundays through Thursdays) to provide support for programming projects, along with help to resolve technical questions. Applications available include programming languages (e.g., C, C++, Python, Scheme and Java), as well as tools for logic circuit design, compiler design/implementation, concurrency, and graphics. Mathematica and LaTeX are used for symbolic/numeric computation and typesetting. These workstations also use OpenMP and MPI for parallel computation in conjunction with course work as well as research.

The Computer Science Lounge (KINSC H111) is adjacent to the Teaching Lab. This space is primarily for informal meetings and discussions. Current periodicals in computer science are available
in this lounge to complement the resources in the Science Library upstairs from the Lab.

The Computer Science Research Lab (KINSC L310) is as a workspace for students involved in upper level courses, in ongoing research projects, and in work to supplement a senior thesis. The Research Lab is also available for seminar classes, meetings and smaller presentations. Currently, there are four workstations (Linux, Macintosh and Windows available) in the Research Lab designed to support student learning as well as faculty research.

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. 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. There is also a small computer room adjacent to the math lounge. From all of these spaces students have wireless access to the campus network. The four laptops in H011 and the fourteen desktop machines in H012 are available for student use when these rooms are not reserved for classes or discussion sessions; all are set up as dual-boot machines, so that either Windows or Mac OS X may be run on any of them.

Facilities for the Physics Department in the Koshland Integrated Science Center include three well-equipped laboratories for instruction, all featuring computerised data acquisition systems. The facilities for intermediate and advanced lab courses include a thin metal film deposition system, a chemical vapor deposition system (mostly used for making carbon nanotubes), microfabrication facilities, a cosmic ray experiment, atomic spectroscopy experiments, and an instructional scanning tunneling microscope, a laser tweezer experiment, and equipment for experiments in micro-fluidics, among many others.

The department also has twelve lab rooms for research involving students, in four areas of research. The laboratory for nano- and molecular electronics houses two atomic force microscopes, two high-resolution optical microscopes, photoelectron characterisation equipment (including Ar ion and HeCd lasers), a UV-vis spectrometer, and an ultrahigh vacuum chamber. The biophysics laboratory includes 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 science is currently undergoing rapid growth in physics with the acquisition of a 24 processor high performance Linux cluster (Babbage) in physics, with potential to expand to 52 processors and the recent purchase of an additional ten research machines for a shared computational research room. Faculty from physics and astronomy, biology, chemistry, mathematics and computer science are working together to maximize the curricular benefits of these activities, including the enrichment of computational concentrations within existing departments, and opportunities for undergraduates to participate in computational research in all departments within the Koshland Integrated Science Center.

The department uses a variety of technical software in its courses and research, including Mathematica, MatLab, Python and Origin. This software is available on computer clusters throughout the science center (including the computers in the physics lounge), and also can be installed on student-owned computers in dorm rooms via a key-server system.

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, five 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 cognitive neuroscience lab contains a 40-channel Neuroscan EEG system for recording electrical activity in the human brain during cognitive performance tasks. The social psychology laboratory includes computerized questionnaire design and response stations, as well as equipment to record dyadic interactions and experience-based reactions. The personality laboratory houses computers for questionnaire and interview design and analysis as well as space for the audio and video recording of life-story interviews. 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, and workspace for departmental students. There is an astrophysics research lab in the KINSC that contains 4 workstations and an informal discussion space. Telescope resources 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. In addition to using these telescopes, students frequently travel to other observatories. Workstations at Haverford are used to process data from the local CCD camera and radio and optical data collected at other observatories. The astronomy library in Strawbridge contains 3,000 bound volumes; we have electronic subscriptions to all of the primary astronomy journals. All of these facilities are available for use by students. Haverford is part of an eight-college consortium which provides research assistanisheships 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 public 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.

Both the Roberts and College Apartment Labs are available to students 24/7 with access via their Haverford One Card.

Additional computer equipment is available in the Language Learning Center, the KINSC, and departmental labs in biology, chemistry, math, computer science, and physics/astronomy. These departmental 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 email. External access to the Internet is provided via a full duplex 100 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 using VPN over their broadband network.

Academic Computing supports a standard suite of software for email, 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 website 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 members of the Haverford community can bring their systems or get extra help on various computer issues. Details of our support policies are available on our website.

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 computing helpdesk, may assist with hardware repairs, install software, assist with system administration, 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.

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 website at http://www.haverford.edu/acc.

LANGUAGE LEARNING CENTER
The Language Learning Center (LLC) has thirty-three computers equipped with iSight camera (video camera), headphones and microphones. The LLC has various multimedia equipment including a flatbed scanner and video/audio digitizers.

The LLC has approximately 600 videos from all over the world. Students can watch them individually on each computer station, in small groups on a TV with wireless headphones, or in class with the projector. The projector is connected to a multi-standard VCR and a DVD player so that videos from any region of the world can be played in the LLC. Satellite TV programs in Chinese, French, German, Italian, Japanese, and Spanish are available via TV or the projector.

The LLC website has information for the use of the Center and language learning. Audio and video materials that accompany textbooks for foreign language classes are digitized with permission from the publishers and are available on the LLC website.

The LLC is open to all students, faculty, and staff. All Haverford faculty members can reserve the LLC for their classes.

FINE ARTS
The Bettye Bohanon Marshall Fine Arts Center opened in 1987 and contains studios for painting, drawing, and 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 for the sculpture program. The Fine Arts Foundry also contains a wood shop and studio space. In spring 2009, the printmaking studio was moved to the Locker Building (adjacent to Ryan Gym) from Arnecliffe at Bryn Mawr College. Its facilities include Digital, Etching, Lithography, Silkscreen, Relief, and a darkroom process for all photographic plates.

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 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. 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.
ACADEMIC CENTERS

Cross-curricular study is a cornerstone of the academic experience at Haverford, and reflects our commitment to preparing students for lives of engagement as citizens and scholars. Indeed, an increasingly complex and interconnected world makes it imperative for students to conceptualize issues, problems – and solutions – from many points of view.

Our three academic centers for interdisciplinary study provide such a programming framework for study within and beyond the classroom and laboratory. As such, they are less ‘centers’ in a physical sense; rather, they permeate the life of the mind and spirit wherever our students and faculty are called in the pursuit of knowledge.

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, as well as its galleries across the campus, 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 initiatives are annual Faculty and Student Humanities Seminars, Reading Groups, artist residencies, and other offerings aimed at enriching the humanities curriculum through innovative collaborations across departmental boundaries.

Generous support from the Andrew W. Mellon Foundation inspired the establishment of an endowment that supports two Mellon Post-doctoral Fellows each year. This program brings recent humanities Ph.D.s to campus to work with faculty (in their first year, the Faculty Humanities Seminar), with students (with two courses each year), and with the wider community (in a public symposium mounted during each Fellow’s second year), while allowing significant time and resources for their own research. The Center also funds summer programs, including Student Humanities Internships with host organizations such as The Philadelphia Orchestra, the Philadelphia Live Arts & Philly Fringe Festival, and the University of Pennsylvania School of Design (W.E.B. DuBois project); and Student Research Assistantships supporting the scholarly work of Haverford faculty. Through Center-sponsored symposia, presentations by renowned scholars and artists, residencies, and its college exhibition program, the Center also enhances the intellectual and cultural life of the Haverford community and the public at large.

For a complete description of the Humanities Center, its various programs, and a calendar of upcoming events, see www.haverford.edu/hhc.

HURFORD HUMANITIES CENTER COORDINATORS
Israel Burshatin (Barbara Riley Levin Professor of Comparative Literature and Professor of Spanish), Faculty Director
Emily Carey Cronin, Associate Director
James Weissinger ’06, Associate Director
Matthew Seamus Callinan, College Exhibitions Coordinator

KOSHLAND INTEGRATED NATURAL SCIENCES CENTER
The Marian E. Koshland Integrated Natural Sciences Center (KINSC) works to catalyze and facilitate programming that maintains Haverford College’s position at the leading edge of academic excellence in the sciences. To achieve this, the KINSC aims to promote scientific scholarship involving close collaboration between faculty and students and to provide opportunities for these collaborations to expand beyond the borders of the Haverford campus through intentional engagement with the national and international scientific communities. The KINSC will also serve as a nexus for interdisciplinary and multidisciplinary growth by supporting curricular and faculty development that requires synergies between existing Departments and cooperation with the Hurford Humanities Center (HHC) and the Center for Peace and Global Citizenship (CPGC).

To achieve this vision, the KINSC is invested in working jointly with HHC and CPGC as well as with the broader Haverford community. We support a diverse set of programs that promote the ambitions of the faculty and students and administer a portfolio of institutional grants that support the sciences at Haverford, including funding from the Howard Hughes Medical Institute as well as a variety of other privately funded activities. The KINSC provides support for projects that enhance faculty scholarship through travel grants for training and development opportunities and offers grants for innovative summer research involving students. Students may apply for summer research externships within their discipline or as a part of a multidisciplinary Tri-Center-sponsored program. Special grants will be available to support the development of larger scale disciplinary and interdisciplinary initiatives. Examples of innovative programming include, but are not limited to, activities tied to public health, science and society, and environmental studies initiatives.

COORDINATORS
Matthew Seamus Callinan, Coordinator
James Weissinger ’06, Associate Director
Faculty Director
Comparative Literature and Professor of Spanish),
Associate Director
Associate Director

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For a complete description of the KINSC, its various programs, and a calendar of upcoming events, see www.haverford.edu/KINSC.

**KINSC COORDINATOR**
Associate Professor of Biology Robert Fairman, Director

**CENTER FOR PEACE AND GLOBAL CITIZENSHIP**
The Center for Peace and Global Citizenship (CPGC) advances Haverford’s long-standing commitment to peace and social justice through research, education and action. The CPGC integrates innovative scholarship and responsible civic engagement around contemporary issues of global significance. With its commitment to knowledge as the foundation for effective action, the Center embodies Haverford’s scholarly and ethical mission as a premier liberal arts college.

The Center fulfills this mission by sponsoring a broad menu of programs. These include:

- **domestic and international summer internships:** Since 2000, the Center has funded more than 350 students to pursue projects in 50 different countries and the United States;
- **on-campus events:** The Center arranges visits by speakers, activists and academics to engage members of the Haverford community in meaningful dialogue on issues of peace and global citizenship;
- **off-campus events:** The Center funds students and faculty to attend conferences and workshops, to conduct field research domestically and internationally, and to collaborate on service-learning projects locally and abroad;
- **The Haverford House Fellowship Program** connects the campus community with efforts to create a more socially just, healthy and vibrant Greater Philadelphia region. Six fellows from each graduating class are selected to work with non-profit organizations and lead independent projects for year-long fellowships;
- **faculty curricular support:** The Center supports faculty in their efforts to integrate experiential learning on issues of peace, social justice and global citizenship into their teaching.

For more information on the Center and its programs, see www.haverford.edu/CPGC.

**CPGC Staff:**
Parker Snowe ’79, Executive Director
Alexander Kitroeff, Academic Director
Donna Ruane, Administrative Assistant
Janice Lion, Domestic Program Coordinator
Alison Castel, International Program Coordinator
Stephanie Zukerman, Program Assistant
Marlene Lofaro, Cafe Coordinator
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CURRICULUM
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:

Language courses taken to fulfill the language requirement do not meet divisional distribution requirements; and

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.

DISTRIBUTION REQUIREMENT
In addition to fulfilling the writing and foreign language requirements noted above, students are required to complete a minimum of three course credits in each of the three divisions of the curriculum: humanities, social sciences, and natural sciences. At least two departments in each division must be represented, and one of the nine course credits must be quantitative as described below. Courses meeting the distribution requirements may not be taken NNG, CR/NCR, or P/F.
QUANTITATIVE REQUIREMENT
Quantitative reasoning is an extremely important skill. The impact of science and technology in our century has been enormous. Today, those who lack the ability to apply elementary quantitative methods to the world around them are at a severe disadvantage. Therefore, students must successfully complete at least one course credit which focuses on quantitative reasoning. Quantitative courses provide experience in some of the following:

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

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

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

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

Haverford 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, Peace and Conflict Studies, Peace, Justice, and Human Rights, and Scientific Computing. 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.
FIRST-YEAR PROGRAM

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.

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.

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 end of the third week of classes for quarter courses and by the end of the sixth week of classes for full-semester courses, 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 a 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.
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.

For more information on Academic Regulations, please see the Academic Regulations Guidebook.
SPECIAL ACADEMIC PROGRAMS

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 number of 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.

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.

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 encouraged 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 relevant to post-graduate study.

Students planning to go to professional schools should seek early advice from the Career Development Office or from the College’s pre-professional 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.

**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.

For additional information on special academic programs, including study abroad, please go to haverford.edu/catalog/specialacademicprograms.php.
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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 1,200 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.

Typically applicants will have taken a rigorous college preparatory program that usually includes at least: four years of English; three years of mathematics; three years of one foreign language; three years of laboratory science; and three years 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 expectations, including honors, enriched, Advanced Placement or International Baccalaureate courses if offered.

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.

First-year applicants may apply for Early Decision after investigating Haverford carefully and making a commitment to enroll if admitted. Early Decision applications must be filed by November 15 along with all supporting credentials. Decisions will be announced by December 15. If applying under Early Decision, students may submit non-binding applications to other colleges with the understanding that they will withdraw all applications if admitted to Haverford.

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 defer matriculation at Haverford for one year, reserving a place in the class starting in September of the following year.

Applicants wishing to enter Haverford after three years of secondary school, an option known as Early Admission, should follow the Regular Decision 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.

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. There is no separate application for international students. First-year students should sit for the SAT Reasoning Test and two SAT Subject Tests; TOEFL (Test of English as a Foreign Language) is suggested for those whose first language is not English and who have not attended a school where English is the medium of instruction. The deadline for first-year application is January 15 (decisions announced by early April); the transfer deadline is March 31 (decisions announced by May 15). While Haverford is not able to practice need-blind admission for students who are not U.S. citizens or Permanent Residents, a limited amount of need-based financial aid is available, and the College meets the full demonstrated need of all admitted students.

Transfer Students

Haverford welcomes transfer students whose academic credentials are very strong. In addition to filing an application, a transfer candidate will be asked to submit a secondary-school transcript, the results of college entrance examinations, a college transcript, and letters of recommendation from two faculty members and 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 announced by May 15. New students may not start in January.

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 online during the summer or on paper 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 five and one-half credit will be awarded for a score of four. 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 five 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 examinations, or for courses taken at another college.

For additional information on admission and on procedures and requirements for applying, please go to www.haverford.edu/admission/.

EXPENSES

The tuition charge for all regular students is $40,260 for the 2009-10 academic year. The residence fee is $12,346 for the academic year. There is also a Students’ Association fee of $364 per year. These fees—tuition, residence and Students’ Association (but excluding the College’s optional accident and health insurance plan, for which see page 238)—total $52,970 for the year. There is also a $25 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.

First-year students and other new students are charged a one-time fee of $200 to cover the cost of their orientation period, called Customs Week.

For additional information, please visit: haverford.edu/business/studentaccounts.php.

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. For any student who is a United States citizen or permanent resident, 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 on the Financial Aid section of the College’s website, www.haverford.edu/financialaid. 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 2003 (Class of 2007) Size at entrance, 313; Graduated 3 years later, 2; Graduated 4 years later, 274; Graduated 5 years later, 11; Graduated 6 years later, 2. Total graduated, 289, or 92.3% of the original class.
COURSES OF INSTRUCTION

List of Departments ................................................................. 31
Numbering System and Symbols ............................................. 32
Department Descriptions ......................................................... 33
LIST OF DEPARTMENTS

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

* Area of Concentration
** Program
• Minor
NUMBERING SYSTEM AND SYMBOLS

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).

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

AFRICANA STUDIES
Africana studies is a developing synthetic field that brings a global frame of reference and a variety of disciplinary perspectives to the study of Africa and the African Diaspora. Drawing on anthropology, economics, history, linguistics, 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.

AFRICANA STUDIES 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) Independent College Programs 101a, "Introduction to African and Africana Studies"/History 102a "Introduction to Africana Civilizations"; (2) five more courses from the list reproduced in the college catalogs, or from a list of new courses periodically approved; (3) at least one of these courses must deal with the African Diaspora; (4) a senior thesis or seminar-length essay in an area of Africana studies. Students are urged to include in their program courses beyond the introductory level that deal with continental Africa and the African Diaspora. Successful completion of the Africana studies minor/concentration is noted on student transcripts at graduation.

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

In addition to meeting these common requirements, students concentrating in Africana studies at Haverford College must also satisfy a distribution requirement. Of the six courses they take, at least two, but no more than three, must be taken in their home department; the remaining three to four courses must be taken in at least two other departments. Independent College Programs 101a, "Introduction to African and Africana Studies"/History 102a "Introduction to Africana Civilizations", provides a foundation and a frame of reference for advanced work. Students are advised to enter the Africana studies program by taking this course as early as possible and to complete it by the end of the junior year.

AFRICAN STUDIES FACULTY
At Haverford:
Assistant Professor of Political Science Susanna Wing

At Bryn Mawr College:
Associate Professor of History Kalala Ngalamulume

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.

AFRICAN STUDIES REQUIREMENTS
Independent College Programs 101a, Introduction to African and Africana Studies/History 102a Introduction to Africana Civilizations, is the foundation course for African studies as well as for the Africana studies program at Haverford and Bryn Mawr Colleges. The course is suitable for first-year students, utilizes on-site resources of the four campuses, and enrolls undergraduates from all four institutions. This course is co-taught each year by two instructors from different disciplines.

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

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

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

AFRICAN STUDIES COORDINATORS
At Haverford:
Assistant Professor of Political Science Susanna Wing

At Bryn Mawr College:
Associate Professor of History Kalala Ngalamulume

AFRICAN AND AFRICANA STUDIES COURSES

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COURSES AT HAVERFORD COLLEGE:

**Fall 2010**
- FREN H312 Le Genocide rwandais (1994)
- GERM H223 Writing Nations: Africa and Europe
- HIST H114 Origins of the Global South
- POLS H235 African Politics
- POLS H270 Tragedy and the Postcolonial
- RELG H137 Black Religion and Liberation
- Theology
- RELG H214 Prophetic Imaginations in the American Tradition

**Spring 2011**
- ANTH H327 Ritual, Performance and Symbolic Practice
- ENGL H265 African American Literature
- POLS H123 American Politics: Difference and Discrimination
- POLS H345 Islam, Democracy and Development
- RELG H330 Seminar in the Writings of Women of African Descent
- SOCL H235 Class, Race, and Education

COURSES AT BRYN MAWR COLLEGE:

**Fall 2010**
- ANTH B200 The Atlantic World 1492-1800: Indians, Europeans, and Africans
- ANTH B253 Childhood in the African Experience
- ARCH B101 Introduction to Egyptian and Near Eastern Archaeology: Egypt and Mesopotamia
- CITY B266 Schools in American Cities
- COML B388 Contemporary African Fiction
- EDUC B266 Schools in American Cities
- ENGL B388 Contemporary African Fiction
- GNST B103 Introduction to Swahili Language and Culture
- HART B362 The African Art Collection
- HIST B200 The Atlantic World 1492-1800: Indians, Europeans, and Africans
- HIST B235 West African History
- HIST B336 Topics in African History: Social and Cultural History of Medicine
- SOCL B266 Schools in American Cities

**Spring 2011**
- ANTH B347 Cultural Perspectives on Marriage and the Family
- EDUC B200 Critical Issues in Education
- ENGL B263 Toni Morrison and the Art of Narrative Conjure
- ENGL B369 Women Poets
- GNST B105 Introduction to Swahili Language and Culture II
- HART B282 Arts of Sub-Saharan Africa
- HIST B102 Introduction to African Civilizations
- HIST B243 Atlantic Cultures: Maroon Societies
- HIST B337 Topics in African History: Social History of Witchcraft
At Haverford we teach social and cultural anthropology. Social and cultural anthropologists study human beings and human communities. We are interested in the family, social organization, modes of subsistence, exchange practices, politics and power, ritual and religion, gender, and all forms of expressive behavior. Once anthropologists primarily studied small-scale indigenous communities (so-called “primitive societies”) and rural populations, but now anthropologists also study state societies, urban communities, and globalization. Our discipline has three central traits. First, we are comparative. This means that we compare social and cultural phenomena in one place to those in another, and that we explore the particular features of a specific people and place in relation to general theories about humans and human societies. This comparative method allows us to tease out what is unique and distinctive about the subject we are studying and what generally tends to be true about that sort of thing. Second, we are holistic. We try to get a sense of the context in which a particular incident or practice is occurring, as a way of developing a fuller understanding of that specific practice and of that place and those people and how things work there. Third, we engage in participant-observation fieldwork. Social and cultural anthropologists live in the communities they are studying for extended periods of time, in order to build a perspective that integrates an insider’s and an outsider’s points of view.

ANTHROPOLOGY FACULTY
Associate Professor Zolani Ngwane, Chair
Associate Professor Mari Gillette
Stinnes Professor of Global Studies: Laurie Kain Hart
Assistant Professor Jesse Weaver Shipley
Visiting Assistant Professor Banu Nilgun Uygun
Mellon Post-doctoral Fellow and Visiting Assistant Professor Ruti Talmor
John R. Coleman Professor of Social Science: Wyatt MacGaffey, Emeritus

Affiliated Faculty at Bryn Mawr College:
Professor of Growth and Structure of Cities Gary McDonogh
Faculty of the Department of Anthropology, Bryn Mawr College

ANTHROPOLOGY MAJOR
REQUIREMENTS
Students are required to take a total of 11 course credits in the major, including five 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, Introduction to Anthropology (spring); or
ANTH 110b, Anthropology of Food and Eating; or
ANTH 155a, Themes in the Anthropology of Religion.
(2) ANTH 303b, History and Theory of Anthropology.
(3) One area course, such as ANTH 241, Mediterranean; ANTH 245, Africa; ANTH 244, China; 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) A two-credit, intensive Senior Thesis Seminar, during the fall and spring semesters of the senior year (Anthropology 450/451).

The remaining courses may be courses offered in the department, in an anthropology department on another campus, or in approved related fields. Typically no more than one biological anthropology or archaeology course may be counted for the Haverford major. 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.

ANTHROPOLOGY 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 303b, 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.

(1) One 100 level introductory course, either:
ANTH 103a, Introduction to Anthropology (fall) or
BMC ANTH 102, Introduction to Anthropology (spring); or
ANTH 110b, Anthropology of Food and Eating; or
ANTH 155a, Themes in the Anthropology of Religion.
(2) ANTH 303b, History and Theory of Anthropology.
(3) One area course, such as ANTH 241, Mediterranean; ANTH 245, Africa; ANTH 244, China; 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) A two-credit, intensive Senior Thesis Seminar, during the fall and spring semesters of the senior year (Anthropology 450/451).

The remaining courses may be courses offered in the department, in an anthropology department on another campus, or in approved related fields. Typically no more than one biological anthropology or archaeology course may be counted for the Haverford major. 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.

ANTHROPOLOGY REQUIREMENTS
FOR HONORS
Honors are decided at the discretion of the faculty in the department of Anthropology. They are 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.

**ANTHROPOLOGY COURSES**

**103 Introduction to Anthropology SO**

* M. Gillette  
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. **Prerequisite:** Not open to students who have completed Bryn Mawr Anthropology 102.

**155 Themes in the Anthropology of Religion SO**  
(Cross-listed in Religion and African and Africana Studies)  
* Z. Ngwane

**204 Anthropology of Gender SO**  
(Cross-listed in Gender and Sexuality Studies)  
* B. Uygun
The cultural construction of gender and sexuality, kinship, inheritance, and marriage; the performative dimensions of sexual identity; the cultural politics of motherhood; myths of matriarchy; ideologies of masculinity and femininity. Not open to students who have completed Anthropology 216b or Bryn Mawr Anthropology 106. **Offered occasionally.**

**206 Anthropology of Art SO**  
* L. Hart
This course looks at the social and cultural foundations of a category of things referred to as “art.” We examine the properties of these things and of the people who make, trade, exhibit, and look at art, and ask why they (we) do that. This involves a) understanding, and making theory about, the general development of the concept and uses of “art” in European civilization, as well how and why objects from “exotic” (that is, colonized) societies (in particular Africa, Native America, and Australia) have been identified and collected as a particular kind of art (“primitive art”) and b) exploring the "power of images" in diverse societies and social contexts. These questions allow us to challenge our received conceptions of what art is and does and to broaden our understanding of human creativity beyond conventional notions of art, taste, and value, and power. **Prerequisite:** One course in ANTH, ARTS, or consent of the instructor. **Typically offered in alternate years.**

**207 Visual Anthropology SO**  
* J. Shipley
Examines the history and development of anthropology’s relationship to the visual, focusing particularly on ethnographic film. Explores the relationship between ethnographic texts and visual ethnographic materials in socio-cultural anthropology. Visual ethnography investigated as a mode for representing culture and a site of cultural practice. Special attention paid to questions of collaboration and documentary for social change. Students produce ethnographic films in crews for final projects. **Prerequisite:** Anth 103 at Haverford or 102 at Bryn Mawr. **Typically offered in alternate years.**

**208 Museum Anthropology SO**  
* M. Gillette
What kinds of uses, values, and meanings do people attribute to objects? Why do museums exist as special sites for housing objects? What do museums do to objects, how, and why? This course is a comparative and historical introduction to museums and objects, and an overview of the kinds of things anthropologists do in and around museums. Students conduct research on museums (museums as the object of research) and museum research (research as museum professionals). **Offered occasionally.**

**209 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. **Prerequisite:** One course in Anthropology or Education. **Offered occasionally.**

**216 Women and Power in Comparative Perspective SO**  
(Cross-listed in Gender and Sexuality Studies)  
* M. Gillette
This course explores issues of power and its operation through examining women and women’s experience. Course readings combine theoretical materials on power and women’s empowerment with ethnographic studies that allow us to investigate theoretical questions in specific contexts. We consider the nature of power, the sources of social inequality, and the potential for powerful action on individual and collective levels. **Offered occasionally.**

**220 Anthropology and Story SO**  
* M. Gillette
From anthropology’s inception as a discipline, anthropologists have experimented with the relationship between ethnographic writing and storytelling. Even early anthropologists who were deeply committed to the idea of anthropology as a science, such as the founder of ethnography Bronislav
Malinowski nevertheless tried to entertain, excite, and emotionally engage readers by using storytelling techniques for ethnographic monographs. Imagine yourself suddenly set down, surrounded by all your gear, alone on a tropical beach close to a native village, while the launch or dinghy which has brought you sails away out of sight. In this course we explore ways to combine ethnography with techniques from dramatic writing. Students read classic and contemporary works by anthropologists who combine ethnographic writing with techniques from dramatic writing, conduct individual ethnographic research projects, and experiment with story-telling techniques to present their findings. Prerequisite: Anthropology 103 or permission of the instructor.

225 Anthropology of Postcolonialism SO
M. Gillette
An examination of cultural and social transformation in the former USSR, Central/Eastern Europe, China, and Cuba through readings in recent ethnography. How do socialist-era institutions and ideologies continue to influence people’s contemporary efforts to create a new kind of society and market? In what sense can we speak of shared national histories and cultures as determinative of these processes - or is it culture itself that is changing? Prerequisite: Anthropology 102 or 103. Offered occasionally.

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

236 Language and Electronic Media SO
J. Shipley
20th century politics and culture were intimately linked to the rapid development of radio, television, and film. These electronic media have creatively engaged with local cultural practices around the world in reshaping the nature of artistic expression, national, gendered, and racial difference; and political power. This course uses anthropological notions of language to examine cultures of electronic media around the globe. We will create a theoretical frame that will allow us to look at radio, video/film, television, the internet, and mobile phone technologies as forms of social mediation. Mass media will be considered in relation to the formation of new types of embodiment, value, production, and consumption. In particular, we will trace how actor-centered performance approaches to language, reference, and authority give insight into the making of contemporary, electronically-mediated ways of understanding the world. This class draws together the fields of philosophy of language, linguistic anthropology, media studies, and various approaches to performance studies. Prerequisite: This course requires at least one anthropology course and instructor’s permission.

241 Anthropology of the Mediterranean: Seminar on Greece SO (Cross-listed in Comparative Literature and Latin American and Iberian Studies)
L. Harr
This course focuses on pluralism and cultural interaction in circum-Mediterranean societies. It includes such topics as: orientalism and the problematics and politics of ethnographic production in and on peripheral societies; the use and abuse of concepts of cultural continuity, interaction in rural and urban settings; imperial legacies and nation-state ideologies in 21st century cultural politics; local and transnational economic systems; migration patterns, conflicts, and contemporary social transformations. Typically offered in alternate years.

244 Anthropology of China SO (Cross-listed in East Asian Studies and Gender and Sexuality Studies)
M. Gillette
This course is a basic introduction to the anthropology of China. The scope of our inquiry is about one century: we begin with traditional China and end with the present. Our primary site is the Chinese mainland (rather than Taiwan, Hong Kong, or the Chinese diaspora). Our goals include learning specific information about China, Chinese society, and Chinese culture; examining a range of diverse anthropological approaches to the study of human beings; exploring the political dimensions of representation; and reflecting on the relationship between political systems, the economy, and social formations. Prerequisite: One course in ANTH or EAST. Typically offered in alternate years.

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 1980s. Prerequisite: One course in literature or anthropology. Typically offered in alternate years.
249 Colonialism, Law, Human Rights in Africa SO
(Cross-listed in Peace, Justice, & Human Rights and African and Africana Studies)
J. Shipley
This course examines the colonial legacies of contemporary discourses of human rights and development as they are relevant in contemporary global politics. By taking an historical approach to the idea of rights we will make connections between sovereignty, the rule of law, and the rights of citizenship. We will use a critical eye to explore the conditions of possibility that allow states, development organizations, donor agencies, and individuals to unwittingly reproduce centuries old tropes of poverty, degradation, and helplessness of non-Western peoples. Using historical descriptions of the encounters between Europeans and Africans in West Africa and South Africa we will unpack assumptions about African societies. We will also explore liberalism and its connections to British colonialism, and its contemporary incarnations. Prerequisite: One course relating to Africa, African politics, African literature.

254 Diseased Bodies: AIDS, Culture and the Anthropology of the Body SO
Z. Ngwane
A study of discourses of cultural and medical management and stigmatization of the diseased human body. We will look at how cultural perceptions of disease generate binaries of taboo/restoration, sin/redemption, dying/living, decay/heal. We will look at how responses to HIV/AIDS embody this ambivalence of the diseased body in ideologies of social subjectivity. The course will be informed by an approach to this problem that views the human body as society's investment in its cultural and material reproduction while also serving as an ideological frontier separating socialized subjectivity from potentially antisocial libidinal forces of the biological self. Within this framework we will pursue the question: in what specific ways does disease, HIV in particular, represent a breach of the boundary between the body as social order and the carnal forces of its disruption? With HIV as an organizing problematic, the course will be structured around themes including religious notions of the body, sin and redemption; Western philosophical opposition of the body to the faculty of reason; interventionist technologies of modern medicine and the secularization of illness; and African notions of the social body and disharmonies of disease. We will conclude with the course reflections on how my work on HIV prevention in South Africa has addressed these cultural issues in local communities. Prerequisite: At least one 100 level course in Social Sciences.

256 Political Anthropology SO
Staff
This course considers politics as what groups of people do to affect their social conditions, and examines how their ability to affect those conditions is organized and controlled. Through the reading of ethnography and anthropological theory, we will raise questions about how “leaderless” societies organize social action, about the interrelations of gender, bodies, and politics, and about the ways in which power is exercised and contested in different societies. We will discuss how modern states arose and what impact they have had on the peoples they incorporate and on options for political action in contemporary complex global political systems. Prerequisite: One other course in Anthropology or Peace Studies, or consent of the instructor. Offered occasionally.

257 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. Typically offered in alternate years.

258 Politics of Culture and Identity SO (Cross-listed in Peace and Conflict Studies-Bi Co Conc)
Staff
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. Prerequisite: Anthropology 102 or 103. Offered occasionally.

259 Ethnography of Islam SO
M. Gillette
Comparative ethnographies of Muslim societies. Islam as a field of anthropological inquiry and theorizing. Ethnographic representation and the construction of ethnographic authority. Islam in the western imagination. Prerequisite: One course in Anthropology or consent of the instructor. Offered occasionally.

261 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. Prerequisite: One course in anthropology or consent. Offered occasionally.
263 Anthropology of Space: Housing and Society
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 course in ANTH or CITY. Offered occasionally.

270 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, countertransference); magic and fetishism, individual and collective violence. Prerequisite: Anthropology 102 or 103. Offered occasionally.

303 History and Theory of Anthropology SO
J. Shipley
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 ANTH, excluding BMC ANTH 303. Typically offered every Spring.

315 Human Rights, Gender and Knowledge: The Truth And Reconciliation Commission in South Africa SO
Z. Ngwane
Reflection on the South African Truth and Reconciliation Commission from the perspective of rural women’s testimonies. Reports and scholarly reflections on the TRC often reflect the perspectives of elite groups. Based on first hand research funded by the CPGC, the course will have students read testimonies based on collected submissions by women from poor rural communities who lost members of their families during the struggle against Apartheid. We will try to understand the role of gender in testimonies to the TRC and how knowledge was distributed unequally between men and women. We will situate women’s testimonies within the larger context of human rights discourses. We will read critical theories of human rights and Truth Commissions. We will also discuss taped interviews I carried out in 2008/9 with the same women, family members and other members of the community. These testimonies and recorded interviews will form primary readings for the course. Prerequisite: At least one 200 level class in Anthropology and with consent of the instructor.

322 Ethnographic Methods SO
M. Gillette
Qualitative research methods, with a focus on participant-observation. Theoretical debates, ethical questions, and practical issues concerning the craft of ethnographic field work will both be addressed. Students will conduct several small-scale field exercises and design and implement a larger ethnographic project. Prerequisite: ANTH 102 or 103. Preference to ANTH majors/minors and PEAC concentrators. Typically offered in alternate years.

327 Ritual, Performance and Symbolic Practice SO
(Cross-listed in African and Africana Studies)
J. Shipley
This course examines theories of performance and practice as a way for understanding how specific events and actions relate to social structure, history, and memory. We will explore how bodies become produced and contested in the performance of political and personal productive and sensuous activity. The course’s central thematic explores the tension between theories of performance and theories of practice which highlight key philosophical issues within anthropology and social thought more generally: power and its enactment, the relationship between personal experience and macro-sociological processes, the nature of consciousness, structure versus agency, and stasis versus change. Prerequisite: One course in Anthropology or consent.

350 Social and Cultural Theory: Writing: Alienation, Uproar, and Self-Production SO
Z. Ngwane
Buying African fair trade coffee beans at the corner cafe; reading about Madonna’s adoption of two Malawian children in the popular press; watching video recordings of Barack Obama’s public HIV test in rural Kenya: each of these phenomena reflects our material & emotional entanglement with people and places previously disconnected & distant from us. How does a pervasive sense of global conductivity & intimacy change the ways in which we imagine ourselves, the public good, and others? In this course we will read recent ethnographies alongside social & critical theory (Foucault, Bourdieu, de Certeau, Deleuze, et al.) to consider how ethnographic methods can illuminate the diverse cultures & subjectivities presupposed and produced by international development & research, and address contemporary problems of global community. Course work will include a research term paper. Prerequisite: Two courses in Anthropology or consent. Hist & Theory of Anth recommended.

355 Anthropology and the New Faces of
This course focuses on the production and collecting practices of Chinese porcelain. It provides a basic introduction to research on material culture, Chinese high-fired ceramics, and the practices of collectors and porcelain producers. Students who complete this class will gain a good basic understanding of the technical and social aspects of Chinese ceramic production, forms and decoration of Chinese ceramics, the porcelain center of Jingdezhen, and the political and cultural aspects of Chinese porcelain consumption. In addition to engaging with course materials, each student will design and complete a major independent research project related to ceramics or an aspect of Chinese material culture. Prerequisite: One course in Anthropology, East Asian Studies, or permission. Offered occasionally.

450 Senior Seminar: Research and Writing SO
M. Gillette
Students research and complete a thesis in sociocultural anthropology over the course of two semesters. The seminar includes course meetings and individual consultations. Prerequisite: Senior standing in ANTH at Haverford. Typically offered every Fall.

451 Senior Seminar: Supervised Research and Writing SO
M. Gillette, J. Shipley, Z. Ngwane, L. Hart
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: Sr standing in ANTH at HC. Typically offered every Spring.

460 Teaching Assistant SO
Staff
Discussion leader and course assistant in Anthropology 103, Anthropology 110, or other selected anthropology courses; includes responsibility for selected tutorials. Final Paper. Typically offered every Semester.

480 Independent Study SO
Z. Ngwane
Offered occasionally,

COURSES OFFERED AT BRYN MAWR COLLEGE

ANTHROPOLOGY
101-102 Introduction to Anthropology
203 Human Ecology
204 North American Archaeology
209 Human Evolution
210 Medical Anthropology
232 Nutritional Anthropology
243 Cultures of Technology: Aesthetics, Senses and the Body
253 Childhood in the African Experience
261 Palestine and Israeli Society
281 Language in Social Context
286 Social Construction of Irish Identity
303 History of Anthropological Theory
312 Anthropology of Reproduction
342 Middle Eastern Diasporas
354 Identity, Ritual and Cultural Practices in Contemporary Vietnam

GROWTH AND STRUCTURE OF CITIES
185 Urban Culture and Society
190 Form of the City
209 Medical Anthropology
335 Mass Media and the City
360 Topics in Urban Culture and Society
Arabic language instruction is offered through Tri-Collage cooperation. Courses are available at Bryn Mawr, Haverford and Swarthmore Colleges. The teaching of Arabic is a component of the three colleges’ efforts to increase the presence of the Middle East in their curricula. Bryn Mawr offers courses on the Middle East in the departments of Anthropology, Classical and Near Eastern Archaeology, Comparative Literature, General Studies, History, and Political Science.

ARABIC FACULTY
Bryn Mawr College
Visiting Assistant Professor Sooyong Kim
Lecturer Camelia Suleiman

Swarthmore College
Assistant Professor Aman Attieh
Lecturer Brahim El Guabli
Assistant Professor Walid Hamarneh
Lecturer Farnaz Perry
Lecturer Marina Rojavin

ARABIC COURSES
ARAB S001, H001, H002 Intensive First Year Modern Standard Arabic
A. Attieh, F. Perry, B. El Guabli
This is a year-long course. This intensive introduction to Arabic aims to develop the four language skills of speaking, writing, listening, and reading. The spoken component covers formal and casual forms of speech. Cultural aspects are also built into the course. This course sequence helps students to rapidly advance in Arabic and prepares them for more advanced work on literary Arabic, as well as to work, travel or study abroad. By the end of the sequence, most students will reach the intermediate-low level, according to the ACTFL proficiency rating. Offered at Bryn Mawr and Haverford in alternate years. Drills taught on both campuses.

ARAB S003, B003, B004 Second Year Modern Standard Arabic
A. Attieh, C. Suleiman, B. El Guabli
This is a year-long course. This course is designed to build on comprehension, listening, reading, and writing skills developed in the previous course sequence. Students gain increased vocabulary and understanding of more complex grammatical structures, and will be able to approach prose, fiction, and non-fiction written in Arabic. Students will also increase their proficiency in Arabic script and sound system; learn key grammatical concepts; and practice conversation and dictation. Instruction combines intensive oral practice with writing and reading in the modern language. Offered at Bryn Mawr and Haverford in alternate years. Drills taught on both campuses.

ARAB S011, S012 Third-Year Modern Standard Arabic
B. El Guabli
This is a year-long course. It is designed to (1) conduct a quick review of the basic structures, grammar and the first 1,000 most frequent words of modern standard Arabic (MSA) learned in earlier courses; (2) introduce the next 1,500 high-frequency words in a variety of contexts with strong cultural content; (3) drill students in the more advanced grammatical structures of MSA; and (4) train students in developing reading skills that will assist them in comprehending a variety of MSA authentic reading passages of various genres and performing reading tasks ranging from intermediate high to advanced levels on the ACTFL scale. Offered at Swarthmore.

ARAB S013 Foreign Language Teaching & Pedagogy (Cross-listed as EDUC 072)
M. Rojavin
This course has two elements that are developed together throughout the course of the semester. Students can serve the Swarthmore community by teaching a foreign language to local elementary school students in an after-school program that meets two times/week. Students must teach for the entire 6-week session, two days per week (M/W or T/Th). During the evening pedagogy sessions held on campus, we will discuss writing weekly lesson plans, foreign language acquisition in children, teaching methodologies and approaches. We use a common goal-oriented curriculum among all the languages. Students must register for the language or educational studies course that they will be teaching and for a service time (A) M/W or (B) T/Th. Offered at Swarthmore.

ARAB B403 Independent Study
Staff
Students may complete a minor in Creative Writing, Dance or Theater and may submit an application to major in Creative Writing, Dance or Theater through the independent major program. Students may complete a major in Fine Arts or a major or minor in Music at Haverford College. English majors may complete a concentration in Creative Writing.

ARTS PROGRAM FACULTY
Instructor in Dance David Dean Brick
Senior Lecturer and Associate Director of Dance Madeline R. Cantor
Associate Professor and Director of Dance Linda Caruso-Haviland (on leave semester II)
Instructor in Creative Writing Nancy Doyle
Lecturer in Creative Writing Thomas Jerome Ferrick Jr.
Instructor in Creative Writing Daisy Fried
Lecturer in Creative Writing Amy Herzog
Senior Lecturer and Production Manager of Theater Hiroshi Iwasaki
Professor of Creative Writing Karl Kirchwey (on leave semesters I and II)
Professor and Director of Theater and Chair of the Arts Programs Mark Evans Lord
Lecturer in Creative Writing Elizabeth A. Mosier
Instructor in Theater Catharine Kevin Susar
Lecturer in Creative Writing J. C. Todd
Visiting Assistant Professor and Director of Creative Writing Daniel P. Torday

ARTS PROGRAM COURSES
Courses in the arts are designed to prepare students who wish to pursue advanced training in their fields and are also for those who want to broaden their academic studies with work in the arts that is conducted at a serious and disciplined level. Courses are offered at introductory as well as advanced levels.

ARTS IN EDUCATION
ARTA B251 Arts Teaching in Educational and Community Settings (Cross-listed as EDUC B251)
M. Cantor
This is a Praxis II course 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 underlying theories. 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. School or community placement 4-6 hours a week. Prerequisite: At least an intermediate level of experience in an art form. This course counts toward the minor in Dance or in Theater. Not offered in 2010-11.

CREATIVE WRITING
Courses in Creative Writing within the Arts Program are designed for students who wish to develop their skills and appreciation of creative writing in a variety of genres (poetry, prose fiction and nonfiction, playwriting, screenwriting, etc.) and for those intending to pursue studies in creative writing at the graduate level. Any English major may include one Creative Writing course in the major plan. Students may pursue a minor as described below. While there is no existing major in Creative Writing, exceptionally well-qualified students with a GPA of 3.7 or higher in Creative Writing courses completed in the Tri-College curriculum may consider submitting an application to major in Creative Writing through the Independent Major Program after meeting with the Creative Writing Program director. When approved, the independent major in Creative Writing may also be pursued as a double major with another academic major subject.

CREATIVE WRITING MINOR REQUIREMENTS
Requirements for the minor in Creative Writing are six units of course work, generally including three beginning/intermediate courses in at least three different genres of creative writing (chosen from ARTW 159, 231, 236, 240, 251, 260, 261, 262, 263, 264, 265, 266, 268, 269) and three electives, including at least one course at the 300 level (ARTW 360, 361, 362, 364, 366, 367, 371, 373, 382), 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 several genres of creative writing. Students should consult with the Creative Writing Program director by the end of their sophomore year to submit a plan for the minor in order to ensure admission to the appropriate range of courses.

CONCENTRATION IN CREATIVE WRITING
English majors may elect a three-course concentration in Creative Writing as part of the English major program. Students interested in the concentration must meet with the Creative Writing Program director by the end of their sophomore year to submit a plan for the concentration and must also confirm the concentration with the chair of the English Department.

CREATIVE WRITING COURSES
ARTW B159 Introduction to Creative Writing
J. Todd
This course is 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 experience in creative writing. Students will write or revise work every week; roughly four weeks each will be devoted to short fiction, poetry, and drama. There will be individual conferences 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.

ARTW B236 Contemporary Literature Seminar
(Cross-listed as ENGL B236)
K.Kirchwey
Surveys the work of literary writers reading in the Creative Writing Program Reading Series. Students will read and discuss at least one work by each of the authors appearing, and whenever possible will meet individually with the authors in class as well as attending their public readings. Authors represented have included poets Lucille Clifton, Derek Walcott and Richard Wilbur, fiction writers E.L. Doctorow and James Salter, and memoirist Patricia Hampl. This is a half-credit course; students may receive credit for either or both semesters. Approximately 15 pages of critical prose writing will be required for each half-credit. Not offered in 2010-11.

ARTW B240 Literary Translation Workshop
(Cross-listed as COML B240)
K.Kirchwey
Open to creative writing students and students of literature, the syllabus includes some theoretical readings, but the emphasis is practical and analytical, considering parallel translations of certain enduring literary texts as well as books and essays about the art of translation. Literary translation will be considered as a spectrum ranging from Dryden’s “metaphrase” (word-for-word translation) all the way through imitation and adaptation. The course will include class visits by working literary translators. The Italian verbs for “to translate” and “to betray” are neighbors; throughout, the course concerns the impossibility and importance of literary translation. Not offered in 2010-11.

ARTW B261 Writing Poetry I
J.Todd
This course will provide a survey of craft resources available to students wishing to write print-based poems in English: figure, line, measure, meter, rhyme, and rhythm. In concert with close reading of model poems, students will gain experience in writing in a variety of verse forms, including haiku, sonnet, free verse, and prose poem. The course is writing-intensive: students write or revise poems most weeks. The course objective is to provide students with the skills to explore poetic form, both received and invented, and to develop a voice with which to express themselves on the printed page.

ARTW B262 Playwriting I (Cross-listed as ARTT B262)
A.Herzog
An introduction to playwriting through a combination of reading assignments, writing exercises, discussions about craft and ultimately the creation of a complete one-act play. Students will work to discover and develop their own unique voices as they learn the technical aspects of the craft of playwriting. Readings will include work by Edward Albee, Maria Irene Fornes, John Guare, Tony Kushner, Susana-Lori Parks, Paula Vogel and others. Short writing assignments will complement each reading assignment. The final assignment will be to write an original one-act play.

ARTW B263 Writing Memoir I
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 discussions attempt to distinguish memoir from related literary genres such as confession and autobiography. Writing assignments and in-class discussion of syllabus readings explore the range of memoirs available for use as models (excerpts by writers including James Baldwin, Lorene Cary, Annie Dillard, Arthur Koestler, Rick Moody, Lorrie Moore, and Tim O’Brien) and elements such as voice and perspective, tone, plot, characterization and symbolic and figurative language. Not offered in 2010-11.

ARTW B264 News and Feature Writing
T.Ferrick
Students in this class will learn how to develop, report, write, edit and revise a variety of news stories, beginning with the basics of reporting and writing the news and advancing to longer-form stories, including personality profiles, news features and trend stories, and concluding with point-of-view journalism (columns, criticism, reported essays). The course will focus heavily on work published in The Philadelphia Inquirer and The New York Times. Several working journalists will participate as guest speakers to explain
their craft. Students will write stories that will be posted on the class blog, the English House Gazette.

ARTW B265 Creative Nonfiction
D. Torday
This course will explore the literary expressions of nonfiction writing by focusing on the skills, process and craft techniques necessary to the generation and revision of literary nonfiction. Using the information-gathering tools of a journalist, the analytical tools of an essayist and the technical tools of a fiction writer, students will produce pieces that will incorporate both factual information and first person experience. Readings will include a broad group of writers ranging from E.B. White to Anne Carson, George Orwell to David Foster Wallace, Joan Didion to James Baldwin, among many others.

ARTW B266 Screenwriting
N. Doyne
An introduction to screenwriting. Issues basic to the art of storytelling in film will be addressed and analyzed: character, dramatic structure, theme, setting, image, sound. The course focuses on the film adaptation; readings include novels, screenplays, and short stories. Films adapted from the readings will be screened. In the course of the semester, students will be expected to outline and complete the first act of an adapted screenplay of their own.

ARTW B269 Writing for Children
E. Mosier
In this course, students have the opportunity to write imaginatively for children and young adults. Through reading and in-class discussion, we will examine the specific requirements of the picture book, the chapter book and the young adult novel. This analytical study of classic and contemporary literature will inspire and inform students’ creative work through the discoveries they make about style and structure, creating compelling characters, the roles of illustration and page composition in story narration, and the ever-evolving fairy tale. Students will receive guidance for their creative work through in-class exercises, peer review and private conferences with the instructor. Not offered in 2010-11.

ARTW B360 Writing Short Fiction II
D. Torday
An exploration of approaches to writing short fiction designed to strengthen skills of experienced student writers as practitioners and critics. Required: writing at least five pages each week, workshop student pieces, and reading texts ranging from realist stories to metafictional experiments and one-page stories to the short novella, to explore how writers can work within tight confines. Prerequisite: ARTW 260 or work demonstrating equivalent expertise in writing short fiction. A writing sample of 5-10 pages in length (prose fiction) must be submitted to the Creative Writing Program during the preregistration period to be considered for this course.

ARTW B361 Writing Poetry II
D. Fried
While writing a poem a week, according to assignments both formal and strategic, students will read at least six volumes of contemporary poetry, immersing themselves in the pleasurable estrangements and rearrangements of a variety of voices, with the goal of forcing positive changes in their own poems. Students in this course are expected to become not only better writers, but also better critics of their own and each other’s work, and the term grade is determined partly by written work and partly by in-class participation during discussions of syllabus reading and student poems.

ARTW B362 Playwriting II (Cross-listed as ARTW B362)
A. Horsag
This course challenges students of playwriting to further develop their unique voices and improve their technical skills in writing for the stage. We will examine how great playwrights captivate a live audience through their mastery of character, story and structure. Students will complete bi-weekly playwriting assignments of 10-12 pages and, ultimately, a one-act play of 30-40 pages. Readings include plays by Beckett, Chekhov, Lorraine Hansberry, Ibsen, Arthur Miller, Tennessee Williams, August Wilson and others. Prerequisite: ARTW 262; or suitable experience in directing, acting or playwriting; or submission of a work sample of 10 pages of dialogue. Not offered in 2010-11.

ARTW B364 Longer Fictional Forms
D. Torday
An advanced workshop for students with a strong background in fiction writing who want to write longer works: the long short story, novella and novel. Students will write intensively, and complete a long story, novel or novella (or combination thereof) totaling up to 20,000 words. Students will examine the craft of their work and of published prose. Prerequisite: ARTW 260 or proof of interest and ability.

ARTW B366 Writing Memoir II
K. Kirchwey
This course will enable students to complete one or two longer memoirs in the semester. The syllabus readings will focus on book-length memoirs by authors such as Frank Conroy, Patricia Hampl, Kathryn Harrison, Mary McCarthy, Vikram Seth, John Edgar Wideman and Tobias Wolff. Discussions of syllabus reading (part of the syllabus reading will be selected by the students) will alternate with discussions of weekly student writing assignments. Prerequisite: ARTW 263 or work demonstrating equivalent expertise. A memoir or personal essay of 5-10 pages in length must be submitted to the English Department to be considered for this course. Not offered in 2010-11.
ARTW B382 Poetry Master Class
K. Kirshner
Four leading contemporary poets who are also accomplished teachers will each conduct a three-week-long unit in this course. Students will have their poems reviewed by each of the visiting poets, who will also present a public reading of their work. Poet-teachers will include Cornelius Eady, Marilyn Hacker, Mary Jo Salter and Gerald Stern. Prerequisite: ARTW B231 or ART W B261 (ARTW B361 is also strongly recommended) or equivalent proficiency in writing text-based verse. A writing sample of 5-7 poems must be submitted to the English Department by the end of the Fall semester to be considered for this course. Not offered in 2010-11.

ARTW B403 Supervised Work
Staff
Students who have had a Creative Writing Major approved through the Independent Major Program will work with a member of the Creative Writing Program faculty on a semester-long 403 (Independent Study) as a final project their senior year. Highly qualified Creative Writing minors and concentrators may petition the program to complete an independent study, subject to the availability of faculty to supervise such projects.

Haverford College currently offers the following courses in creative writing:
ENGL H291 Poetry Writing: A Practical Workshop
ENGL H292 Poetry Writing II: Contemporary Voices
ENGL H293 Fiction Writing: From the Conventional to the Experimental
ENGL H294 Fiction Writing

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 creative and scholarly inquiry within the liberal arts. The Program offers full semester courses in progressive levels of Ballet, Modern and Jazz as well as a full range of technique courses in diverse genres and various traditions. Several performance opportunities are available to students ranging from our Dance Outreach Project, which travels to schools throughout the Philadelphia region, to our Spring Concert for which students work with professional choreographers or reconstructions and perform in our newly renovated theater. We also offer lecture/seminar courses designed to introduce students to dance as a vital area of academic inquiry that examines dance within Western traditions as well as courses that extend or locate themselves beyond those social or theatrical traditions.

Students can take single courses in dance, can minor in dance, or submit an application to major through the independent major program. The core academic curriculum that serves as the basis for our minor or our independent major includes intermediate or advanced technique courses, performance ensembles, dance composition, independent work, and courses in dance research or analysis.

DANCE MAJOR AND MINOR REQUIREMENTS
Requirements for the dance minor are six units of coursework, three required (ARTD 140, 142, and one credit which may be distributed among the following: 230, 231, 330, 331, or 345) and three electives. Students may choose to emphasize one aspect of the field, but must first consult with the dance faculty regarding their course of study. The major requires eleven courses, drawn primarily from our core academic curriculum and including the above three required courses. The major also requires a senior capstone experience and demonstration of basic writing competency in dance.

DANCE COURSES
ARTD B140 Approaches to Dance: Themes and Perspectives
L. Carnes-Haviland
This course introduces students to dance as a multi-layered, significant and enduring human behavior that ranges from art to play to ritual to politics and beyond. It engages students in the creative, critical and conceptual processes that emerge in response to the study of dance. It also explores the research potential that arises when other areas of academic inquiry, including criticism, ethnology, history and philosophy, interact with dance and dance scholarship. Lectures, discussion, film, video, and guest speakers are included.

ARTD B142 Dance Composition I
D. Brick
In this introduction to the art of making dances, an array of compositional tools and approaches is used to evolve and refine choreographic ideas. Basic concepts such as space, phrasing, timing, image, energy, density and partnering are introduced and explored alongside attention to the roles of inspiration and synthesis in the creative process. Improvisation is used to explore choreographic ideas and students learn to help and direct others in generating movement. Discussion of and feedback on weekly choreographic assignments and readings contributes to analyzing and refining choreography. Concurrent attendance in any level technique course is required.

ARTD B230 Intermediate Technique: Modern
ARTD B231 Intermediate Technique: Ballet
ARTD B232 Intermediate Technique: Jazz
Y. Goodman, M. Stortz, M. Cantor, J. Laico, L. Montser
Intermediate level dance technique courses focus on expanding the movement vocabulary, on introducing movement phrases that are increasingly complex and...
demanding, and on further attention to motional dynamics and spatial contexts. Students at this level are also expected to begin demonstrating an intellectual and kinesthetic understanding of these technical challenges and their actual performance. Students will be evaluated on their openness and commitment to the learning process, increased understanding of the technique, and demonstration in class of their technical and stylistic progress as articulated within the field.

**ARTD B240 Dance History I: Roots of Western Theater Dance**
_L. Caruso-Haviland_
This course investigates the historic and cultural forces affecting the development and functions of pre-20th century dance as well as its relationship to and impact on the development of Western culture. It will consider nontheatrical forms and applications, but will give special emphasis to the development of theatre dance forms. It will also introduce students to the varied forms of historic research and the changing modes of documenting dance and to a view of history not only as a linear progression of events but also as process, change and cultural shift. Lecture, discussion, and audiovisual materials. _Not offered in 2010-11._

**ARTD B241 Dance History II: A History of Contemporary Western Theater Dance**
_L. Caruso-Haviland_
The study of the history of dance with particular emphasis on its development in the twentieth century as a Theatre Art form within the broader context of both Western and global art and culture. The course investigates the historic and cultural forces that shape both the form and function of dance as well as its reciprocal relationship to or impact on those same forces. Dance will be considered both chronologically and theoretically as cultural, social, aesthetic, and personal phenomena. In addition to lectures and discussion, the course will include film, video, slides, and some movement experiences. _Not offered in 2010-11._

**ARTD B242 Dance Composition II**
_M. Cantor_
This course builds on work accomplished in Composition I and develops an understanding of and skill in the theory and craft of choreography. This includes deepening movement invention skills; exploring form and structure; investigating sources for sound, music, text and language; developing group design; and broadening critical understanding. Students will work on a selected number of projects and will have some opportunity to revise and expand work. Readings and viewings will be assigned and related production problems will be considered. Concurrent attendance in any level technique course is required.

**ARTD B250 Performing the Political Body**
_L. Caruso-Haviland_
Artists, activists, intellectuals, and ordinary people have used dance and performance to support political goals and ideologies or to perform social or cultural interventions in the private and public spheres. We will focus on how dance is a useful medium for both embodying and analyzing ideologies and practices of power particularly with reference to gender, class, and ethnicity. In addition to literary, anthropological, and political texts, the course includes introductory group improvisation and performance exercises and an in-class mini-performance project; willingness to research topics and to explore movement or other performance approaches is more important than prior training or experience. _Not offered in 2010-11._

**ARTD B254 Nation, Gender and Class in Latin American Dance**
_L. Tome_
Social and theatrical dance in Latin America, focusing on salsa, tango and ballet as samples of native, imported and exported forms practiced on the continent. Highlights how dance embodies issues of nationality, class and gender relevant to Latin American countries. Readings, visual media, class discussions and presentations, guest lectures, field trip, and some instruction in salsa/tango. _Prerequisite: A Dance academic course or a course in Anthropology, Sociology or Hispanic-American Studies, or permission of the instructor. Not offered in 2010-11._

**ARTD B330 Advanced Technique: Modern**
**ARTD B331 Advanced Technique: Ballet**
_L. Mintzner, D. Krensing, R. Malcolm-Naik_
Advanced level technique courses continue to expand movement vocabulary and to introduce increasingly challenging movement phrases and repertory. Students are also expected to begin recognizing and incorporating the varied gestural and dynamic markers of styles and genres, with an eye to both developing their facility for working with various choreographic models and for beginning to mark out their individual movement preferences. There is also a continuing emphasis on cultivating the relationship between an intellectual and kinesthetic understanding and command of technical challenges and their actual performance.

**ARTD B342 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. Concurrent attendance in any level technique course is required.

**ARTD B345 Dance Ensembles**
_M. Cantor_
Dance ensembles are offered in Ballet, Modern, Jazz, and African and are designed to offer students significant opportunities to develop dance technique,
particularly in relationship to dance as a performance art. Students audition for entrance into individual ensembles. Original works choreographed by faculty or guest choreographers or works reconstructed/restaged from classic or contemporary repertories are rehearsed and performed in concert. This course is suitable for intermediate and advanced level dancers. These and additional ensembles, such as Hip-hop, may be taken, instead, for Physical Education credit.

**ARTD B390 Senior Project/Thesis**  
*M. Cantor, L. Caruso-Haviland*  
Majors develop, in conjunction with a faculty advisor, a senior capstone experience that is complementary to and will expand and deepen their work and interest thus far. This can range from a significant research or expository paper to a substantial choreographic work that will be supported in a full studio performance. Students who elect to do choreographic or performance work must also submit a portfolio (10 pages) of written work on dance. Work begins in the Fall semester and should be completed by the middle of the Spring semester. One outside evaluator will be invited to offer additional comment.

**ARTD B403 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.

**DANCE TECHNIQUE**  
In addition to our core technique courses at the intermediate and advanced levels, the Dance Program offers a full range of dance instruction including introductory level courses in ballet, modern, jazz, African, and conditioning as well as techniques developed from other cultural art and social forms including Flamenco, Classical Indian, Hip-hop, Latin Social dance, and Tap, among others. All technique courses may be taken for Physical Education credit but students may elect, instead, to take intermediate and advanced level courses for academic credit.

**Dance Technique Courses**  
**ARTD B230 Intermediate Technique: Modern**  
*Segarra*  
**ARTD B231 Intermediate Technique: Ballet**  
*Lacce*  
**ARTD B330 Advanced Technique: Modern**  
*Caruso-Haviland, Malcolm-Naib*  
**ARTD B331 Advanced Technique: Ballet**  
*Mintzer*  
**ARTD B342 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 PERFORMANCE**  
Dance Ensembles (modern, ballet, jazz, African, and Dance Outreach) are designed to offer students significant opportunities to develop dance technique, particularly in relationship to dance as performance art. Original works or reconstructions from the historic or contemporary repertory choreographed by faculty or guest choreographers are rehearsed and performed. The Dance Outreach Project is a dance performance/education program that tours Philadelphia and suburban schools and community groups. Dance Ensembles are open to intermediate- and advanced-level dancers by audition or permission of the instructor, and may be taken for physical education credit or academic credit. Concurrent attendance in any level technique course is required.

**Dance Performance Courses**  
**ARTD B345 Dance Ensemble**  
*Cantor, Caruso-Haviland, Cruz*  
Dance ensemble offers course sections in African, Ballet, Jazz and Modern Dance.

**ARTD B390 Senior Project/Thesis**  
*Cantor, Caruso-Haviland*  
**ARTD B403 Supervised Work**  
*Cantor, Caruso-Haviland, Malcolm-Naib*  
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 Bryn Mawr and Haverford Colleges’ Theater Program focuses on 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.

**THEATER MINOR REQUIREMENTS**  
Requirements for the minor in Theater are six units of course work, three required (ARTT 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 submit an application to major in Theater through the independent major program.

**THEATER PERFORMANCE**  
Numerous opportunities exist to act, direct, design and 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.

THEATER COURSES

ARTT B150 Introduction to Theater
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.

ARTT B230 Topics in American Drama (Cross-listed as ENGL B230)
G. Hemmeter
Considers American plays of the 20th century, reading major playwrights of the canon alongside other dramatists who were less often read and produced. Will also study later 20th-century dramatists whose plays both develop and resist the complex foundation established by canonical American playwrights and how American drama reflects and responds to cultural and political shifts. Considers how modern American identity has been constructed through dramatic performance, considering both written and performed versions of these plays. Not offered in 2010-11.

ARTT B241 Modern Drama (Cross-listed as ENGL B241)
M. Lord
Not offered in 2010-11.

ARTT B250 Twentieth-Century Theories of Acting
C. Slusar
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.

ARTT B251 Fundamentals of Acting
C. Slusar
An intensive workshop in the methodologies and aesthetics of theater performance, this course is 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 permission of the instructor. The class is offered for a half-unit of credit.

ARTT B253 Performance Ensemble
M. Lord
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.

ARTT B254 Fundamentals of Theater Design
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.

ARTT B255 Fundamentals of Costume Design
H. Iwasaki
Prerequisite: ARTT 252, 254 or 255 or equivalent experience. Not offered in 2010-11.

ARTT B262 Playwriting I (Cross-listed as ARTW B262)
A. Herzog
Not offered in 2010-11.

ARTT B296 Introduction to Medieval Drama (Cross-listed as ENGL B296)
J. Taylor
Not offered in 2010-11.

ARTT B344 Advanced Theater Design
H. Iwasaki
A workshop for those who have completed either Fundamentals of Theater Design, Costume Design or Technical Theater Production or have an equivalent experience, for students to explore their specific area of interest. The focus is on translating the theories into concrete designs. Prerequisites: ARTT 252, 254 or 255 or equivalent experience. Not offered in 2010-11.

ARTT B351 Acting II
C. Slusar
Builds on the methods learned in ARTT 251, with an emphasis on strategies of preparing short solo
performances. In addition to intensive exercises in naturalistic and anti-naturalistic performance techniques, the course provides opportunities for exploration of principles of design, directing, dramaturgy and playwriting as they pertain to specific projects conceived by members of the class. Prerequisite: Permission of instructor. Not offered in 2010-11.

ARTT B353 Advanced Performance Ensemble
M. Lord
An advanced, intensive workshop in theater performance. 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.

ARTT B354 Shakespeare on the Stage
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 sceneworlc culminating in on-campus performances.

ARTT B356 Endgames: Theater of Samuel Beckett
(Cross-listed as ENGL B356)
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 postmodern performance techniques. Not offered in 2010-11.

ARTT B359 Directing for the Stage
J. Christy, 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 in 2010-11.

ARTT B362 Advanced Playwriting (Cross-listed as ARTW B362)
A. Herzog
Not offered in 2010-11.

ARTT B403 Supervised Work
H. Iwasaki, M. Lord

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ASTRONOMY

The astronomy department’s curriculum is centered on studying the phenomena of the extraterrestrial Universe and on understanding them in terms of the fundamental principles of physics. We emphasize student research with faculty members, and upper-level courses contain substantial project- and/or research-based investigation. Our department offers two majors: astronomy or astrophysics. Both majors provide substantial training in quantitative reasoning and independent thinking through work in and out of the classroom. The astronomy major is appropriate for students that desire an in-depth education in astronomy that can be applied to a wide-range of career trajectories, but who do not necessarily intend to pursue graduate study in astronomy. The astrophysics major is appropriate for students who wish to pursue the study of astronomy with additional attention to the physical principles that underlie astrophysical phenomena. The depth of the physics training required for a degree in astrophysics will prepare students who wish to pursue a career in astronomy or astrophysics, or to enter graduate study in astronomy or astrophysics. The department also offers a minor in astronomy.

Although a variety of pathways can lead to a major in the department, prospective astronomy or astrophysics majors are advised to study physics (Physics 105 and 106, or 101 and 102, or Bryn Mawr equivalents) beginning in their first year, and to enroll in Astronomy 205/206 and Physics 213/214 in their sophomore year. It is also recommended to take Astronomy/Physics 152 in the second semester of the first year.

The department offers three courses, Astronomy 101a, Astronomy 112, 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 152, 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.

Students may major in astronomy or astrophysics, but not both. Astrophysics majors may not double major in either physics or astronomy, nor can they minor in either physics or astronomy. Astronomy majors may pursue a double major or a minor in physics. A concentration in scientific computing is available for astronomy and astrophysics majors. The department coordinator for this concentration is Beth Willman.

ASTRONOMY FACULTY
Bettye and Howard Marshall Professor of Natural Sciences R. Bruce Partridge, Emeritus

John Farnum Professor of Astronomy Stephen P. Boughn (on leave 2010-11)
Assistant Professor of Astronomy Beth Willman
Visiting Instructor of Astronomy Scott Engle

ASTRONOMY MAJOR REQUIREMENTS
1. Physics 105 (or 101), Physics 106 (or 102), Physics 213, Physics 214.
2. Two mathematics courses; Mathematics 121 and all 200 level or higher mathematics courses can be used to satisfy this requirement.
3. Astronomy 205, Astronomy 206, four 300-level astronomy courses, one of which may be replaced by an upper-level physics course.
4. Astronomy 404, which may be replaced by approved independent research either at Haverford or elsewhere.
5. Written comprehensive examinations.

Bryn Mawr equivalents may be substituted for the non-astronomy courses. Astronomy/Physics 152 is recommended but not required.

ASTROPHYSICS MAJOR REQUIREMENTS
1. Physics 105 (or 101), Physics 106 (or 102), Physics 213, Physics 214, Physics 211 (usually taken concurrently with Physics 213).
2. Two mathematics courses; Mathematics 121 and all 200 level or higher mathematics courses can be used to satisfy this requirement.
3. Astronomy 205, Astronomy 206, and any two 300 level astronomy courses.
5. The Senior Seminar, Physics 399, including a talk and senior thesis on research conducted by the student. This research can be undertaken in a 400-level research course with any member of the Physics or Astronomy departments or by doing extracurricular research at Haverford or elsewhere, e.g., an approved summer research internship at another institution. The thesis is to be written under the supervision of both the research advisor and a Haverford advisor if the research advisor is not a Haverford faculty member.

Bryn Mawr equivalents may be substituted for the non-astronomy courses. Astronomy/Physics 152 and Physics 308 are recommended but not required.

ASTRONOMY MINOR REQUIREMENTS
1. Physics 105 (or 101); Physics 106 (or 102).
2. Astronomy 205; Astronomy 206; one 300 level astronomy course.
Astronomy/Physics 152 is recommended but not required.

ASTRONOMY REQUIREMENTS FOR HONORS
All astronomy and astrophysics majors are regarded as candidates for Honors. For both majors, the award of Honors will be made in part on the basis of superior work in the departmental courses and in certain related courses. For astronomy majors, the award of Honors will additionally be based on performance on the comprehensive examinations, with consideration given for independent research. For astrophysics majors, the award of Honors will additionally be based on the senior thesis and talk.

ASTRONOMY COURSES

101 Astronomical Ideas NA
B. Willman
Fundamental concepts and observations of modern astronomy, such as the properties of planets, the birth and death of stars, and the properties and evolution of the Universe. Not intended for students majoring in the physical sciences. Lottery: 12 spaces for Freshmen; 20 spaces for Sophomores, Juniors, and Seniors.

112 Survey of the Cosmos NA/QU
Staff
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. No prerequisites but Astronomy 101 is useful. Typically offered in alternate years.

114 Planetary Astronomy NA
Staff
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. Typically offered in alternate years.

152 Freshman Seminar in Astrophysics NA (Cross-listed in Physics)
B. Willman
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). Typically offered every Spring.

205 Introduction to Astrophysics I NA
Staff
General introduction to astronomy including: the structure and evolution of stars; the properties and evolution of the solar system including planetary surfaces and atmospheres; exoplanets; and observational projects using the Strawbridge Observatory telescopes. Prerequisite: Physics 105 and 106 & Math 114 or equivalent. Typically offered every Fall.

206 Introduction to Astrophysics II NA
B. Willman
Introduction to the study of: the structure and formation of the Milky Way galaxy; the interstellar medium; the properties of galaxies and their nuclei; and cosmology including the Hot Big Bang model. Prerequisite: Astronomy 205a and Math 114b or equivalent or consent. Typically offered every Spring.

341 Advanced Topics: Observational Astronomy NA
B. Willman
Prerequisite: Astronomy 205. Typically offered in alternate years.

342 Advanced Topics: Modern Galactic Astronomy NA
B. Willman, R. Fadel
Prerequisite: Astronomy 205 and 206. Typically offered in alternate years.

343 Advanced Topics: Stellar Structure and Evolution NA
S. Boughn
Prerequisite: Astronomy 205 and Physics 214. Typically offered in alternate years.

344 Advanced Topics: Cosmology NA
S. Boughn
Prerequisite: Astronomy 206b. Typically offered in alternate years.

404 Research in Astrophysics NA
B. Willman
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.

480 Independent Study NA
B. Willman
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 206.
ATHLETICS

Haverford College’s Athletic Department is committed to the belief that physical education is an integral component of each student’s liberal arts education and offers a wide range of athletic opportunities for both men and women – Intercollegiate Varsity Teams, Competitive Club Teams, Intramural Programs, Instructional Classes, and Recreational Activities – designed to meet the diverse and changing interests of its student body within the college’s mission of excellence and individual growth. All Haverford students must complete a six-quarter athletic requirement during their first two years of college.

ATHLETICS STAFF

Wendall Smith (Director of Athletics)
Colin Bathory (Men’s Lacrosse)
David Beccaria (Baseball)
Amy Bergin (Volleyball)
William C. Brady (Men’s Soccer)
Melissa Cruice (Assistant Athletic Trainer / Compliance Coordinator)
Thomas Donnelly (Men’s Cross-Country, Track & Field)
Jamie Gluck (Women’s Soccer)
Jim Kenyon (Facilities Manager)
Kamran Rashid Khan (Cricket)
Matthew Kirsch (Sports Information Director)
Ann Koger (Women’s Tennis)
Damon Leedale-Brown (Men’s & Women’s Squash)
Curt Mauger (Head Athletic Trainer)
Bobbi Morgan (Women’s Basketball)
Michael Mucci (Men’s Basketball)
Gregg Petcoff (Senior Sports Information Director)
Francis Rizzo (Women’s Cross-Country, Track & Field)
Sean Sloane (Men’s Tennis)
Christopher Spencer (Men’s & Women’s Fencing)
Cory Walts (Fitness Center Director / Strength and Conditioning Coach)
Jennifer Ward (Softball)
Julie Shaner Young (Women’s Lacrosse)
TBA (Field Hockey)

INTERCOLLEGIATE VARSITY PROGRAM

The Haverford College Athletic Department is committed to integrating athletics within the educational mission of the college and creating and supporting a culture of success which encourages and supports each student-athlete’s pursuit of both academic and athletic excellence. While maintaining a balance between academic and athletic achievement, each coach seeks to establish a positive competitive environment which will foster the intellectual, physical and personal development of each student-athlete based upon the values of sportsmanship, integrity, leadership, trust, respect, loyalty and concern for others. Policies and personnel reflect the Athletic Department’s desire to create an athletic program which will be a source of pride and enthusiasm for all members of the Haverford College Community. The athletic program boasts a broad-based 23 varsity teams: men’s varsities in baseball, basketball, cricket, cross-country, fencing, lacrosse, soccer, squash, tennis, indoor track and outdoor track; women’s varsities in basketball, cross-country, fencing, field hockey, lacrosse, soccer, softball, squash, tennis, indoor track, outdoor track and volleyball. Junior varsities are organized for sports when interest and appropriate competition is present.

CLUB SPORT PROGRAM

The Haverford College Athletic Department will work collaboratively with Student Activities to provide facilities and guidance in order to facilitate the students’ training and competitive goals at the club level. Currently recognized Haverford Club Sports are: men’s and women’s badminton, men’s and women’s crew, men’s and women’s golf, men’s rugby, women’s soccer, men’s volleyball and men’s and women’s ultimate frisbee.

INTRAMURAL, INSTRUCTIONAL AND RECREATIONAL PROGRAMS

The Haverford College Athletic Department will provide facilities, guidance, instruction, and other resources to create, support, and maintain a broad based offering of programs to promote the health and fitness needs throughout Haverford’s student, faculty, and staff community. The Haverford College Athletic Department will encourage each student’s involvement in physical activities in order to promote and establish a foundation for a lifelong commitment to and involvement in fitness and health. Intramural leagues in soccer, basketball and softball are held yearly while other leagues are sponsored, when needed, to meet student interest. 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.
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.

**BIOCHEMISTRY AND BIOPHYSICS FACULTY**

*Professor of Chemistry* Karin Åkerfeldt, Concentration Advisor  
*Professor of Biology* Robert Fairman, Concentration Advisor  
*Professor of Biology* Jennifer Punt, Concentration Advisor  
*Professor of Chemistry* Robert C. Scarrow, Concentration Advisor  
*Professor of Physics* Walter F. Smith, Concentration Advisor  
*Associate Professor of Physics* Suzanne Amador Kane, Concentration Advisor  
*Assistant Professor of Chemistry* Casey H. Londergan, Concentration Advisor

**BIOCHEMISTRY AND BIOPHYSICS 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.

### Biochemistry/Biophysics Core Curriculum (required of all):

1. Biology 200 (cell biology; full year course).
2. One semester of Biology 300 (laboratory in biochemistry and molecular biology, cross-listed as Chemistry 300).
3. Chemistry 112 (chemical dynamics) or former courses 101 or 105.
4. One semester Mathematics course numbered 114 (calculus II) or higher.
5. 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 Major with a Biochemistry Area of Concentration:

Biology majors desiring a Biochemistry Area of Concentration must complete the Biochemistry/Biophysics core curriculum (see above) as well as the following additional requirements. Courses meeting concentration requirements may be used for the biology major in lieu of one semester of Biology 300.

1. Chemistry 111 (chemical structure and bonding) or 115, Chemistry 220 and 221 (organic chemistry).
2. Chemistry 304 (statistical thermodynamics and kinetics) or 305 (quantum chemistry).
3. Chemistry 301 or 302 (laboratory in chemical structure and reactivity).
4. Two half-semester advanced courses from the following list: Chemistry 351 (bioinorganic chemistry), 352 (topics in biophysical chemistry) and 357 (topics in bioorganic chemistry); topics courses may be taken multiple times with different topics.
5. Two half-semester courses from the following list: Biology 301 (genetics), 302 (cell architecture), 303 (structure and function of macromolecules), 304 (biochemistry: metabolic basis of disease), and 306 (inter- and intra-cellular communication). One of the electives must be 301 or 303.

#### Biology Major with a Biophysics Area of Concentration:

Biology majors desiring a Biophysics Area of Concentration must complete the Biochemistry/Biophysics core curriculum (see above) as well as the following additional requirements. Courses meeting concentration
requirements may be used for the biology major in lieu of one semester of Biology 300.
1. Mathematics 121 (calculus III) or 216 (advanced calculus).
2. Physics 213 (waves and optics), 211 (laboratory in electronics and waves; half-credit course), and 326 (advanced physics laboratory).
3. Physics 214 (quantum mechanics) or Chemistry 305 (quantum chemistry).
4. Physics 303 (statistical physics) or Chemistry 304 (statistical thermodynamics and kinetics).
5. Physics 320 (introduction to biophysics), or a similar course approved by the concentration coordinating committee.
6. Two half-semester courses from the following list: Biology 301 (genetics), 302 (cell architecture), 303 (structure and function of macromolecules), 304 (biochemistry: metabolic basis of disease), and 306 (inter- and intra-cellular communication). One of the electives must be 301 or 303.

Chemistry Major with a Biochemistry Area of Concentration:
Chemistry majors desiring a Biochemistry Area of Concentration must complete the Biochemistry/Biophysics core curriculum (see above) as well as the following additional requirements. Courses meeting concentration requirements may be used for the chemistry major in lieu of Chemistry 302.
1. Two half-semester courses from the following: Chemistry 351 (bioinorganic chemistry), 352 (topics in biophysical chemistry) and 357 (topics in bioorganic chemistry); topics courses may be taken multiple times with different topics.
2. Two half-semester courses from the following list: Biology 301 (genetics), 302 (cell architecture), 303 (structure and function of macromolecules), 304 (biochemistry: metabolic basis of disease), and 306 (inter- and intra-cellular communication). One of the electives must be 301 or 303.

Physics Major with a Biophysics Area of Concentration:
Physics majors desiring a Biophysics Area of Concentration must complete the Biochemistry/Biophysics core curriculum (see above) as well as either Physics 320 (introduction to biophysics) or two half-semester courses from the following list: Biology 301 (genetics), 302 (cell architecture), 303 (structure and function of macromolecules), 304 (biochemistry: metabolic basis of disease), 306 (inter- and intra-cellular communication) and 309 (molecular neurobiology). 300-level biology courses meeting concentration requirements may be used for the physics major in lieu of one or two of the six required 300-level physics courses.
BIOLOGY

Our understanding of the structure and function of living organisms at the cellular and molecular levels is evolving rapidly. The traditional lines that used to demarcate the areas of genetics, biochemistry, microbiology, cell biology and physiology have dissolved in the research laboratory as well as in clinical practice. This necessitates an approach to the teaching of biology that emphasizes the common molecular basis of these disciplines and the involvement of students in the process of discovery so that they have the conceptual tools to both follow and contribute to the rapid advance of knowledge and understanding.

Students interested in learning about biology but not intending to major in this field can enroll in our Perspectives in Biology courses. These are appropriate for students from all backgrounds and disciplines and are separate from the major track.

Students interested in majoring in Biology must take a natural science course (which includes a laboratory experience) at Haverford, Bryn Mawr or Swarthmore College in their first year; appropriate choices include chemistry, physics, geology or computer science. The first course in the Biology major curriculum is Cell Structure and Function, taken in the sophomore year. The junior year curriculum consists of two laboratory courses and a suite of half-semester lecture courses. In the senior year, students participate in a research tutorial pursuing original research and reading and reporting on the current literature under the supervision of a faculty mentor, culminating in a written senior thesis. Seniors also enroll in an advanced seminar course 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. Senior Department Studies is a half credit course in which seniors participate in an external seminar program and present their research to the Department.

Several interdisciplinary Areas of Concentration are supported within the Biology major, including Biochemistry, Biophysics, Scientific Computing and Neural and Behavioral Sciences. 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 the full requirements of the biology major, including the senior thesis. At the present time, the Biology Department does not offer a minor.

Students may substitute Bryn Mawr biology courses for certain Haverford requirements with prior faculty approval. However, Bryn Mawr Biology 100-level classes cannot be substituted for the major requirement of Biology 200a and 200b.

Students interested in pursuing careers in medicine, public health, or related fields should consult with the Pre-Health Advisor regarding their course selections.

BIOLOGY FACULTY
Professor Slavica Mitic, Emeritus
Professor Melvin Santer, Emeritus
Elizabeth Ufford Green Professor of Natural Sciences
Judith A. Owen
Professor Robert Fairman
Professor Karl Johnson, Chair
Professor Philip Meneely
Professor Jennifer Punt
Associate Professor Iruka Okeke
Assistant Professor Rachel Hoang
Assistant Professor Andrea Morris
Lab Instructor Katherine Heston

BIOLOGY MAJOR REQUIREMENTS
a. Both semesters of Biology 200a and 200b.
Successful completion of one natural science course (which includes a laboratory experience) at Haverford, Bryn Mawr or Swarthmore College is a prerequisite for Biology 200a.

b. A minimum of one semester of chemistry (with associated lab).

c. At least one semester of advanced coursework (200 level or higher) in a natural sciences department other than Biology. Courses cross-listed in Biology may not be counted toward this requirement.

d. Two semesters of the junior laboratory, Biology 300a and 300b.

e. Four half-semester advanced topics courses, at least two of which are selected from a “core” (Biology 301-306 and 312). Occasionally, an upper-level course from Bryn Mawr or Swarthmore may substitute for one or two of the half semester lecture courses, but only with the specific permission of the student’s major advisor.

f. One half-semester seminar course in the Haverford Biology Department at the 350-level (chosen from Biology 350-363): no substitutions permitted. Students are encouraged to take more than one of these courses to enhance their Biology experience.

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g. A minimum of two 400 level Senior Research Tutorial credits, generally taken over both semesters of the senior year, including active participation in weekly lab meetings and submission of a notebook and a thesis describing the progress and results of the project. The tutorial may be taken for single or double credit each semester.

h. Senior Department Studies, Biology 499.

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 (NBS); and Scientific Computing. 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.

In addition to the required courses, the Biology Department strongly recommends a year of physics, a course in probability and statistics, and advanced coursework in chemistry (through Physical Chemistry or equivalent).

BIOLOGY COURSES

221 The Primate Origins of Society SO (Cross-listed in Psychology)
S.Perloe
Prerequisite: An intro course in one of the following: Anth, Biol, Psy, or Soc or consent.

PERSPECTIVES IN BIOLOGY COURSES FOR STUDENTS NOT INTENDING TO MAJOR IN THE SCIENCES

No prerequisites. Not open to students who have taken HC Bio 200 or BMC Biology 100 level courses.

122 Writing in Public Health NA (Cross-listed in Writing Program)
J.Owen
Prerequisite: Open only to first-year students as assigned by the Director of College Writing. Satisfies the first year writing requirement. Does not count toward the major.

123 Perspectives in Biology: Scientific Literacy NA
K.Johnson
An introduction to current topics through reading and discussion of articles from the primary and popular literatures. Our texts will include Science, Nature and The Science Times. We will follow new breakthroughs and discoveries as they are reported 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 30. Prerequisite: Lottery preference to Classes ’13 & ’14. Students must register for both 123d and 125e to be considered for a space in the class. Does not count toward the major.

124 Perspectives in Biology: Tropical Infectious Disease NA (Cross-listed in African and Africana Studies)
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 waterborne, vaccine-preventable and zoonotic (animal transmitted) infections. Course participants 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 30. Prerequisite: Lottery preference to Freshmen and Sophomores. Students must register for both Perspectives classes paired in a given semester to qualify for the single lottery that will be run for both classes. Does not count toward the major.

125 Perspectives in Biology: Genetic Rôle 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 or 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 30. Prerequisite: Lottery preference to Classes ’13 and ’14. Please see lottery rules listed under description for Bio 123e. Does not count toward the major.

126 Passion, Proof and Persuasion: The Nature of Scientific Inquiry NA (Cross-listed in Writing Program)
J.Owen
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. Prerequisite: Open only to first-year students as assigned by the Director of College Writing. Does not count toward the major.
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 30. Prerequisite: Lottery preference to Freshmen and Sophomores. Students must register for both Perspectives classes paired in a given semester to qualify for the single lottery that will be run for both classes. Does not count toward the major.

128 Perspectives in Biology: How Do I Know Who I Am? NA
J.Owen
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 30. Prerequisite: Lottery preference to Freshmen and Sophomores. Students must register for both Perspectives classes paired in a given semester to qualify for the single lottery that will be run for both classes. Does not count toward the major.

129 Perspectives in Biology: The Vexations of Vaccines NA
R.Hoang
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 smallpox by Chinese and Turks in the 15th century, vaccination is now the cornerstone of preventative health programs and has eradicated some diseases worldwide. In this course, we will discuss the history of vaccination, its biological and cellular bases, and the difficulties involved in generating vaccines for current scourges. Finally, we will critically evaluate the controversies surrounding vaccination in some communities. One half semester. Enrollment limited to 30. Prerequisite: Lottery preference to Freshmen and Sophomores. Students must register for both Perspectives classes paired in a given semester to qualify for the single lottery that will be run for both classes. Does not count toward the major.

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 origin 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 30. Prerequisite: Lottery preference to Freshmen and Sophomores. Students must register for both Perspectives classes paired in a given semester to qualify for the single lottery that will be run for both classes. Does not count toward the major.

OTHER COURSES (NOT PART OF THE MAJOR TRACK)

187 Scientific Computing: Discrete Systems NA (Cross-listed in Computer Science)
D.Wonnacott/P.Meneely
Prerequisite: One semester of any (social or natural) science is recommended. Offered occasionally.

217 Biological Psychology NA (Cross-listed in Psychology)
W.Sternberg
Prerequisite: An intro course in Psyc or Biol or consent.

220 Unlocking Key Concepts in Biology NA
R.Hoang
A course for BIOL 200 students designed to enhance problem solving skills and data analysis in areas of genetics, biochemistry, and cell and molecular biology. The class meets once a week through the semester to work through problems related to material covered concurrently in BIOL 200. Enrollment by invitation from the Department. Prerequisite: Concurrent enrollment in BIOL 200 and consent.

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

200 Cell Structure and Function NA
P.Meneely/K.Johnson/K.Heston
Three hours of lecture and one laboratory period per week. A one-year course in cellular and molecular biology. Biology 200 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 and molecular biology, biochemistry and genetics. Enrollment per lab section is limited to 32. Prerequisite: Successful completion of one Natural Science course (which includes laboratory experience) at Haverford, Bryn Mawr, or Swarthmore.

300 Laboratory in Biochemistry and Molecular
Biology NA (Cross-listed in Chemistry)  
*R.Fairman/J.Punt/J.Owen/Staff*  
One lecture and two laboratory periods per week. An introduction to the application of modern experimental approaches in the study of interesting biological questions. Techniques employed are drawn from: 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:* Biol 200 or consent.

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 equivalent or consent.

302 Cell Architecture NA  
*K.Johnson*  
An examination of cellular structure and function. Topics include the cytoskeleton and endomembrane systems, with particular emphasis upon the dynamic qualities of living cells. *Prerequisite:* Biology 200 or consent.

303 Structure and Function of Macromolecules NA  
*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:* Biol 200, & Chem 221 or equiv to be taken previously or concurrently, or consent.

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:* Biol 200, & Chem 221 or equiv to be taken previously or concurrently, or consent.

306 Inter- and Intra-Cellular Communication NA  
*Staff*  
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 equiv or consent.

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 cell determination and differentiation are explored. *Prerequisite:* Biology 200 and 301 or consent of instructor.

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

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

310 Molecular Microbiology NA  
*I.Okeke*  
A study of prokaryotic biology with emphasis on cell structure, gene organization and expression, 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:* Biol 200 or consent.

312 Development & Evolution NA  
*R.Huang*
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, considering how these 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**

**Staff**

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.

331 Computational Genomics NA/QUI

**P.Meneely**

Complete DNA sequence information is now available for hundreds of species. Computer-based comparisons of genes or genomes between different species are routine for many biological investigations. This course uses a lecture and workshop format to introduce students to the evolutionary and computational basis for such comparisons, as well as the statistical tools to evaluate these comparisons. **Prerequisite:** Biol 301 required; Biol 303 recommended; some familiarity with statistics and probability. Permission of instructor required.

332 Biological Networks and Systems NA/QUI

**P.Meneely**

Biological molecules interact in complex ways. Genomic analysis has identified many of the genes and gene products that comprise the component parts of an organism. This course discusses how the interactions among these molecules are studied and what properties of the biological system emerge from the complex networks of interactions. **Prerequisite:** Biology 301 or equivalent or consent.

**ADVANCED HALF-SEMESTER COURSES IN MOLECULAR, CELLULAR, AND DEVELOPMENTAL BIOLOGY**

350 Pattern Formation in the Nervous System NA

**Staff**

A fundamental process in the development of the vertebrate nervous system is the partitioning of the nervous system into distinct domains of cellular differentiation, for example the brain vs. the spinal cord. This seminar course will explore, through a series of student research article presentations, the molecular processes by which patterning 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. Enrollment limited to 15 students. **Prerequisite:** Biology 309 or consent.

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, mechanomeric engines, biosynthetic machinery and the assembly and regulation of cytoskeletal arrays. These systems provide novel insights into how work is accomplished (and regulated) in a nano-scale environment and serve as models for the development of nanotechnologies for science and medicine. Enrollment limited to 15 students. **Prerequisite:** Biology 302 or consent of instructor.

352 Cellular Immunology NA

**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. Enrollment limited to 15 students. **Prerequisite:** Biol 300b, 308, or consent.

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 molecular 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. Enrollment limited to 15 students. **Prerequisite:** Biology 200 and one semester of 300 level Biology or consent of instructor.

**357 Topics in Protein Science NA**
**R.Fairman**
This course will study current topics in protein science using the primary research literature. We will particularly focus on these issues as they relate to function. Topics may include protein-DNA interactions, protein:protein interactions, and chaperones and their role in protein folding, protein aggregation and disease. Enrollment limited to 15 students. **Prerequisite:** Biology 200 and 300b or consent of instructor.

**358 Developmental Genetics NA**
**R.Huang**
This course will examine the structure of sex chromosomes, and how differences in sex chromosome constitution give rise to the 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**
**Staff**
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 diseases. 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; and molecular genetics in diagnosis and treatment of cancer. Enrollment limited to 15 students. **Prerequisite:** Biology 300 or consent.

**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. Enrollment limited to 15 students. **Prerequisite:** Biology 200 and 300b or consent of instructor.

**363 Stem Cell Biology NA**
**S.Emerson**
This course will develop an understanding of the molecular mechanisms that regulate stem cell self-renewal and differentiation. These issues will be examined by exploring the primary literature on topics such as hematopoietic (bone marrow) stem cells and their use as therapeutic agents. Enrollment limited to 15 students. **Prerequisite:** Biology 300b or consent.

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

**402 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.

**403 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. **Prerequisite:** Consent of the instructor.

**404 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.

**407 Senior Research Tutorial in BioArchitecture**
NA
K. Johnson
Studies of structure in living systems and applications in nanotechnology. Approaches employed include genetic analysis, biochemistry, molecular biology, microscopy and imaging, bioengineering and synthetic biology. Laboratory work is supplemented by readings from the current literature. Prerequisite: Consent of instructor.

408 Senior Research Tutorial on Life and Death Decisions of Developing Lymphocytes NA
J. Punt
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 the T cell developmental stage. Immature T cells (thymocytes) respond to strong T cell receptor signals by dying, while their direct descendents, mature T cells, respond to the very same stimulation by proliferating. We are working to determine the molecular reasons behind this difference in responsiveness. By identifying and comparing the intracellular signals experienced by immature and mature T cells we are working to solve this developmental mystery. Laboratory work is supplemented by readings from current literature. Prerequisite: Consent of the instructor.

409 Senior Research Tutorial in Molecular Neurobiology NA
A. Morris
The developing nervous system of vertebrate embryos rapidly becomes patterned into distinct domains of neural cell differentiation. In order to identify what genes are responsible for the establishment of this pattern, a variety of molecular screening techniques are employed. The expression pattern of these genes is then determined by in situ hybridization and their function analyzed in vivo and in vitro, using microinjection and biochemical assays. Laboratory work is supplemented by readings from the current literature. Prerequisite: Consent of instructor.

410 Senior Research Tutorial at Off-Campus Research Labs NA
K. Johnson
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.

411 Senior Research Tutorial on The Control of Cell Shape: Molecular & Evolutionary Approaches NA
R. Huang
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 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.

412 Senior Research Tutorial in Hematopoetic Stem Cell Biology NA
S. Emerson
The development and maintenance of vertebrate blood is tasked to rare quiescent multipotent hematopoetic stem cells, which must balance programs for self-renewal and differentiation. This balance is determined both intrinsically through a number of different signaling pathways, including the NF-κ transcription factor, and extrinsically by the microenvironmental niche in which they reside. We employ a combination of cellular and molecular techniques to investigate these two aspects of hematopoetic stem cell regulation. Laboratory work is supplemented with readings from the current literature. Prerequisite: Consent of instructor.

480 Independent Study NA
K. Johnson
Prerequisite: Consent of instructor.

493 Interdisciplinary Examinations of Biologically Significant Research NA (Cross-listed in Chemistry and Physics and Psychology)
P. McNeely
Seminar for HHMI Scholars and any junior or senior science major committed to an interdisciplinary approach to the study of original research. Prerequisite: Consent of Instructor.

499 Senior Department Studies NA
K. Johnson
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. Prerequisite: Consent of Dept.

COURSES OFFERED AT BRYN MAWR COLLEGE
Multiple upper level biology courses at Bryn Mawr can satisfy certain requirements for the Haverford Biology major, with consent of the major advisor.
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, K-12 education as well as a number of other professions.

The major program recognizes that chemistry as a discipline is a core science but is also intertwined in a number of other fields, including physics, biology and math/computer science. In fact, some of the most exciting areas in science today are found in the interdisciplinary fields of chemical physics, chemical biology, theoretical/computational chemistry, environmental studies and materials science. The chemistry major allows the student flexibility in designing a program that can be directed toward such interdisciplinary areas or to one of the more traditional areas of organic, physical, or inorganic chemistry. In addition, the chemistry department is one of the sponsor departments of the concentrations in scientific computing and biochemistry and biophysics.

This academic year is a transitional one for the Chemistry Department as we inaugurate four new courses for our first year program. Students have four possible entry points into the program. The particular entry point or placement depends on the level of preparation of the individual student and is determined by the combination of results from a placement questionnaire, secondary school records, standardized and advanced placement tests, and individual consultation. All four starting points can result in the completion of the chemistry major program. For the first entry point, no previous chemistry experience is required and students enter the first year of the general chemistry sequence with a Foundations course (Chem 110) followed by the regular introductory courses (Chem 111 and Chem 112). The second entry point is for those students with a typical good high school chemistry preparation. They will take two semesters of introductory course work (Chem 111 and 112). The third entry point is for students with an excellent high school chemistry background who can omit Chem 111 and take only Chem 112 along with a new half credit investigative lab course, Chem 115, which introduces spectroscopy. These advanced first-year students have an extra course slot available in their first semester that might be used for a mathematics and/or a physics course. All of these students will continue the following year with a new organic sequence of courses (starting in academic year 2011-2012).

Finally, the fourth option available to a few students with an excellent high school chemistry background is to take organic chemistry (220, 221) in the first year, continuing with junior-level chemistry in the sophomore year.

All students as seniors are required to participate in a research program for advanced course credit, and first to third year students with strong interests in Chemistry are able to get involved with research throughout 260 level courses. This research experience nurtures talents and abilities, encourages independent problem solving and builds on concepts and principles discussed in prior formal class work. It also can help the student define choices for careers after graduation. Summer research experience is particularly encouraged. The summer experience provides a background of focused work that can greatly enrich the senior thesis research experience. In recent years, fifteen to twenty students 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 international study abroad programs at Oxford University (England), University College London (England), University of Melbourne (Australia) 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, Massachusetts.

CHEMISTRY FACULTY

John Farnum Professor of Chemistry Colin MacKay, Emeritus
Professor Claude E. Wintner, Emeritus
Professor Karin Åkerfeldt
Professor Terry Newirth, Chairperson
Professor Robert Scarrow
Associate Professor Frances Rose Blase (on leave 2010-2011)
Associate Professor Alexander Norquist (on leave 2010-2011)
Assistant Professor Casey Londergan
Assistant Professor Joshua Schrier
Assistant Professor Helen White
Visiting Professor Charles Lerman
Visiting Professor Lennart Sjölin
General Chemistry Laboratory Instructor Dennis Collin
Organic Chemistry Laboratory Instructor Michael J. Kukla

CHEMISTRY MAJOR REQUIREMENTS
MAJOR REQUIREMENTS
Each student confers with the major advisor to plan a program that takes into account specific interests and career aims. The major requirements have been designed to meet the educational needs of students interested in careers in chemistry, biochemistry, engineering, medicine, K-12 education, business, law, and other professions. An American Chemical Society (ACS) certified major requires additional coursework and is recommended for students interested in pursuing graduate study in science and engineering, or who wish to directly enter the job market in a chemistry related field after graduation.

CHEMISTRY MAJOR
The core required courses are: Chemistry 111 or 115, 112, 220, 221, 301, 302, 304 or 305, at least one semester of 380 or 36x (research tutorials), one semester of inorganic chemistry (Chemistry 320, 0.5 semester) and one half semester course from the following: 351, 353 and 354 and 391 (senior seminar). Chemistry majors must also complete one semester of additional advanced chemistry courses numbered 304-358; one semester of mathematics courses numbered 114 (calculus II) or higher; and either introductory physics (Physics 101/102 or 105/106) or both semesters of Biology 200.

CHEMISTRY MAJOR WITH BIOCHEMISTRY CONCENTRATION
Biochemistry concentrators are allowed to substitute either semester of Biology 300 for Chemistry 302. (Chemistry 301 (Superlab I) is required for all chemistry majors and cannot be replaced.)
Concentrators also must take one semester of an advanced biology course (see the Biochemistry and Biophysics section of this catalog for a current list of advanced Biology courses), and two half semester advanced chemistry courses with a biological emphasis. These include Chem 351 (0.5 semester, bioorganic), Chem 352 (0.5 semester, biophysical) or Chem 357 (0.5 semester, biorganic). Biology 200a, 200b, Physics 101/102 or 105/106 are required for biochemistry concentrators.

CHEMISTRY MAJOR WITH SCIENTIFIC COMPUTING CONCENTRATION
See the Computer Science page for details on this concentration. In the chemistry department, which can contribute to this concentration are Chem 304, Chem 305, and Chem 362; students are also encouraged to enroll in Chem B322 when offered. The department coordinator for this concentration is Joshua Schrier.

ACS-CERTIFIED CHEMISTRY MAJOR
In order to receive ACS-certification, students must satisfy all of the major requirements (with or without a biochemistry concentration) above and as an additional course must complete the second semester of physical chemistry (304 or 305). The following requirements also apply for ACS-certification and may be met with the same courses used to meet major requirements: Physics 101/102 or 105/106 and at least one semester of biochemistry. This last requirement may be satisfied by Biology 200 (second semester), by Bryn Mawr Chemistry 242, or by two half-semester courses of Chemistry 351, 352, or 357.

CHEMISTRY MINOR REQUIREMENTS
The required courses are: Chemistry 111 or 115, 112, 220, 221, 304 or 305, and one semester of advanced chemistry chosen from courses numbered between 301 and 369. Students who begin by placement in Chemistry 220 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 391) is not required, but attendance at seminars, including the Philips Visitor Series in Chemistry, is strongly recommended.

CHEMISTRY 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.

CHEMISTRY COURSES

110 Fundamentals of Chemistry NA/QU
K.Akerfeldt/D.Collin
Topics include dimensional analysis, atomic structure, nuclear chemistry, Lewis structures, behavior of gases, stoichiometry in solid, liquid and gas phase reactions, thermochemistry, and intermolecular forces. This course does not count toward the chemistry major but will serve as a foundation to Chemistry 111 (Structure and Bonding) and Chemistry 112 (Dynamics) which are required for the major. Prerequisite: No high school chemistry or placement by department. Does not count toward the major. Typically offered every Fall.

111 Chemical Structure and Bonding NA
R.Scarrow/D.Collin
Structure and bonding in molecules starting from nuclear and electronic structure of atoms. This course introduces the theories of chemical bonding that rationalize and predict the structures and bulk properties of molecules and materials. It also introduces modern instrumental and computational methods used to study chemical structure and bonding. Prerequisite: High school Chemistry course and placement by the Department. Three-hour lab meets every other week. Typically offered every Semester.
112 Chemical Dynamics NA/QU  
_H. White/D. Collins_
An introduction to chemical thermodynamics, equilibrium, electrochemistry and kinetics. Microscopic properties are used to develop basic chemical concepts of energy, enthalpy, entropy, and the Gibbs Energy, and their applications to thermochemistry, equilibria, and electrochemistry. Chemical kinetics, reaction mechanisms, and applications to chemical problems are also discussed. 3 Hour Lab, meets every other week. _Prerequisite:_ High school Chemistry and Placement by the Department. Three-hour lab meets every other week. _Typically offered every Semester._

115 Chemical Structure Inquiry Lab NA  
_C. Londergan_
Students will become acquainted with modern methods of chemical structure analysis as they discover the identity of unknown chemical compounds via self-proposed experiments. _Prerequisite:_ Placement by the department. Students placed in this course generally have a 4, or more frequently a 5, on the Chem AP as well as high SAT scores. Our placement in this lab course would be similar to our current placement in our advanced one semester general chemistry course, Chem 105. Students placed in this course would also be required to take our new Chemical Dynamics course before progressing to the 200 level courses. _Typically offered every Fall._

151 Case Studies in Chemistry NA  
_C. Lerman_
This course is intended for non-science majors. It will explore aspects of the structure & properties of atoms and molecules, and how they account for observable phenomena within the topics of light, radiation, and color. Illustrations will be drawn from various fields of science and everyday life. Concepts will be developed both qualitatively and quantitatively. Not open to students with prior college-level chemistry. _Does not count toward the major._

154 Nanotechnology NA  
_J. Schrier_
Three lectures. Directed to non-science majors. Concepts and current understanding in synthesis and practical application of natural and man-made devices on the nanoscale. Topics include popular conception of nanodevices, current research implementation of nanoscale devices, biological self-assembly, and devices based on biomolecular media. _Does not count toward the major. Offered occasionally._

220 Organic Chemistry I: Introduction to Organic Chemistry NA  
_T. Newirth/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. Students must be free to attend one afternoon of lab AND one recitation time. _Prerequisite:_ Grade of 2.0 in Chem 101b or 105b, or placement by Dept. _Typically offered every Fall._

221 Organic Chemistry II: Topics in Organic Chemistry NA  
_K. Akerfeldt, M. Kukla_
Three lectures, one required recitation, and one laboratory period. Topics in stereochemistry, reaction mechanisms, biochemistry and natural-products chemistry, building on the fundamentals developed in Chemistry 220. Students must be free to attend one afternoon of lab AND one recitation time. _Prerequisite:_ Grade of 2.0 in Chemistry 220a. _Typically offered every Spring._

263 Research Tutorial in Organic Chemistry NA  
_K. Akerfeldt, F. Blase, T. Newirth_
One-half credit course for the year designed for students interested in the chemistry research experience in synthetic organic chemistry and physical-organic chemistry. Topics include total synthesis of biologically significant molecules, new methods of enantioselective synthesis, and the study of organic reaction mechanisms. (Not open to seniors.) _Prerequisite:_ Consent. _Does not count toward the major._

301 Lab in Chemical Structure and Reactivity NA  
_K. Akerfeldt/J. Schrier_
Two lectures and two laboratory periods. An introduction to the methods of research in chemistry. Inorganic, organic, physical chemistry, computational 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 computation and instrumental analytical chemistry are particularly stressed. _Prerequisite:_ Chem 221b (Co-requisite: 304a). _Typically offered every Fall._

302 Lab in Chemical Structure and Reactivity NA  
_T. Newirth, C. Londergan_
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 mass spectrometer combined with either gas or liquid chromatography are used by students, with faculty
supervision. Prerequisite: Chem 221b and 304a.
Typically offered every Spring.

304 Statistical Thermodynamics and Kinetics
NA/QU
J.Schrier
Three lectures. A quantitative approach to the
treatment and prediction of behavior in chemical
systems. Topics to be covered include: introductory
quantum mechanics and energy in molecules,
statistical mechanics and energy partitioning,
thermodynamics of molecules and larger systems,
physical and chemical equilibrium, and chemical
kinetics. Systems of interest range from single
molecules to complicated condensed-phase
macromolecular assemblies; specific experimental
elements of single-molecule observation, phase
changes in lipids and liquid crystals, and
observations of protein folding will be discussed in
the context of the course material. Prerequisite: One
semester of Math 114 or 115, Math 121 or 216 is
highly recommended. Typically offered every Fall.

305 Quantum Chemistry NA
C.Londergan
Two lectures. The quantum theory of atoms and
molecules as applied to problems in molecular
structure, computational chemistry, and basic
spectroscopic techniques. Emphasis on computer-
based solutions and visualization. Prerequisite: Math
121 or 216. Typically offered every Spring.

320 Concepts of Inorganic Chemistry NA
R.Scarrow
Three lectures for one-half semester (one-half course
credit). An introduction to structure and reactivity
of inorganic molecules and materials. Topics
include: theories of chemical bonding, symmetries
of molecules and solid state materials, acid-base,
oxidation-reduction reactions, and structures and
nomenclature of coordination complexes.
Prerequisite: Chemistry 304a. Typically offered every
Spring.

340 Molecular Spectroscopy NA
C.Londergan
Two lectures for one-half semester (one-half course
credit). Quantum mechanical description of current
techniques in the spectroscopy of molecules.
Prerequisite: Chemistry 305 or Physics 214 or
consent of instructor. Typically offered in alternate
years.

351 Bioinorganic Chemistry NA
R.Scarrow
Three lectures for one-half semester (one-half course
credit). Biological cells require metals such as zinc,
iron, copper, manganese, and molybdenum; 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 will be discussed.
Prerequisite: Chem 221 or 304 or consent. Students
should have completed 320g or a Biol course
involving protein structure. Typically offered every
Spring.

352 Topics in Biophysical Chemistry NA
L.Span
Prerequisite: Chemistry 304a. Offered occasionally.

353 Topics in Materials Science NA
Staff
Three lectures for one-half semester (one-half course
credit). 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 magnetoresistant
materials, as well as superconductors and
semiconductors. Prerequisite: Chem 304 or Phys
214 & Chem 101b or Chem 105b. Typically offered
every Spring.

354 Solid State Chemistry NA
J.Schrier
Three lectures for one-half semester (one-half course
credit). An examination of the reactivity of solids.
Synthetic techniques and structural analyses will be
emphasized. Prerequisite: Chem 304 or Phys 214 &
Chem 101 or 105. Offered occasionally.

355 Topics in Advanced Organic Chemistry NA
F.Blase
Three lectures for one-half semester (one-half course
credit). 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, organometallic chemistry. Topics selected
differ from those selected for 357 in the previous
year. Prerequisite: Chemistry 221. Offered
occasionally.

357 Topics in Bioorganic Chemistry NA
T.Newirth
Prerequisite: Chemistry 221b.

358 Environmental Chemistry NA
H.White
Three lectures for one-half semester (one-half course
credit). This course will examine chemical processes
that occur in natural waters, soils and the atmosphere. Specific topics will be chosen with input from enrolled students, who will be expected to share in discussion leadership. Prerequisite: Chem 304a or equiv. or permission. Typically offered in alternate years.

380 Independent Research in Chemistry NA
R.Sarrow
This course is designed for chemistry majors who want to pursue a library research experience. Students will work closely with a faculty member on a topic in the current chemical literature to prepare a thesis paper. Prerequisite: Chemistry 221 and Chemistry 304.

391 Departmental Seminar NA
H.White/J.Schrier
One meeting per week throughout the year (one-half course credit). Presentation and discussion of current research topics in the various areas of chemistry by faculty, students and outside speakers.

480 Independent Study NA
A.Norquist

RESEARCH TUTORIALS

Students 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.

363 Research Tutorial in Organic Chemistry NA
F.Blais, T.Newirth
Directed research in synthetic organic chemistry, and physical-organic chemistry. Topics include total synthesis of biologically significant molecules, new methods of enantioselective synthesis and the study of organic reaction mechanisms. Prerequisite: Consent.

261 Research Tutorial in Physical Chemistry NA
C.Londergan
One-half credit course for the year designed for students interested in the chemistry research experience in physical chemistry, condensed phase chemical physics, and biophysical chemistry, with emphasis on spectroscopic studies of peptides and proteins. (Not open to seniors.) Prerequisite: Consent. Does not count toward the major.

362 Research Tutorial in Theoretical Chemistry NA
J.Schrier
One-half credit course for the year designed for students interested in the chemistry research experience in theoretical physical chemistry, with emphasis on methods for prediction of optical, electronic, and mechanical properties of organic and inorganic semiconductor nanostructures. (Not open to seniors.) Prerequisite: Consent. Does not count toward the major.

264 Research Tutorial in Bioorganic Chemistry NA
K.Akerfeldt
One-half credit course for the year designed for students interested in the chemistry research experience in protein structure-function relationship studies and the design and synthesis of a broad range of peptides, proteins and biologically inspired novel materials. (Not open to seniors.) Prerequisite: Consent. Does not count toward the major.

265 Research Tutorial in Bioinorganic Chemistry NA
R.Scarrow
One-half credit course for the year designed for students interested in the chemistry research experience in spectroscopic and kinetic studies of metalloproteins and inorganic coordination compounds. (Not open to seniors.) Prerequisite: Consent. Does not count toward the major.

268 Research Tutorial in Environmental Chemistry NA
H.White
One-half credit course for the year designed for students interested in the chemistry research experience in the field of biogeochemistry, a multidisciplinary approach focused at understanding the chemical composition and processes of Earth’s biosphere. (Not open to seniors.) Prerequisite: Consent. Does not count toward the major.

269 Research Tutorial in Materials Science NA
A.Norquist
One-half credit course for the year designed for students interested in the chemistry research experience in the synthesis and structural characterization of organically templated microporous materials. (Not open to seniors.) Prerequisite: Consent. Does not count toward the major.

361 Research Tutorial in Physical Chemistry NA
C.Londergan
Directed research in physical chemistry, condensed phase chemical physics, and biophysical chemistry, with emphasis on spectroscopic studies of peptides and proteins. Prerequisite: Consent.

362 Research Tutorial in Theoretical Chemistry NA
J.Schrier
Directed research in computational and theoretical physical chemistry, with emphasis on development and application of methods for prediction of optical,
electronic, and mechanical properties of organic and inorganic semiconductor nanostructures. 
Prerequisite: Consent.

364 Research Tutorial in Bioorganic Chemistry NA  
K.Akerfeldt  
Directed research in bioorganic chemistry. Topics include protein structure-function relationship studies and the design and synthesis of a broad range of peptides, proteins and biologically inspired novel materials. Prerequisite: Consent.

365 Research Tutorial in Bioinorganic Chemistry NA  
R.Scarrow  
Topics include spectroscopic and kinetic studies of metalloproteins and inorganic coordination compounds. Prerequisite: Consent.

368 Research Tutorial in Environmental Chemistry NA  
H.White  
Directed research in environmental chemistry, centered in the field of biogeochemistry, a multidisciplinary approach focused at understanding the chemical composition and processes of Earth’s biosphere. Prerequisite: Consent.

369 Research Tutorial in Materials Science NA  
A.Norquist  
Topics include synthesis and structural characterization of organically templated microporous materials. Prerequisite: Consent.

SENIOR RESEARCH, INDEPENDENT STUDY  
AND SENIOR DEPARTMENTAL STUDIES

493 Interdisciplinary Examinations of Biologically Significant Research NA (Cross-listed in Biology and Physics and Psychology)  
P.Meneely  
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  
315 Medicinal Chemistry  
332 Advanced Inorganic Chemistry  
345 Advanced Biological Chemistry
Students may complete a major or minor in Classical and Near Eastern Archaeology.

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.

CLASSICAL AND NEAR EASTERN ARCHAEOLOGY FACULTY
Associate Professor Mehmet-Ali Atac (on leave semesters I and II)
Professor A. A. Donohue
Visiting Assistant Professor Jean M. Evans
Assistant Professor Astrid Lindenlauf
Associate Professor Peter Magee (on leave semester II)
Professor and Chair James C. Wright

CLASSICAL AND NEAR EASTERN ARCHAEOLOGY MAJOR REQUIREMENTS
The major requires a minimum of 10 courses. Core requirements are two 100 level courses distributed between the ancient Near East and Egypt and ancient Greece and Rome and two semesters of the senior conference. At least two upper-level courses should be distributed between classical and Near Eastern subjects and one other should concern method and theory in archaeology (ARCH 330 and ANTH 220). Additional requirements are determined in consultation with the major adviser. Additional coursework in subjects related to archaeology may be accepted for major credit; such courses are offered in the Departments of Anthropology, Geology, Greek, Latin and Classical Studies, Growth and Structure of Cities, and History of Art.

Each student’s course of study to meet major requirements will be determined in consultation with the undergraduate major adviser 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 departmental faculty. Students who are interested in interdisciplinary concentrations or in study abroad during the junior year are strongly advised to seek assistance in planning their major early in their sophomore year.

CLASSICAL AND NEAR EASTERN ARCHAEOLOGY MINOR REQUIREMENTS
The minor requires six courses. Core requirements are two 100 level courses distributed between the ancient Near East and Egypt and ancient Greece and Rome in addition to four other courses selected in consultation with the major adviser.

GEOARCHAEOLOGY CONCENTRATION
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: GEOL 101 or 102 or 103; 202, 203, 204, 205, 270, and 399; two semesters of chemistry; two semesters of math, statistics or computational methods; either ARCH 101 or ANTH 101; and one 200 or 300 level elective from among current offerings in Anthropology or Classical and Near Eastern Archaeology. Paperwork for the concentration should be filed at the same time as the major work plan. For course planning advice, consult with Don Barber (Geology), Rick Davis (Anthropology) or Peter Magee (Archaeology).

CLASSICAL AND NEAR EASTERN ARCHAEOLOGY REQUIREMENTS FOR HONORS
Honors are granted on the basis of academic performance as demonstrated by a cumulative average of 3.5 or better in the major.

CLASSICAL AND NEAR EASTERN ARCHAEOLOGY INDEPENDENT RESEARCH
Majors who wish to undertake independent research, especially for researching and writing a lengthy paper, must arrange with a professor who is willing to advise them, and consult with the major adviser. Such research normally would be conducted by seniors as a unit of supervised work (403), which must be approved by the advising professor before registration.
CLASSICAL AND NEAR EASTERN ARCHAEOLOGY 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 Middle Egyptian, Akkadian and Sumerian. Any student considering graduate study in classical and Near Eastern archaeology should study French and German.

CLASSICAL AND NEAR EASTERN ARCHAEOLOGY STUDY ABROAD

A semester of study abroad is encouraged if the program is approved by the department. Students are encouraged to consult with faculty, since some programs the department may approve may not yet be listed at the Office of International Programs. Major credit for courses taken is given on a case-by-case basis after review of the syllabus, work submitted for a grade, and a transcript. Normally credit will not be given for more than one course and not for courses that are ordinarily offered by the department.

CLASSICAL AND NEAR EASTERN ARCHAEOLOGY 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 several field projects in which undergraduates may be invited to participate.

Professor Peter Magee conducts a for-credit field school at Musulah, al-Hamriya and Tell Abraq 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, which concluded all fieldwork in 2010 and is being published. The project continues in study and publication phase.

The department is collaborating with Professor Ada Oyar (Ph.D., Bryn Mawr College, 1991) of Bogazici University in Istanbul, in the Tarsus Regional Project, Turkey, sponsored by Bogazici University. This is a long-term investigation of the mound at Gozlu Kule at Tarsus, in Cilicia, which was first excavated by Hetty Goldman, A.B. 1903. Both undergraduate and graduate students in archaeology participate in this project.

CLASSICAL AND NEAR EASTERN ARCHAEOLOGY MUSEUM INTERNSHIP

The department is awarded annually two internships by the Nicholas P. Goulandris Foundation for students to work for a month in the Museum of Cycladic Art in Athens, Greece, with an additional two weeks at an archaeological field project. This is an all-expense paid internship for which students may submit an application.

Opportunities to work with the College’s archaeology collections are available throughout the academic year and during the summer. Students wishing to work with the collections should consult Marianne Weldon, Collections Manager for Art and Artifacts.

CLASSICAL AND NEAR EASTERN ARCHAEOLOGY COURSES

ARCH B101 Introduction to Egyptian and Near Eastern Archaeology: Egypt and Mesopotamia
J. Evans
A historical survey of the archaeology and art of the ancient Near East and Egypt.

ARCH B102 Introduction to Classical Archaeology
A. Donohue, A. Lindenlauf
A historical survey of the archaeology and art of Greece, Etruria, and Rome. Three hours of class, one hour of special topics each week. Not offered in 2010-11.

ARCH B104 Archaeology of Agricultural and Urban Revolutions (Cross-listed as CITY B104)
P. Magee
From Egypt to India, this course examines the archaeology of the two most fundamental changes that have occurred in human society in the last 12,000 years. Agriculture and urbanism, and we explore these in Egypt and the Near East as far as India. We also explore those societies that did not experience these changes. Not offered in 2010-11.

ARCH B105 Introduction to Greek Art and Archaeology
A. Lindenlauf
This course examines the visual arts and material culture of the ancient Greek world, and reviews past and present approaches to archaeological and art historical research in the area. We will focus on the time span of roughly 1,000 years from the so-called Dark Age through the Archaic, Classical, and Hellenistic periods, circa 1100 to 31 B.C.E. Proceeding more or less in chronological order, we will explore major excavated sites, such as Athens, Delphi, Olympia, and Pergamon, and discuss key examples of architecture, sculpture, painting, mosaics, and portable arts as documents of social, religious,
and cultural history. This is a half-semester, half-credit course.

ARCH B106 Introduction to Roman Art and Archaeology
A.Donohue
From its emergence in central Italy in the 8th century B.C.E., Rome developed into an empire extending from western Europe through the Near East. This course surveys Roman material culture through the 4th century C.E. Emphasis is on the interpretation of monuments and artifacts in historical and social context. This is a half-semester, half-credit course.

ARCH B110 The World Through Classical Eyes (Cross-listed as CITY B110 and CSTS B110)
A.Donohue
A survey of the ways in which the ancient Greeks and Romans perceived and constructed their physical and social world. The evidence of ancient texts and monuments will form the basis for exploring such subjects as cosmology, geography, travel and commerce, ancient ethnography and anthropology, the idea of natural and artificial wonders, and the self-definition of the classical cultures in the context of the oikoumene, the “inhabited world.”

ARCH B115 Classical Art (Cross-listed as CITY B115, CSTS B115 and HART B115)
A.Donohue
An introduction to the visual arts of ancient Greece and Rome from the Bronze Age through Late Imperial times (circa 3000 B.C.E. to 300 C.E.). Major categories of artistic production are examined in historical and social context, including interactions with neighboring areas and cultures; methodological and interpretive issues are highlighted. Not offered in 2010-11.

ARCH B120 The Archaeology, Anthropology and Sociology of Rubbish
A.Lindenlauf
This course aims to introduce students to a range of approaches to the study of disposal practices in past and present societies. Particular attention will be paid to the interpretation of spatial disposal patterns, the power of dirty waste to create boundaries and difference, and types and motivations of recycling. Not offered in 2010-11.

ARCH B125 Classical Myths in Art and in the Sky (Cross-listed as CSTS B125 and HART B125)
A.Lindenlauf
This course explores Greek and Roman mythology using an archaeological and art historical approach, focusing on the ways in which the traditional tales of the gods and heroes were depicted, developed and transmitted in the visual arts such as vase painting and architectural sculpture, as well as projected into the natural environment. Not offered in 2010-11.

ARCH B130 The Bronze Age
J.Wright
This short course is about the notion of the Bronze Age and its archaeological manifestation in the Aegean, Eastern Mediterranean and the Near East. It explores the notion that the discovery of metals and the development of metallurgy spurred the formation of “metal economies,” which led to the expansion of civilizations in the 3rd and 2nd millennia B.C.E. This is a half-semester, half-credit course.

ARCH B135 Archaeological Fieldwork and Methods
J.Wright
In this short course, students will learn the fundamentals of the practice of archaeology through readings and case studies and participatory demonstrations. The course is based on a well-known up-to-date introductory text in archaeology. Case studies will be drawn from the archives of the Nemea Valley Archaeological Project and material in the College’s collections. Each week there will be a 2-hour laboratory that will introduce students to a variety of fieldwork methods and forms of analysis. This is a half-semester, half-credit course.

ARCH B160 Daily Life in Ancient Greece and Rome (Cross-listed as CITY B160 and CSTS B160)
A.Donohue
The often-praised achievements of the classical cultures arose from the realities of day-to-day life. This course surveys the rich body of archaeological and literary evidence pertaining to how ancient Greeks and Romans—famous and obscure alike—lived and died. Topics include housing, food, clothing, work, leisure and family and social life. Not offered in 2010-11.

ARCH B203 Ancient Greek Cities and Sanctuaries (Cross-listed as CITY B203)
J.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.

ARCH B205 Greek Sculpture (Cross-listed as HART B204)
A.Donohue
One of the best-preserved categories of evidence for ancient Greek culture is sculpture. The Greeks devoted immense resources to producing sculpture that encompassed many materials and forms and served a variety of important social functions. This course examines sculptural production in Greece and neighboring lands from the Bronze Age through the
fourth century B.C.E. with special attention to style, iconography and historical and social context. Not offered in 2010-11.

ARCH B206 Hellenistic and Roman Sculpture (Cross-listed as HART B206)  
A.Donohue  
This course surveys the sculpture produced from the fourth century B.C.E. to the fourth century C.E., the period beginning with the death of Alexander the Great that saw the transformation 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.

ARCH B209 Aegean Archaeology  
J.Wright  
The prehistoric cultures of the Aegean area beginning with the origins of agriculture (circa 6500 B.C.E.) and ending with the end of the Late Bronze Age (circa 1100 B.C.E.) with a focus on the palaces of Crete (Knossos, Phaistos, Mallia), Troy, the Aegean Islands (Akrotiri on Thera), and Mycenaean Greece (Mycenae, Tiryns, Thebes, Athens, Pylos).

ARCH B220 Araby the Blest: The Archaeology of 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.

ARCH B224 Women in the Ancient Near East  
P.Magee  
A survey of the social position of women in the ancient Near East, from sedentary villages to empires of the first millennium B.C.E. Topics include critiques of traditional concepts of gender in archaeology and theories of matriarchy. Case studies illustrate the historicity of gender concepts: women's work in early village societies; the meanings of Neolithic female figurines; the representation of gender in the Epic of Gilgamesh; the institution of the “Tawananna” (queen) in the Hittite empire; the indirect power of women such as Semiramis in the Neo-Assyrian palaces. Reliefs, statues, texts and more indirect archaeological evidence are the basis for discussion. Not offered in 2010-11.

ARCH B226 Archaeology of Anatolia  
M.Atac  
One of the cradles of civilization, Anatolia witnessed the rise and fall of many cultures and states throughout its ancient history. This course approaches the ancient material remains of pre-classical Anatolia from the perspective of Near Eastern archaeology, examining the art, artifacts, architecture, cities, and settlements of this land from the Neolithic through the Lydian periods. Some emphasis will be on the Late Bronze Age and the Iron Age, especially phases of Hittite and Assyrian imperialism, Late Hittite states, Phrygia, and the Urartu. Not offered in 2010-11.

ARCH B228 The Archaeology of Iran: From the Neo-Lithic to Alexander the Great  
P.Magee  
Examines the archaeology of Iran and its eastern neighbors from circa 8000 B.C.E. to the coming of Alexander at the end of the fourth century B.C.E. Focus on the emergence of agriculture and urbanism and the appearance of the Achaemenid Empire, examined in the light of contacts with states in Mesopotamia and South Asia and the abilities of the ancient inhabitants of Iran to exploit their environment. Not offered in 2010-11.

ARCH B234 Picturing Women in Classical Antiquity (Cross-listed as CSTS B234 and HART B234)  
A.Lindenlauf  
We investigate representations of women in different media in ancient Greece and Rome, examining the cultural stereotypes of women and the gender roles that they reinforce. We also study the daily life of women in the ancient world, the objects that they were associated with in life and death and their occupations. Not offered in 2010-11.

ARCH B236 The Archaeology of Syria  
J.Evans  
Recent excavations in Syria have contributed important data to the major issues in ancient Near Eastern archaeology, including the onset of agriculture, the emergence of social stratification, and the rise of urbanism and empire. From the Paleolithic period to the end of the Iron Age (circa 16,000-500 B.C.E.), this course will present the material culture of Syria and its parallels in neighboring regions.

ARCH B240 Archaeology and History of Ancient Mesopotamia  
J.Evans  
A survey of the material culture of ancient Mesopotamia, modern Iraq, from the earliest phases of state formation (circa 3500 B.C.E.) through the Achaemenid Persian occupation of the Near East (circa 331 B.C.E.). Emphasis will be on art, artifacts, monuments, religion, kingship, and the cuneiform tradition. The survival of the cultural legacy of Mesopotamia into later ancient and Islamic traditions will also be addressed.

ARCH B244 Great Empires of the Ancient Near East (Cross-listed as CITY B244, HIST B244 and
POLS B244)  
M. Ateci  
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. Not offered in 2010-11.

ARCH B245 The Archaeology of Water  
P. Magee  
This course examines the distribution of water throughout the Middle East and Mediterranean and the archaeology of water exploitation and management over the last 12,000 years. Recent anthropological models that challenge the concept of "hydraulic civilization" are emphasized as are contemporary attempts to revive traditional and ancient technologies to preserve and better manage modern water resources.

ARCH B252 Pompeii (Cross-listed as CITY B259)  
Staff  
Introduces students to a nearly intact archaeological site whose destruction by the eruption of Mt. Vesuvius in 79 C.E. was recorded by contemporaries. The discovery of Pompeii in the mid-1700s had an enormous impact on 18th- and 19th-century views of the Roman past as well as styles and preferences of the modern era. Inform students in classical antiquity, urban life, city structure, residential architecture, home decoration and furnishing, wall painting, minor arts and craft and mercantile activities within a Roman city. Not offered in 2010-11.

ARCH B255 Show and Spectacle in Ancient Greece and Rome (Cross-listed as CSTS B255 and CITY B260)  
A. Baertschi, R. Scott, J. Wright  
Sport and spectacle in ancient Greece and Rome and how they compare to the institutions of education and sport in modern society. Topics are the Olympic games and other sanctuaries with athletic competitions, the built structures for athletics (stadium, gymnasium, baths, amphitheaters, circuses, and hippodrome) and spectacles, such as gladiatorial combat. Not offered in 2010-11.

ARCH B268 Greek and Roman Architecture (Cross-listed as CITY B268 and HART B268)  
Staff  
The course will introduce the structure of Greek and Roman cities and sanctuaries, the variety of building types and monuments found within them, and how local populations used and lived in the architectural environment of the classical world. Not offered in 2010-11.

ARCH B270 Geoaarchaeology (Cross-listed as ANTH B270 and GEOL B270)  
D. Barber, P. Magee  
Societies in the past depended on our human ancestors’ ability to interact with their environment. Geoaarchaeology 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: One course in anthropology, archaeology or geology. Not offered in 2010-11.

ARCH B274 Bioarchaeology (Cross-listed as ANTH B274)  
R. Rhodes  
Not offered in 2010-11.

ARCH B301 Greek Vase-Painting  
A. Lindenlaup  
An examination of the conceptions of the human body evidenced in Greek and Roman art and literature, with emphasis on issues that have persisted in the Western tradition. Topics include the fashioning of concepts of male and female standards of beauty and their implications; conventions of visual representation; the nude; clothing and its symbolism; the athletic ideal; physiognomy; medical theory and practice; the visible expression of character and emotions; and the formulation of the "classical ideal" in antiquity and later times.

ARCH B303 Classical Bodies (Cross-listed as HART B305)  
A. Donohue  
An examination of the conceptions of the human body evidenced in Greek and Roman art and literature, with emphasis on issues that have persisted in the Western tradition. Topics include the fashioning of concepts of male and female standards of beauty and their implications; conventions of visual representation; the nude; clothing and its symbolism; the athletic ideal; physiognomy; medical theory and practice; the visible expression of character and emotions; and the formulation of the "classical ideal" in antiquity and later times.

ARCH B305 Ancient Athens: Acropolis (Cross-listed as CITY B305)  
A. Lindenlaup  
This course is an introduction to the Acropolis of Athens, perhaps the best-known acropolis in the world. We will explore its history, understand and interpret specific monuments and their sculptural decoration and engage in more recent discussions, for instance, on the role the Acropolis played in shaping the Hellenic identity. Not offered in 2010-11.

ARCH B308 Ceramic Analysis  
P. Magee  
Pottery is 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 instructor. Not offered in 2010-11.

ARCH B312 The Eastern Mediterranean in the Late Bronze Age  
J. Wright  
This course will cover economic and cultural interactions among the Levant, Cyprus, Anatolia, Egypt, and the Aegean. We will study the politics and powers in the Eastern Mediterranean circa 1500 to 1100 B.C.E.—the Egyptian and Hittite empires, the Mitanni, Ugarit and Syro-Palestinian polities, Cyprus and the Mycenaean. Topics include: metallurgy, mercantile systems, seafaring, the Sea Peoples, systems collapse, and interpretive issues when working with archaeological and historical sources.

ARCH B322 The Archaeology of the Roman Empire  
Staff  
An examination of the growth of the Roman Republic into the Roman Empire at its height, from its acquisitions of the Hellenistic kingdoms (second and first centuries, B.C.E.) to its domination of Europe, North Africa and the Near East. Not offered in 2010-11.

ARCH B323 On the Trail of Alexander the Great  
A. Lindenlauf  
This course explores the world of Alexander the Great and the Hellenistic world on the basis of a variety of sources. Particular focus is put on the material culture of Macedonia and Alexander's campaigns that changed forever the nature and boundaries of the Greek world. Prerequisite: A course in classical archaeology or permission of the instructor. Not offered in 2010-11.

ARCH B328 Analysis of Geospatial Data Using GIS (Cross-listed as GEOL B328, BIOL B328 and CITY B328)  
Staff  

ARCH B330 Archaeological Theory and Method  
J. Wright  
An historical introduction to archaeological theory and methods. Topics: archaeology's origins in the Renaissance; the formation of archaeology and geology and social scientific approaches to the human past; competing philosophies of knowledge, phenomenology and postmodern constructions of knowledge. Not offered in 2010-11.

ARCH B342 Greek Architectural Sculpture  
Staff  
This course examines in depth a large and important body of remains from the Archaic, Classical and Hellenistic periods, which puts the sculpture in its architectural and cultural contexts, allowing study of original examples of Greek art that are couched in a relatively well established chronology. Not offered in 2010-11.

ARCH B352 Ancient Egyptian Architecture: The New Kingdom  
M. Atac  
A proseminar that concentrates on the principles of ancient Egyptian monumental architecture with an emphasis on the New Kingdom. The primary focus of the course is temple design, but palaces, representative settlements, and examples of Graeco-Roman temples of the Nile Valley will also be dealt with. Not offered in 2010-11.

ARCH B355 Archaeology of the Achaemenid Empire in Cross Cultural Context  
P. Magee  
The Achaemenid Empire (538-332 B.C.E.) ruled the largest landmass of any of the ancient Near Eastern Empires. Attempts by archaeologists to understand the manner in which authority was asserted over this area have suffered from a reliance on biased historical sources, largely from the Classical World. This course uses archaeological data to re-examine the Achaemenid Empire in a global context. This data is examined through a methodological framework that emphasizes comparative studies of ancient and more recent Empires in Africa, the Americas, South Asia, and the Mediterranean.

ARCH B359 Topics in Classical Art and Archaeology (Cross-listed as CSTS B359 and HART B358)  
A. Donohue  
A research-oriented course taught in seminar format, treating issues of current interest in Greek and Roman art and archaeology. Prerequisites: 200 level coursework in some aspect of classical or related cultures, archaeology or art history. Not offered in 2010-11.

ARCH B369 Topics in Medieval History (Cross-listed as HIST B369 and CSTS B369)  
E. Truitt, G. Schwartz  
Not offered in 2010-11.

ARCH B398 Senior Seminar  
A. Lindenlauf  
A weekly seminar on common topics with assigned readings and oral and written reports.

ARCH B399 Senior Seminar  
A. Donohue  
A weekly seminar on common topics with assigned readings and oral and written reports.

ARCH B403 Supervised Work  
Staff
The Classics department (in cooperation with the Bryn Mawr department of Greek, Latin, and Classical Studies) 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.

**CLASSICS FACULTY**

William R. Kenan Jr. Professor of Classics and Comparative Literature Deborah H. Roberts, Chair
Assistant Professor Robert Germany
Assistant Professor Bret Mulligan (on leave 2010-2011)
Visiting Assistant Professor Danielle La Londe

**CLASSICS 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 (398/399).

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 (398/399); a minimum of three semester courses beyond the introductory level in a related field (another language, archaeology, comparative literature, English, history, religion, philosophy).

Classical Culture and Society: Two courses in either Latin or Greek beyond the elementary level; one course in Greek 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; three electives dealing with classical antiquity, at least one of which must be at the 200 level or above, and at least one of which (except in the case of history and society concentrations) must be drawn from courses in history and society; Senior Seminar (Classics 398/399).

**CLASSICS 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 language 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 or above and at least one must be in Classical Culture and Society at the 200 level.

**CLASSICS REQUIREMENTS FOR HONORS**

Superior performance in course work and the senior thesis constitutes the basis for Departmental Honors.

**COURSES IN GREEK LANGUAGE AND LITERATURE**

001 Elementary Greek HU
R.Germany
Introduction to ancient Greek, with selected readings in poetry and prose. This is the first semester of a year-long course. Typically offered every Fall.

002 Elementary Greek HU
R.Germany
Completion of the basics of ancient Greek, followed by readings in Lysias and Plato. This is the second semester of a year-long course. Typically offered every Spring.

101 Introduction to Greek Literature: Herodotus and Greek Lyric HU
R.Germany
Introduction to the study of Greek literature through readings in Herodotus' Histories and selections of Greek lyric poetry. Emphasis will be on developing reading skills and on critical interpretation and discussion. Prerequisite: Greek 001-002 or the equivalent. Typically offered yearly in alternation with Bryn Mawr.

102 Introduction to Greek Poetry: Homer HU
R.Germany
Readings in Homer's Iliad or Odyssey, with critical interpretation and discussion. Prerequisite: Greek 101 or equivalent. Typically offered yearly in alternation with Bryn Mawr.

201 Advanced Greek: Plato and Thucydides (taught as Bryn Mawr Greek 201) HU
202 Advanced Greek: TragedyHU
D. Roberts
Two Greek tragedies and readings in Aristotle’s Poetics. Prerequisite: Greek 101-102 or the equivalent. Typically offered every Spring.

350 Seminar in Greek Literature HU
Staff
An advanced seminar in Greek language and literature, with special emphasis on the interpretation and discussion of texts in Greek and the reading of relevant scholarship. Topic to be determined by faculty; topics of recent seminars include: “Plato and the Sophists” and “Translating the Classics: Theory, History, Practice.” May be repeated for credit. Prerequisite: At least one 200 level Greek course or consent. Offered occasionally.

480 Independent Study HU
Staff
Offered occasionally.

COURSES IN LATIN LANGUAGE AND LITERATURE

001 Elementary Latin HU
D. La Londe
Introduction to the Latin language, including vocabulary, grammar, style, and techniques for reading and translation of poetry and prose; with attention to Roman history, mythology, literature, religion, and more. This is the first semester of a year-long course. Typically offered every Fall.

002 Elementary Latin HU
D. La Londe
Completion of the introduction to the Latin language, with readings in prose (especially Cicero and Sallust on the Catilinarian Conspiracy) and poetry (especially Ovid and Vergil). Prerequisite: LATN 001 or equivalent. Typically offered every Spring.

101 Introduction to Latin Literature: The Language of Love and Hate in the Roman Republic 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. Prerequisite: Students should have had either a year of college Latin or very strong high school preparation. For a course with more extensive grammar review, see Bryn Mawr Latin 003. Typically offered every Fall.

102 Introduction to Latin Literature: Comedy HU
R. Germany
Deepening acquaintance with Latin language and literature through close reading of a Roman comedy. Review of Classical Latin grammar by comparison with Archaic Latin. Additional emphasis on colloquial Latin, meter, stagecraft, and reception. Class will stage a public performance! Prerequisite: Latin 101 or BMC 003 or very strong HS prep. Typically offered every Spring.

201 Advanced Latin Literature: Vergil HU
D. La Londe
Readings in Vergil’s Eclogues, Georgics, and Aeneid. Prerequisite: Latin 101-102 or the equivalent. Typically offered yearly in alternation with Bryn Mawr.

202 Advanced Latin Literature: Ovid’s Love Poetry HU
B. Mulligan
Focuses on the culminating works of the Latin Elegiac tradition—Ovid’s Amores and Ars Amatoria—and their engagement with questions of genre, poetics, subjectivity, fiction, and truth. Selections from other Roman elegists and important scholarship will be read in English. Prerequisite: Latin 101-102 or the equivalent. Typically offered yearly in alternation with Bryn Mawr.

350 Seminar in Latin Literature HU
Staff
An advanced seminar in Latin language and literature, with special emphasis on the interpretation and discussion of texts in Latin and the reading of relevant scholarship. Topic to be determined by faculty; recent topics have included “Poetry and Patronage in Flavian Rome” and “Translating the Classics: Theory, History, Practice.” May be repeated for credit. Prerequisite: At least one 200 level Latin course or consent. Offered occasionally.

480 Independent Study HU
Staff
Offered occasionally.

COURSES IN CLASSICAL STUDIES NOT REQUIRING GREEK OR LATIN

119 Culture and Crisis in the Golden Age of Athens HU
B. Mulligan/R. Germany
Introduction to classical culture through a study of the Athenian achievement in literature, politics and philosophy from the Persian Wars to the trial and death of Socrates, largely through primary sources. The last third of the semester will feature an open-ended, student-led simulation of the aftermath of the Peloponnesian Wars, in which students will debate social reconciliation after the expulsion of the tyrants, the organization of Athenian government, the
expansion of citizenship, the future of the Athenian empire, and the fate of Socrates. *Typically offered in alternate years.*

121 The Roman Revolution HU
D. La Londe
An introduction to the literature and culture of ancient Rome, focusing on the transformative period of the late republic and early principate, including topics such as the Romans’ self-image, religion, sex and gender, and the relationship between art and politics. *Typically offered in alternate years.*

209 Classical Mythology HU (Cross-listed in Comparative Literature)
D. La Londe
An introduction to the primary characters and stories of Greek and Roman mythology including cosmic creation, Olympian and other deities, and heroes both as they appear in Greek and Roman literature and art and as they are later represented in modern art, music, and film. *Typically offered in alternate years.*

210 Classical Mythology HU (Cross-listed in Comparative Literature)
D. La Londe
A survey of Greek and Roman comic theater from its myth in literature, art, music, and film. 

212 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 occasionally.*

213 Tragedy and the Tragic: Suffering, Representation, and Response HU (Cross-listed in Comparative Literature)
D. Roberts
This course, an exploration of tragedy and the tragic from ancient Greece to the present, is concerned with tragedy as a kind of drama, with the idea of the tragic as manifested in a variety of cultural contexts and forms, and with critiques of tragedy. *Offered occasionally.*

215 Tales of Troy HU (Cross-listed in Comparative Literature)
B. Mulligan
An introduction to the myth of the Trojan War and its role in the history of western literature and culture, focusing on the development and adaptation of the myth in literature, art, music, and film from antiquity to the present day. *Offered regularly.*

219 Rites of Laughter: Ancient Comedy and its Legacy HU (Cross-listed in Comparative Literature)
R. Germany
A survey of Greek and Roman comic theater, from its ritual origins to its classical role in civic cultural life. Special emphasis will be given to related modern forms of entertainment and to ancient and modern theories of the comic. *Prerequisite: None. Offered regularly.*

221 The Ancient Novel HU (Cross-listed in Comparative Literature)
R. Germany
An exploration of the earliest prose fiction in the Western literary tradition in relation to other ancient genres and to the early modern novel, with attention to formulations of gender, heroism, truth, love, and violence. *Offered regularly.*

290 History of Literary Theory: Plato to Shelley HU (Cross-listed in Comparative Literature and English)
D. Roberts
In this course we investigate central texts in literary theory from the Greeks to early nineteenth-century Europe, with attention to key critical terms and concepts. Topics of discussion include the nature and origin of literary creation, socio-political ideas about the function of poetry and the poet, mimetic models of literature, the roles of art and nature in literature in relation to its audience, theories of genre, defenses of poetry, allegorical interpretation, the idea of the sublime, definitions of the imagination, poetic language, and the application of critical theory to particular texts. Readings include selections from: Plato, Aristotle, Horace, Longinus, Dante, Augustine, Sidney, Corneille, Dryden, Pope, De Stael, Johnson, Wollstonecraft, Wordsworth, Coleridge, Keats, and Shelley. Requirements include 5 short papers and a final exam. Not open to first-year students. *Prerequisite: Sophomore standing or above. Typically offered in alternate years.*

293 Translation and Other Transformations: Theory and Practice HU (Cross-listed in Comparative Literature)
D. Roberts
*Prerequisite: Students must be at least at the intermediate level in at least one language other than English.*

398 Senior Seminar HU
R. Germany
A bi-college, team-taught seminar focused on refining the ability to read, discuss, and analyze classical culture and the scholarship of various sub-fields of Classical Studies (e.g. literature, religion, philosophy, law, social history), leading towards the completion of a prospectus for the senior thesis. *Typically offered yearly in alternation with Bryn Mawr.*

399 Senior Seminar HU
R. Germany/B. Mulligan/D. Roberts
Independent work on the senior thesis and meetings with the thesis advisor. *Typically offered every Spring.*
460 Teaching Assistant HU
Staff

480 Independent Study HU
Staff
Offered occasionally.
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.

COMPARATIVE LITERATURE ADVISORY COMMITTEE

At Haverford College:
Barbara Riley Levin Professor of Spanish and Comparative Literature
Israel Burshtatin, Chair
William E. Kenan, Jr. Professor of Classics and Comparative Literature
Deborah Roberts
Associate Professor of Spanish
Roberto Sandoval
Associate Professor of English
Maud McNerney
Associate Professor of German
Ulrich Schönherr
Associate Professor of French
David Sedley
Assistant Professor of Philosophy
Jerry Miller
Assistant Professor of Religion
Travis Zadeh

At Bryn Mawr College:
Fairbanks Professor in the Humanities and Professor of German and Comparative Literature
Azade Seyhan (on leave Spring 2011)
Professor of Russian and Comparative Literature
Elizabeth C. Allen
Professor of Spanish
Maria Cristina Quintero
Associate Professor of French
Francis Higginston
Assistant Professor of Italian
Roberta Ricci

COMPARATIVE LITERATURE TEACHING FACULTY

At Haverford College:
Francis B. Gunnam Professor of English and Professor of Africana Studies
Kimberly Benston
Ruth Marshall Magill Professor of Music
Curt Cacioppo
Professor of English
C. Stephen Finley
Professor of Music
Richard Freedman
Professor of Philosophy and Director of the Margaret Geist Center
Ashok Gangadean

John R. Coleman Professor of Social Sciences and Professor of History and East Asian Studies
Paul Smith
Professor of Philosophy
Kathleen Wright
Associate Professor of French and Africana Studies
Koffi Anyinéfa
Associate Professor of Anthropology
Laurie Kain Hart
Associate Professor of English
Rajeswari Mohan
Associate Professor of Spanish
Graciela Michelotti
Associate Professor of Anthropology
Zolani Ngwane
Associate Professor of French
David Sedley
Assistant Professor of Classics
Brett Mulligan
Assistant Professor of Classics
Robert Germany
Assistant Professor of English
Debora Sherman
Visiting Assistant Professor in Fine Arts
John Muse

At Bryn Mawr College:
Professor of French
Grace Morgan Armstrong
Professor of English
Peter Briggs
Professor of English
E. Jane Hedley
Professor of English
Joseph E. Kramer
Professor of Philosophy
Michael Krauss
Professor of History of Art
Steven Z. Levine
Professor of Italian
Nicholas Patruno
Professor of Spanish
Maria Cristina Quintero
Professor of Spanish
Enrique Sacero-Gari
Associate Professor of English and Africana Studies
Linda Susan Beard
Associate Professor of English
Michael Tratner
Senior Lecturer in the Arts Program
Mark Lord

COMPARATIVE LITERATURE 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 appears 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.

COMPARATIVE LITERATURE 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.

COMPARATIVE LITERATURE
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.

COMPARATIVE LITERATURE COURSES

200 Introduction to Comparative Literature HU
U.Schoenherr
The course offers a comprehensive reconstruction of
literature from the Renaissance period to the present,
by focusing on a) the changing relationship between
literature and religion, b) the construction of
identities (class, gender, race), c) the representation of
history, and d) models of literary self-referentiality. In
addition, the class will introduce a variety of literary
and cultural theories necessary for the analysis of
(non)fictional texts.

203 Writing the Jewish Trajectories in Latin
America HU (Cross-listed in Spanish and Latin
American and Iberian Studies)
G.Michelotti
Prerequisite: Spanish 102, placement, or consent.

205 Studies in the Spanish American Novel HU
(Cross-listed in Spanish American and Iberian Studies)
G.Michelotti
Prerequisite: Spanish 102, placement, or consent.

207 Fictions of Spanish American History HU
(Cross-listed in Spanish)
R.Castillo Sandoval
Prerequisite: Spanish 102, placement, or consent of
the instructor.

209 Classical Mythology HU (Cross-listed in
Classical Studies)
D.La Londe
Typically offered in alternate years.

210 Spanish and Spanish American Film Studies
HU (Cross-listed in Spanish and Latin American
and Iberian Studies)
G.Michelotti
Prerequisite: Spanish 102, placement, or consent.

212 The Classical Tradition in Western Literature
HU (Cross-listed in Classical Studies)
D.Roberts

214 Writing the Nation: 19th-Century Literature
in Latin America HU (Cross-listed in Spanish and
Latin American and Iberian Studies)
R.Castillo Sandoval
Prerequisite: Spanish 102, placement, or consent of
instructor.

215 Tales of Troy HU (Cross-listed in Classical
Studies)
B.Mulligan
Offered occasionally.

218 The Western Dramatic Tradition HU (Cross-
listed in English)
K.Benston
Typically offered in alternate years.

222 Rethinking Latin America in Contemporary
Narrative HU (Cross-listed in Spanish and Latin
American and Iberian Studies)
A.Gomez Unamuno
Prerequisite: Spanish 102, placement, or consent.

223 Writing Nations: Africa and Europe HU
(Cross-listed in German and African and Africana
Studies and Gender and Sexuality Studies)
I.Bruit

230 Beauty, Rhetoric, Aesthetics, Philosophy HU
(Cross-listed in Independent College Programs and
Philosophy)
J.Muse

232 Inquiring Minds: Inquisition, Writing, and
the Early Modern Subject HU (Cross-listed in
Spanish and Latin American and Iberian Studies)
I.Burshatin
Prerequisite: SPAN102, placement, or consent of the
instructor.

235 Spanish American Theater HU (Cross-listed in
Spanish)
G.Michelotti
Prerequisite: SPAN 102, placement, or consent of the
instructor.

240 As the World Turned: Milton and Early
Modern Revolutions HU (Cross-listed in English)
D.Sedley
Prerequisite: Freshman Writing.

241 Anthropology of the Mediterranean: Seminar
on Greece SO (Cross-listed in Anthropology and
Latin American and Iberian Studies)
L.Hart
Typically offered in alternate years.
243 Trans-Atlantic Exchanges: Conversion & Revolution in Britain HU (Cross-listed in English)
L. McGrane
Typically offered in alternate years.

248 The Quran HU (Cross-listed in Religion)
T. Zadeh

251 Music, Film, and Narrative HU (Cross-listed in Music)
R. Freedman
Prerequisite: Music 203 or equivalent knowledge of music theory.

255 Cinema et colonialisme HU (Cross-listed in French and African and Africana Studies)
K. Anyinefa

266 Iberian Orientalism and the Nation HU (Cross-listed in Spanish and Latin American and Iberian Studies and African and Africana Studies)
I. Burshatin
Prerequisite: Freshman Writing or Spanish 102 or consent.

289 Children’s Literature HU
D. Roberts
This course investigates the beginnings, selected historical developments, and some of the varieties of literature for children, and asks questions about the distinctiveness of such literature, its aims and its presumed readership, and the applicability of particular theoretical approaches to children’s books. We will look at folk tale and fairy tale, early examples of literature specifically for children, some particularly influential texts, and examples from several subgenres of children’s literature; we will also spend a week each on picture books and poetry for children. Discussion will focus both on the texts themselves and on critical issues of various kinds. Prerequisite: Sophomore standing or above. Preference to COML majors, ENGL majors, and those minoring in EDUC or Teacher Cert Pgm.

293 Translation and other Transformations: Theory and Practice HU (Cross-listed in Classical Studies)
D. Roberts
An exploration of the theory and practice of translation (both historical and current) and of other forms of rewriting. Theoretical readings include works by Dryden, Schleiermacher, Arnold, Benjamin, Venuti, and others; examples of translation will be drawn from a variety of texts in different languages. Students will have the opportunity to work on translation projects of their own. Prerequisite: Students must be at least at the intermediate level in at least one language other than English.

295 Interpretation and the Other: Meaning, Understanding and Alterity HU (Cross-listed in English and Philosophy and Religion)
D. Dawson, S. Finley
Offered occasionally.

302 Speaking in Tongues HU (Cross-listed in English and Gender and Sexuality Studies)
M. McInerney
Prerequisite: Two 200 level courses in English.

306 Of Monsters and Marvels: Wonder in Islamic Traditions HU (Cross-listed in Religion)
T. Zadeh
Prerequisite: Consent.

312 "Les arts du roman du 16e au 18e siecle" HU (Cross-listed in French and African and Africana Studies)
K. Anyinefa

320 Spanish American Colonial Writings HU (Cross-listed in Spanish and Latin American and Iberian Studies)
R. Castillo Sandoval
Prerequisite: One 200 level Spanish course or consent.

322 Politics of Memory in Latin America HU (Cross-listed in Spanish)
A. Gomez Unamuno
Prerequisite: Spanish 200 level, or consent of the instructor.

334 Gender Dissidence in Hispanic Writing HU (Cross-listed in Spanish and Gender and Sexuality Studies and Latin American and Iberian Studies)
I. Burshatin
Prerequisite: A 200 level course or consent of the instructor.

343 The Latin American City and its Narratives HU (Cross-listed in Spanish and Latin American and Iberian Studies)
G. Michelotti
Prerequisite: SPAN 200 level course, or consent.

352 Evita and Her Sisters HU (Cross-listed in Spanish and Gender and Sexuality Studies and Latin American and Iberian Studies)
G. Michelotti
Prerequisite: A 200 level course or consent of the instructor.

359 Music - Text - Performance HU (Cross-listed in German and Gender and Sexuality Studies)
U. Schoenborn
Prerequisite: One 200 level course in the Humanities.
385 Popular Culture, Cultural Identity and the Arts in Latin American HU (Cross-listed in Spanish and Latin American and Iberian Studies)  
R.Castillo Sandoval  
Prerequisite: A 200 level course or consent of instructor.

388 Problems in Narrative: Obsession, Trauma, Hysteria, Oblivion, Bliss HU (Cross-listed in English)  
K.Benston  
Prerequisite: Two courses in English at 200 level or consent.

398 Theories and Methods in Comparative Literature HU  
A. Seyhan  
Advanced work in the history and problems of comparative literature. Prerequisite: Open only to students majoring or minorning in Comp Lit. Occasionally open, with permission, to Jr. Comp Lit majors who plan to study away. Typically offered yearly in alternation with Bryn Mawr.

399 Senior Seminar HU  
I.Burshatin, D.Roberts  
Oral and written presentations of work in progress, culminating in a senior thesis and comprehensive oral examination.

COURSES IN CLASSICAL STUDIES NOT REQUIRING GREEK OR LATIN

213 Tragedy and the Tragic: Suffering, Representation, and Response HU (Cross-listed in Classical Studies)  
D.Roberts  
Offered occasionally.

219 Rites of Laughter: Ancient Comedy and its Legacy HU (Cross-listed in Classical Studies)  
R.Germany

221 The Ancient Novel HU (Cross-listed in Classical Studies)  
R.Germany  
Offered occasionally.

290 History of Literary Theory: Plato to Shelley HU (Cross-listed in Classical Studies and English)  
D.Roberts  
Prerequisite: Sophomore standing or above. Typically offered in alternate years.

LITERATURE COURSES

211 Introduction to Postcolonial Literature HU (Cross-listed in English)  
R.Mohan

Typically offered in alternate years.

220 The Epic in English HU (Cross-listed in English)  
M.McInerney

318 The Western Dramatic Tradition HU (Cross-listed in English)  
K.Benston  
Prerequisite: Two courses in English at the 200 level or permission of instructor. Typically offered in alternate years.

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:

377 Problems in Postcolonial Literature HU (Cross-listed in English)  
R.Mohan

389 Problems in Poetics: The Interpretation of Lyric HU (Cross-listed in English)  
K.Benston

MUSICOLOGY

250 Words and Music HU (Cross-listed in Music)  
C.Cacioppo  
Prerequisite: One 100 level course in Music or consent.

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.

332 Topics in 20th Century Continental Philosophy. Topic for 2010/11: Deleuze and Guattari HU (Cross-listed in Philosophy)  
J.Delpech-Ramey  
Prerequisite: One 200-level Phil course and Junior standing or consent.

INTERMEDIATE COURSES

278 Christian Thought from Modernity to Post-Modernity [A,B] HU (Cross-listed in Religion)  
D.Dawson  
Offered occasionally.

SEMINARS AND INDEPENDENT STUDY

All religion department seminars may be repeated for credit with change of content.
282 The Allegorical Imagination HU (Cross-listed in Religion)  
D. Dawson

308 Mystical Literatures of Islam HU (Cross-listed in Religion and Gender and Sexuality Studies)  
T. Zadeh

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)
231 Cultural Profiles in 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 Études avancées 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 is the representation and manipulation of information - the study of the theory, analysis, design, and implementation of the data structures that represent information, and the algorithms that transform them. Computer Science is interdisciplinary, with roots in mathematics, physics and engineering, and with applications in virtually every academic discipline and professional enterprise.

Computer Science at Haverford College (www.cs.haverford.edu) emphasizes these fundamental concepts in conjunction with depth of thought and clarity of expression. This approach is consistent with the principles of scientific education in the liberal arts. The aim is to provide students with a base of skills and capabilities which transcend short-term fashions and fluctuations in computer hardware and software. Computer Science offers a Major, a Concentration for Mathematics Majors, a Concentration for Physics Majors, and a Minor. Computer Science also participates and contributes substantially to the Concentration in Scientific Computing. Details of these programs are given at www.cs.haverford.edu/curriculum.

Computer Science Faculty
Professor Steven Lindell
Associate Professor David G. Wonnacott
Assistant Professor and Lab Coordinator John P. Dougherty

Affiliated Faculty
Professor of Mathematics Lynne Butler
J. McLain King Professor of Mathematics Curtis Greene
William H. and Johanna A. Harris Distinguished Professor of Computational Science Robert Manning
Professor of Biology Philip M. Meneely
Professor of Physics Walter Smith
Assistant Professor of Physics Peter Love

At Bryn Mawr College:
Professor Deepak Kumar
Associate Professor Douglas Blank
Assistant Professor Dianna Xu

The Computer Science Major
2. Computer Science/Math 231 (Discrete Mathematics).
4. Computer Science 350 or 355 or 356.
5. One additional 300 level course in computer science, and two additional courses numbered 200 or higher (or related courses in math or physics).
6. Computer Science 480 project and paper.

Computer Science Courses
100 The World of Computing NA/QU
J. Dougherty
Survey of fundamental ideas in computing (user interfaces, algorithms, translation, history, Internet and Web, limits of computation, artificial intelligence, social implications, accessibility), with a weekly laboratory/discussion section and a term project to extend course concepts and demonstrate quantitative reasoning. Prerequisite: None. Does not count toward the major. Typically offered in alternate years.

101 Fluency with Information Technology NA/QU
J. Dougherty
A study of the skills, concepts and capabilities involve 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. Does not count toward the major. Typically offered in alternate years.

105 Introduction to Computer Science NA/QU
D. Wonnacott/Staff
Introduction to the intellectual and software tools used to create and study algorithms: formal and informal problem specification; problem solving and algorithm design techniques; reliability, proofs, and testing techniques; program clarity, complexity and efficiency; functional and imperative paradigms; associated programming skills. Weekly programming laboratory section. Typically offered every Fall.

106 Introduction to Data Structures NA/QU
J. Dougherty
Overview of the intellectual and software tools used to create and study data structures: specification of data types; abstraction and representation; reasoning tools to study correctness and efficiency; classic data structures for collections (set, vector, list, stack, queue, tree, graph); introduction to object-orientated programming. Weekly programming laboratory section. Prerequisite: CMSC 105 (or 110 at Bryn Mawr) or instructor consent. Typically offered every Spring.

130 Foundations of Rigorous Thinking NA/QU
S. Lindell
Quantitative seminar to develop reasoning skills through mathematics: logic and sets. Uses symbolism for abstract objects and formal methods of computing. A transition course for non-science students who might wish to do further work in computer or cognitive science. Offered occasionally.

147 A History of Mechanized Thought NA/QU
S. Lindell
An exploration of the history of computer and information systems, from early number systems to binary arithmetic, and from the abacus to the modern computer. Includes a laboratory which explores aspects of digital and analog computing. Offered occasionally.

187 Scientific Computing: Discrete Systems NA (Cross-listed in Biology)
D. Wonnacott/P. Meneely
A survey of computational techniques with applications in a variety of natural and social sciences, with an emphasis on problems involving discrete systems such as strings and networks. Computer programming is in lecture, so prior programming experience is required. First priority is to students who have declared a concentration in scientific computing (if this goes forward); if space is available, freshmen and sophomores share the second highest priority, with juniors and seniors at the lowest priority. Prerequisite: One semester of any (social or natural) science is recommended. Offered occasionally.

206 Introduction to Data Structures NA/QU
J. Dougherty
Overview of the intellectual and software tools used to create and study data structures: specification of data types; abstraction and representation; reasoning tools to study correctness and efficiency; classic data structures for collections (set, vector, list, stack, queue, tree, graph); introduction to object-orientated programming. Weekly programming laboratory section. Prerequisite: Computer Science 105 (or 110 at Bryn Mawr) or instructor consent. Typically offered every Spring.

210 Linear Optimization and Game Theory NA/QU (Cross-listed in Mathematics and Economics)
L. Butler
Prerequisite: MATH 215 or MATH 115 and concurrent registration in MATH 215. Typically offered in alternate years.

215 Human Computer Interaction NA
S. Lindell
Interaction between people and machines, with a focus on how computer interfaces can be made more convenient. Issues considered will include the study of cognitive principles, foundations of perception, and guidelines for accessibility, together with safety and social implications. Prerequisite: One course in Computer Science or permission of the instructor. Offered occasionally.

235 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. Prerequisite: Math 215 (may be taken concurrently). Offered occasionally.

240 Principles of Computer Organization NA
J. Dougherty/D. Wonnacott
Treatment of the hierarchical design of modern digital computers: boolean logic/algebra; sequential state systems; register machines; instruction sets; memory organization; assembly language programming. Lectures cover the theoretical aspects of system architecture; labs provide implementation experience via a hardware simulator. Prerequisite: CMSC 206 or consent. MATH 231 recommended. Typically offered yearly in alternation with Bryn Mawr.

245 Principles of Programming Languages NA
D. Wonnacott
Study of 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. Lectures cover theoretical foundations of language design and implementation; labs provide opportunities to both use and implement language features. Prerequisite: CMSC 206 or consent. CMSC/MATH 231 strongly recommended. Typically offered yearly in alternation with Bryn Mawr.

287 High Performance Computing NA
J. Dougherty
Prerequisite: CMSC 206 or consent. Offered occasionally.

300 Computer Science Research Foundations NA
D. Wonnacott
An introduction to research skills needed for the field of computer science, designed to prepare students for senior thesis or summer research work. Prerequisite: Course open to Junior CMSC Majors; others by permission.

304 Computational Physics NA/QU (Cross-listed in Physics)
P. Love
Prerequisite: Junior standing, Physics 213 and either CMSC 105 or extensive experience with a programming language or consent. Typically offered in alternate years.

340 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: CMSC 206. Typically offered in alternate years.

345 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: CMSC/MATH 231. Typically offered in alternate years.

350 Compiler Design NA
D. Wonnacott
A practical introduction to modern compiler and interpreter design with a substantial laboratory component using compiler-writing tools. Prerequisite: CMSC 245. Typically offered yearly in alternation with Bryn Mawr.

356 Concurrency and Co-Design in Operating Systems NA
D. Wonnacott
A practical introduction to the principles of shared-memory concurrent programming and of hardware/software co-design, which together underlie modern operating systems; includes a substantial laboratory component, currently using Java’s high-level concurrency and the HERA architecture. Prerequisite: CMSC240. Typically offered in alternate years.

392 Software Development for Accessibility NA
J. Dougherty
Prerequisite: CMSC 206 or consent. Offered occasionally.

393 Physics of Computation NA
S. Lindell
Advanced seminar covering the fundamental physical limits and potentials of computation. Prerequisite: Math 235 or Physics 303 or instructor consent. Offered occasionally.

394 Number Systems and Computer Arithmetic NA (Cross-listed in Mathematics)
S. Lindell
Prerequisite: Discrete Mathematics 231 or another 200 level MATH course with rigorous proofs. Offered occasionally.

399 Senior Thesis NA
J. Dougherty, S. Lindell, D. Wonnacott
Taken for a half credit in both the fall and spring semesters, whose purpose is to prepare the thesis. Seminar for seniors writing theses, dealing with the oral and written exposition of advanced material. Prerequisite: Senior standing.

460 Teaching Assistant NA
S. Lindell
Does not count toward the major.

480 Independent Study NA
J. Dougherty
The pursuit of advanced material under the direct supervision of a faculty member. Prerequisite: Permission of instructor.

RELATED COURSES IN MATHEMATICS
203 Applied Statistics
210 Linear Optimization and Game Theory
215 Linear Algebra
218 Probability and Statistics
222 Introduction to Scientific Computing
250 Combinatorial Analysis
RELATED COURSES IN PHYSICS
316 Electronic Instrumentation and Computers
322 Solid State Physics

COMPUTER SCIENCE COURSES OFFERED
AT BRYN MAWR COLLEGE
110 Introduction to Computing
120 Visualizing Information
212 Computer Graphics
231 Discrete Mathematics
246 Programming Paradigms
325 Computational Linguistics
330 Algorithms: Design & Practice
355 Operating Systems
361 Emergence
371 Cognitive Science
372 Artificial Intelligence
376 Androids: Design & Practice
380 Recent Advances in Computer Science
THE CONCENTRATION IN SCIENTIFIC COMPUTING

Many disciplines in the natural and social sciences include a significant sub-discipline that is explicitly computational. Examples include astronomy, biology, chemistry, economics, and physics. In some fields, such as biology, the use of computation has become so widespread that basic literacy in computation is increasingly important and may soon become required. The concentration in scientific computing gives students an opportunity to develop a basic facility with the tools and concepts involved in applying computation to a scientific problem, and to explore the specific computational aspects of their own major disciplines.

Three of the six courses required for the concentration focus exclusively on computing; one is an introduction to computer science and programming, and the other two focus on the general issues of the use of computation in a broad range of scientific disciplines. For the remaining three courses in the concentration, students choose from a list of elective courses offered by a variety of departments. These courses involve the particular use of computation relevant for that particular department. The Scientific Computing web page, (http://www.cs.haverford.edu/programs/SC-conc.html) contains some suggested tracks for a variety of majors, although a student may also design her/his own track in consultation with one of the coordinators of the concentration.

THE CONCENTRATION IN SCIENTIFIC COMPUTING COORDINATORS FOR 2009-2010

Assistant Professor of Astronomy and Physics Peter Love, Concentration coordinator
Associate Professor of Biology Robert Fairman, Concentration coordinator
Assistant Professor of Chemistry Casey Londergan, Concentration coordinator
Assistant Professor of Computer Science John Dougherty, Concentration coordinator
Assistant Professor of Economics Indradeep Ghosh, Concentration coordinator
William H. and Johanna A. Harris Associate Professor of Computational Science Robert Manning, Concentration coordinator

THE CONCENTRATION IN SCIENTIFIC COMPUTING REQUIREMENTS

The concentration in scientific computing consists of six courses selected from the following list and approved by the student’s concentration advisor. (Note: As per College rules, the CSC consists of 6 required courses. Of these 6 courses, 2-3 count toward both the student’s major and concentration.

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. For example, both introductory computer science courses, CS H105 and CS B110, cannot be taken for credit.)

(A) A one-semester introduction to Computer Science and programming drawn from the following three courses: CS H105 or CS B110 (Introduction to Computer Science); CS H187 (Scientific Computing – Discrete Problems)

(B) Two courses with a focus on scientific computing from the following list:

- Math H222: Scientific Computing – Continuous Problems
- CS H/B206: Introduction to Data Structures
- CS B250: Computational Models in the Sciences
- one additional course from the list in part (A) above (though B110 and H105 cannot both be taken)

(C) Three credits worth of electives in which real-world phenomena are investigated using computation, at a significant level as determined by the standards of that discipline. At least one of these three credits must come from a 300-level course or courses (not senior research). These courses should be drawn from the following list:

- Astronomy H321: Stellar Structure and Evolution
- Biology H300: Superlab
- Biology H301: Advanced Genetic Analysis (1/2 credit)
- Biology H354: Computational Genomics (1/2 credit)
- Biology H357: Protein Design (1/2 credit)
- Chemistry H304: Physical Chemistry I
- Chemistry H305: Physical Chemistry II
- Chemistry B322: Advanced Physical Chemistry: Mathematical Modeling & Natural Processes
- CS B20: Visualizing Information
- CS H225: Fundamentals of Databases
- CS H235: Information and Coding Theory
- Economics H365: Computational Methods in Economics
- Economics S032: Operations Research
- Math H204/B210: Differential Equations, in years in which it includes significant computer
lab exercises involving modeling and/or simulation

• Math H210: Linear Optimization and Game Theory
• Math H218: Probability, in years in which it includes significant computer lab exercises involving modeling and/or simulation
• Math H286: Applied Multivariate Statistical Analysis
• Math H394: Advanced Topics in Computer Science and Discrete Math
• Math H397: Advanced Topics in Applied Math
• Math S056: Modeling
• Physics H304: Computational Physics
• Physics B306: Mathematical Methods in the Physical Sciences
• Physics H316: Electronic Instrumentation and Computers
• Physics S026: Chaos, Fractals, Complexity, Self-Organization, and Emergence

• Up to 1 credit of senior research (e.g., Astronomy H404, Bio H40x, Chemistry H361, CS H480, Math H399, Physics H41x), if the project has a significant focus on scientific computing

(D) Some part of completion of the concentration must include a project-based experience in which computation is applied to investigate a real-world phenomenon, e.g.: A senior thesis/experience with significant scientific computing component, or A summer research experience, or A multi-week project for a course that may (or may not) be one of the three electives that fulfill requirement (C).
EAST ASIAN STUDIES

Students may complete a major in East Asian Studies, a minor in Chinese language or Japanese language, or a (non-language) minor in East Asian Studies.

The Bi-College Department of East Asian Studies (EAS) links rigorous language training to the study of East Asian culture and society. In addition to our intensive programs in Chinese and Japanese languages, the departmental faculty offers courses in East Asian philosophy, linguistics, literature, religion, social and intellectual history. The East Asian Studies program also incorporates courses 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. Please consult the course guide, online or in print, for details on this year’s offerings.

EAST ASIAN STUDIES FACULTY

Chairs
Professor Robert Dostal, Co-Chair at Bryn Mawr College
Associate Professor Hank Glassman, Co-Chair at Haverford College

At Bryn Mawr College:
Associate Professor Yonglin Jiang
Assistant Professor Pauline Lin (on leave Semester I)
Senior Lecturer Tzu Chiang
Instructor Changchun Zhang

At Haverford College:
Professor of History and East Asian Studies Paul Jakov Smith, John B. Coleman Professor of Social Sciences
Associate Professor Hank Glassman
Associate Professor of Chinese and Linguistics Shizhe Huang, C. V. Starr Professorship in Asian Studies

Senior Lecturer Yoko Koike (on leave 2010-2011)
Visiting Instructors Kimiko Suzuki, Kazue Kurokawa
Instructor Minako Kobayashi, Tsung Tsai

EAST ASIAN STUDIES 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 (Major 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.

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 senior seminar (EAST 398, 399, culminating in the completion of a senior thesis early in the spring semester).

EAST ASIAN STUDIES MINOR REQUIREMENTS

The Department of East Asian Studies offers minors in both Chinese and Japanese. The requirement is six courses in either language. This minor is currently administered at Bryn Mawr. The department also offers a minor in East Asian Studies, requiring any six courses in EAS exclusive of languages but including cross-listed courses taught in other departments. Of the six courses taken in fulfillment of the EAS non-language minor, at least two must be at the 200 level and at least one must be at the 300 level.

LANGUAGE PLACEMENT TESTS

Placement tests for first-time students at all levels are conducted in the week before classes start in the fall semester. To qualify for Third-year language courses students need to finish Second-year courses with a score of 3.0 or above in all four areas of training: listening, speaking, reading, and writing. In the event that students do not meet the minimum grade at the conclusion of 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 taking summer courses or studying on their own under supervision. They must take a placement test before starting Third-year language study in the fall. (Similarly,
students who do not finish Third-year with a score of less than 3.0 in any of the four areas must also take a placement exam before entering Fourth-year.)

**EAST ASIAN STUDIES REQUIREMENTS FOR 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. Formal approval is required by the study abroad advisor prior to the student’s travel. Without this approval, credit for courses taken abroad will not be accepted by the East Asian Studies Department. Also, since procedures for study abroad are different for Bryn Mawr and Haverford, students should contact the relevant deans at their own colleges. Students majoring in EAS are discouraged from studying abroad during the spring of their junior year, since the Methods and Approaches Seminar EAST 200, meets then and it is best to take it as a junior. Minors and other students may go abroad fall or spring semester or for the whole year.

If studying abroad is not practical, students may consider attending certain intensive summer schools approved by the East Asian Studies Department. These plans must be worked out in concert with the program’s study abroad advisor and the student’s dean.

**EAST ASIAN STUDIES COURSES**

**EAST H120 Chinese Perspectives on the Individual and Society (Cross-listed in History)**

_P. 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 began to percolate Chinese literature and political discourse.

**EAST B131 Chinese Civilization (Cross-listed in History)**

_Y. Jiang_

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.

**EAST H132 Japanese Civilization**

_H. Glassman_

A broad chronological survey of Japanese culture and society from the earliest times to the present, with special reference to such topics as belief, family, language, the arts, and sociopolitical organization. Readings include primary sources in English translation and secondary studies.

**EAST B200 Major Seminar: Methods and Approaches in East Asian Studies**

_Y. Jiang_

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. Required of East Asian Studies majors, but open to others by permission. The course should be taken before the senior year. 

**Prerequisite:** One year of Chinese or Japanese.

**EAST H201 Introduction to Buddhism (Cross-listed in Religion)**

_H. Glassman_

Focusing on the East Asian Buddhist tradition, this course examines Buddhist philosophy, doctrine and practice as textual traditions and as lived religion.

**EAST B206 Modern Chinese Literature and Film**

_P. Lin_

Introduces the development of modern Chinese literature and related film since the 19th century in terms of the significant motifs of enlightenment and decadence. The course enriches the understanding of heterogeneous "modernities" rather than the homogeneous "modernity" in modern China.

**EAST B210 Topics in Chinese Culture: Late Imperial China: Marco Polo to 18th Century**

_Staff_

This course is a broad chronological survey of Chinese history with a focus on foreign relations. In this period, China stood at the center of the emerging world economy. The rise of Inner Asian armies on horseback led China to be ruled by Mongolian and Manchurian leaders, fostering new notions of the empire. Interactions with Europeans became more common, from Marco Polo near the beginning of the period to British merchants at the end. Students are encouraged to relate these changes to their understanding of present-day China.

**EAST B212 Introduction to Chinese Literature: Literature in Everyday Life**

_P. Lin_

One year of Chinese or Japanese.
The rituals of everyday life mark the passing of our personal histories: they include the basics for sustenance, as well as the extravagant and serendipitous occurrences; there is a rhythm to daily life, and there are interruptions to that rhythm. At the same time, records of daily life also reflect a given period, its culture, people or the individual writers. This course explores literature about everyday life beginning from the earliest times with the Book of Songs to the great 18th century novel, The Dream of the Red Chamber. Topics include: farm life and gardens, the "things" in life, travels, courtship, dreams, tea culture, and food.

EAST H218 Chinese Calligraphy As an Art Form (Cross-listed in Fine Arts) Y.Li
This course is a 200-level studio/lecture art course. It combines studio practice and creating art projects with slide lectures, readings and museum visits. Students will learn the basic techniques of Chinese Calligraphy, its historical roots and development, and its connection with society, politics, and religion. It offers training in disciplined hand-eye coordination together with an appreciation for this ancient and contemporary art form. At the same time, students will learn how western artists, such as Van Gogh, Franz Kline, Jackson Pollock, Robert Motherwell, and Willem de Kooning, were influenced by Chinese calligraphy and built on its techniques in their own work. No Chinese language required.

EAST B225 Topics in Modern Chinese Literature: Modern China through Literature, Art and Film (Cross-listed as HART 225 and HIST 220) P.Lin

EAST H228 The Logos and the Tao (Cross-listed in Philosophy and Comparative Literature) 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. Prerequisite: One 100 level course or its equivalent, or consent.

EAST B229 Comparative Urbanism: Colonial and Post-Colonial Cities (Cross-listed as ANTH B229 and CITY B229) G.McDonogh
This course examines the issues of colonialism, post-colonialism, and urbanism in a Chinese context. As Chinese society transformed in the nineteenth and early twentieth centuries, cities were at the forefront of change, becoming symbols of both the promise and the discontents of modernity. At the same time, Chinese cities maintained their roles as centers of economic, political, and religious activity. How did these shifts affect urban life? We will consider answers to these questions with reference to hygiene, markets, military bases, crime, imperialism, and labor.

EAST H235 Early Chinese Philosophy (Cross-listed in Philosophy) K.Wright
An introduction to the lively and sharp disputes between competing schools of philosophy in ancient Chinese philosophy, that is, philosophy in the pre-Han period prior to the syncretism that marks Confucianism, Neo-Confucianism, and most recently New Confucianism. Prerequisite: One 100 level course in philosophy or EAST 131 Chinese Civilization or by permission of the instructor.

EAST H240 Economic Development and Transformation: China vs. India (Cross-listed in Economics) 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 the 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. Prerequisite: Econ H101, or 102, or 100 or B105 or equiv.

EAST H242 Buddhist Philosophy (Cross-listed in Philosophy) 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 Dhammapada, and proceeds to an in-depth critical exploration of the teachings of Nagarjuna, the great dialectician who founded the Madhyamika School. Prerequisite: One 100 level course in Phil or consent.

EAST H244 Anthropology of China (Cross-listed in Anthropology) M.Gillette
Social institutions, cultural idioms, and forms of representation in and of Chinese society over the past 150 years. Through investigations of ethnographic monographs, missionary records, memoirs, and realist fiction, we develop skills in socialgraphs, missionary records, memoirs, and realist fiction, we develop skills in social analysis and cultural critique, and enrich our understanding of contemporary Chinese society. Prerequisite: One course in East Asian Studies or consent.

EAST H247 Death and the Afterlife in East Asia (Cross-listed in Religion) H.Glassman
This course engages the rich textual and visual traditions of China, Korea, and Japan to illuminate
EAST H256 Zen Thought, Zen Culture, Zen History
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.

EAST H260 Mid-Imperial China HU (Cross-listed in History)
P. Smith
This course surveys the fundamental transformation of Chinese society between the 10th and 17th centuries, with particular stress on the civil service examinations and the rise of a literocentric elite; the impact of Neo-Confucianism on social and gender relations; relations between China, the nomad polities of the steppe, and (by the 16th century) the increasingly inquisitive representatives of the West; and the cultural consequences for Chinese of all social strata of the growing power of money. Prerequisite: Open to sophomores and above.

EAST H261 Late Imperial China, 1600-1900 (Cross-listed in History)
P. Smith
Surveys Chinese culture and society at the height of the imperial era through the 18th century and the ensuing political and cultural crises catalyzed by institutional decline and Western imperialism in the 19th and early 20th centuries. Prerequisite: Sophomore standing or above and at least one prior course in History or East Asian Studies.

EAST B263 The Chinese Revolution Y. Jiang
Placed the causes and consequences of the 20th century revolutions 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.

EAST B264 Human Rights in China (Cross-listed as Hist B260)
Y. Jiang
This course will examine China's human rights issues from a historical perspective. The topics include diverse perspectives on human rights, historical background, civil rights, religious practice, justice system, education, as well as the problems concerning some social groups such as migrant laborers, women, ethnic minorities and peasants.

EAST H267 The Medieval Transformation of Eurasia, ca. 1000 1400 (Cross-listed in History) P. Smith
Historians now agree that the 10th through the 14th centuries witnessed transformations across Eurasia that had long-term consequences for subsequent developments throughout the Old World. This course surveys the nature of and linkages between those changes in Europe, the Islamic world, China, and Japan, with a primary focus on travelers' accounts and such literary sources as The Canterbury Tales (Europe), The Arabian Nights (Middle East), Tale of the Heike (Japan), and The Story of the Western Wing (China). Prerequisite: One 100 level introductory course in History or East Asian Studies.

EAST B270 Japanese Architecture and Planning (Cross-listed as CITY B270 and HART B270) C. Hein
This course will examine the nature and linkages between those changes in Europe, the Islamic world, China, and Japan, with a primary focus on travelers' accounts and such literary sources as The Canterbury Tales (Europe), The Arabian Nights (Middle East), Tale of the Heike (Japan), and The Story of the Western Wing (China). Prerequisite: One 100 level introductory course in History or East Asian Studies.
In this seminar we will examine the intersection of religion & gender in Japanese literature from the 11th to the 16th centuries. The course assumes no prior academic experience in gender, literature, religion, or Japanese culture. While all materials read in the course are in English translation, as students will see, linguistic translation is only the first step. We will undertake this enterprise of cultural translation together as we read primary and secondary sources to gain insight to the meaning of being a man or being a woman in medieval Japan.

These students are urged to consult the Co-Chair 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 in East Asian Studies. Information about specific study abroad opportunities can be obtained from the director.

Faculty
Lecturer Tz’u Chiang
C. V. Starr Professorship in Asian Studies and Associate Professor of Chinese and Linguistics Shizhe Huang, Director
Assistant Professor Pauline Lin (on leave Semester I)
Instructor Changchun Zhang

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.
representative works. **Prerequisite:** Third-year Chinese or consent of instructor.

**JAPANESE LANGUAGE**
The Japanese Language Program offers a full undergraduate curriculum of courses in Modern Japanese. Students who will combine language study with focused work on East Asian society and culture may wish to consider the major in East Asian Studies. Information about specific study abroad opportunities can be obtained from the director.

**Faculty**
*Associate Professor Hank Glassman,* **Interim Director**
*Senior Lecturer Yoko Koike,* **Director (on leave 2010-2011)**
*Instructor Kazue Kurokawa*
*Instructor Kimiko Suzuki*

**JNSE 001,002 First-Year Japanese-Intensive HU**
*K. Kurokawa*
An intensive 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 class and oral practice. This is a year-long course; both semesters (JNSE001 and 002) are required for credit. Limited to 18 students.

**JNSE 003,004 Second-Year Japanese HU**
*K. Suzuki*
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. Limited to 18 students.

**JNSE 101 Third-Year Japanese HU**
*K. Kurokawa*
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 and consent of instructor.

**JNSE 102 Third-Year Japanese HU**
*K. Suzuki*
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:** Japanese 101 or equivalent.

**JNSE 201 Fourth-Year Japanese HU**
*K. Suzuki*
Advanced study of Japanese with particular emphasis on reading texts and mastery of kanji and expansion of vocabulary in addition to further development of speaking and writing proficiency. **Prerequisite:** Third-year Japanese or equivalent and consent of instructor.

**JNSE 202 Fourth-Year Japanese HU**
*K. Kurokawa*
Advanced study of Japanese in all four skills (speaking, listening, reading and writing), with the focus on the development of effective communicative skills. Authentic texts and audio-visual materials will be used. **Prerequisite:** Japanese 201 or equivalent and consent of 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 course, Economics 105, introduces and develops 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. This course provides 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 105 as a prerequisite, and are designed to be useful to non-majors as well as minors and majors. The advanced theory courses of Economics 300 and Economics 302 follow up on the introductory theory course but offer more in-depth and mathematical treatments of these theoretical concepts which are the building blocks for modern economic thought and research. Statistical methods used in empirical research are important for students who will be reading original economics articles and conducting their own research. Economics 203 (Statistical Methods in Economics) or Economics 204 (Economics Statistics with Calculus) followed by Economics 304 (Introduction to Econometrics) give students the necessary methodological training. 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. A small number of the 300 level courses are “junior research seminars” designed to develop the student’s research skills through exploring topical cutting edge research and conducting related original projects. Economics 396 is a two semester Senior Research Seminar. The first semester is a group seminar in which students learn salient research skills, listen to and critique work of guest economics speakers, and develop their own research questions. During the second semester students conduct original and independent economics research under the guidance of one of the economics faculty members.

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, excluding Economics 105). 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.

ECONOMICS FACULTY

Associate Professor Richard Ball
Assistant Professor Biswajit Banerjee
Associate Professor Linda Bell (on leave)
Visiting Assistant Professor Paul Cichello
Professor Vernon J. Dixon, Emeritus
Assistant Professor Indradeep Ghosh (on leave)
Assistant Professor Saleha Jilani
Professor Vladimir Kontorovich, Chair
Visiting Assistant Professor Shannon Mudd
Assistant Professor David Owens
Professor Anne E. Preston (on leave)

ECONOMICS MAJOR REQUIREMENTS

Economics 105, 203 or 204, 300, 302, 304, 396; four other semester courses above the 100 level, one of which is at the 300 level and one of which is a junior research seminar; two semesters of college-level calculus or equivalent. With departmental approval, Math 203 can replace Economics 203 or 204 and Math 286 can replace Economics 304. Prospective majors are advised to take Economics
105, 203 or 204, and either Economics 300 or 302 by the end of their sophomore year.

Note: Because the curriculum changed in the 2009-2010 academic year, requirements for majors graduating in 2011 and 2012 are slightly different. The requirements listed above hold for all majors graduating in 2012 and after. Majors graduating in 2011 have the option of taking a two semester introductory sequence of Economics 101, Introduction to Microeconomics, and Economics 102, Introduction to Macroeconomics, or simply Economics 105. Those students taking Economics 101 and 102 will only be required to take 3 electives, with one at the 300 level and one which is a Junior Research Seminar.

**ECONOMICS MINOR REQUIREMENTS**
Requirements for a minor in economics are: Economics 105, 203 or 204, 300 or 302; three other Economics courses at the 200 and/or 300 levels.

**ECONOMICS 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.

**ECONOMICS COURSES**

**105 Introduction to Economics SO**

S. Jilani

An introduction to microeconomic topics--opportunity cost, supply and demand, consumer decision making, the theory of the firm; market structures, and efficiency and market failure—and macroeconomic topics—the determination of GDP, money and interest rates, unemployment and inflation, and fiscal and monetary policy. Because Econ 105 requires graphical and algebraic competency, students are strongly encouraged to take a college-level calculus course either before or concurrently with this course.

**203 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, 102, 105, or 100 with Chair approval, and conditional on a grade of 3.0 or higher.

**204 Economic Statistics with Calculus SO/QU**

RBall

An introductory course in statistics aimed primarily at students in economics and other social sciences. The course develops the theoretical groundwork of statistical inference and investigates the application of theoretical principles and methods to real data. Three hours of class plus two hours of lab per week. **Prerequisite:** Math 114 or equivalent background in probability and integral calculus.

**205 Corporate Finance SO**

Staff

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:** ECON 105.

**207 Monetary Economics SO**

I. Ghosh

How money, the banking system and financial markets interact and affect the macroeconomy. We will study asset markets and asset returns, the determination of equilibrium rates of return and interest rates, and the risk-return trade-off in asset markets and its influence on portfolio allocation. We will also cover how monetary policy is implemented through the Federal Reserve System. **Prerequisite:** ECON 105.

**209 Law and Economics SO**

V. Kontorovich

Why do rational people follow fixed rules (laws) instead of doing what is best for them in a specific situation? Can there be order without law? Should the government compensate people when it issues environmental and wildlife protection regulations which reduce the value of their property? The lady who burned herself with a cup of McDonald’s coffee won several million dollars in compensation. Does that make sense? These and many other questions are addressed as we look at property law, contracts, and torts. **Prerequisite:** ECON 105 and one other economics course.

**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 105.

224 Women in the Labor Market SO (Cross-listed in Gender and Sexuality Studies)

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.

225 Developing Economies SO

Staff
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: ECON 105.

231 Public Health Economics SO

Staff
Prerequisite: ECON 105.

237 Games and Strategies in Economics SO/QU

R.Ball
A survey of the major equilibrium concepts of non-cooperative game theory, with an emphasis on applications to economics and related fields. Prerequisite: Completion of HC MATH 113 with a grade of 2.7 or above or equivalent preparation in calculus.

240 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. Prerequisite: ECON 105.

241 Economics of Transition & Euro Adoption in Central and Eastern Europe SO

B.Banerjee
The aim of this course is to provide an understanding of the process of transition of former socialist countries from centrally planned to market economies and their accession into the European Union (EU) with the eventual goal of adopting the euro as the currency. Special emphasis will be given to the experiences of the Czech Republic, Slovakia, Hungary, Poland, Slovenia, Latvia, Estonia, and Lithuania. In the context of transition, the course will cover issues related to political transformation, macroeconomic stabilization, privatization, and structural reforms in the fiscal sector, banking and financial sectors, and the labor market. Prerequisite: Intro Micro and Macroeconomics.

249 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, not by, people. 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 Econ, Pols, or Hist.

250 Sports Economics SO

A.Preston
An examination of organized team sports from the perspective of the economist and public policy maker. Tools of labor economics and industrial organization are used to analyze economic problems arising from opportunities for monopoly and monopsony rents and piecemeal regulation. Prerequisite: Introduction to Economics.

251 Empirical Macroeconomics SO

B.Banerjee
The aim of this course is to provide students with an understanding of the design and implementation of macroeconomic and financial policies. The course will cover the principal features of accounts used in macroeconomic analysis, the diagnosis of macroeconomic performance, and the preparation of an internally consistent macroeconomic policy program that will move an economy toward internal and external balance. Actual case studies will be used. Teams will be formed, and each team will collectively prepare an analysis of economic
background and formulate a policy program for a
given country. Prerequisite: Intro Macroeconomics
and proficiency in the use of spreadsheets.

297 Economic Sociology SO (Cross-listed in
Sociology)
M. Gould
Prerequisite: Soc 155a or b, Econ 105, or consent of
the instructor. Typically offered in alternate years.

300 Intermediate Microeconomic Analysis SO
V. Kantorovich
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.

302 Intermediate Macroeconomic Analysis SO
B. Banerjee
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: Econ 105 and one other Econ course
and Math 114.

304 Introduction to Econometrics SO
Staff
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.

311 Theory of Non-Cooperative Games SO
Staff
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
case 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 or 204, 300 and two
semesters of college level calculus (or equivalent).

312 General Equilibrium Theory SO
R. Ball
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: Econ
300 and either Math 216 or 317.

314 Behavioral Economics SO
D. Owens
This course explores systematic departures of
behavior from the predictions of neoclassical
economic theory, and when possible, proposes
alternative theories to explain this behavior. The
course will begin with a study of reference-
dependent preferences, based on Kahneman and
Tversky’s seminal paper Prospect Theory. Further
topics will include, but not be limited to, present-
biased preferences, social preferences and behavioral
finance. Students should be comfortable with
microeconomic theory, and have some exposure to
game theory. The course will have a heavy research
component, and students should be prepared for
critical reading of scholarly articles, and to write and
present a research paper of their own. Prerequisite:
Econ 308.

321 Derivative Securities SO
Staff

340 Policy Research in Labor Economics SO
L. Bell
The starting point for this course will be current
academic research as it contributes to labor market
policy debate and change. Current policy relevant
issues will dictate precise content and the emphasis
of the course will be on understanding a body of
academic economic discourse and how it helps to
prioritize, influence, and ultimately set into motion
national economic policy. Possible topics may
include: workplace discrimination, minimum wage
policy, economic inequality, poverty and welfare,
international labor market comparison and
performance, executive compensation, education
policy and access, and the life-cycle of employment.  
Prerequisite: Econ 300 and 304.

345 Advanced Topics in Finance (International Finance) SO  
S.Mudd  
The course will examine the economics of international financial markets and multinational enterprises by considering three main topics: models of exchange rates determination, exchange rate risk and its management at the firm level including the use of forward contracts and derivatives (foreign currency options, swaps and futures); international capital flows, including a firm level look at foreign country entry decisions; the problem of international debt and other imbalances and their relationship to economic growth and crises.  
Prerequisite: ECON 203, ECON 300 and ECON 302

347 Advanced Seminar in Macroeconomics: Open Economy Macroeconomics SO  
I.Ghosh  
This course will explore topics in international macroeconomics, focusing on the determination and behavior of unemployment, interest rates and national income, as well as exchange rates, trade balance, and capital flows within an “open economy” framework. Applications will include the European Monetary Union, the Asian and Latin American financial crises, and the sustainability of the U.S. Current Account Deficit. Prerequisite: Econ 302 or equiv.

348 International Trade: 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 or equivalent.

365 Computational Methods in Economics and Finance SO  
I.Ghosh  
This course will introduce numerical methods commonly used in the fields of macroeconomics and finance. It will introduce computational and programming techniques that can be used to solve finite-dimensional optimization problems. Such problems commonly arise in economics—how much to spend as opposed to save; and in finance—how to distribute the saved amount across different assets. Prerequisite: Econ 302 AND Math 121 AND Math 215. No prior programming experience is required.

371 Junior Research Seminar: Psychological Biases and Economic Decisions SO  
D.Owens  
A seminar-based course covering current research on the role of psychological biases in economic decision-making. The focus is on critical reading of recent work and developing students’ own research. Prerequisite: ECON 300 and ECON 304.

372 Junior Research Seminar: Advanced International Trade SO  
S.Jilani  
This advanced seminar-based course covers topics in international trade theory and policy, with an emphasis on current research topics and developments. Determinants of international trade and foreign investment will be analyzed, and we will examine the motivations for and consequences of tariffs and quantitative restrictions on trade. Topics will include dynamic comparative advantage, factor movements and multinational corporations, effects of trade on economic growth and income inequality, international trade policy negotiations, agreements and disputes, and economic integration. Prerequisite: Econ 300 (Intermediate Micro) and Econ 304 (Econometrics) or permission. Math 121 or 216 (Calc or Adv. Calc) recommended.

373 Research Seminar SO  
Staff  

396 Research Seminar SO  
Staff  

460 Independent Study SO  
Staff  

ELECTIVES

210 Linear Optimization and Game Theory  
NA/QU (Cross-listed in Computer Science and Mathematics)  
L.Butler  
Prerequisite: MATH 215 or MATH 115 and concurrent registration in MATH 215. Typically offered in alternate years.

COURSES OFFERED ONLY AT BRYN MAWR COLLEGE:

206 International Economics  
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
The field of education is about teaching people how to teach—and more. The Bryn Mawr/Haverford Education Program is built around four mutually-informing pursuits: teacher preparation; the interdisciplinary study of learning as a central human and cultural activity; the investigation of the politics of schooling; and students’ growth as teachers, learners, researchers, and change agents.

Courses in the Education Program address students interested in: the theory, process, and reform of education in the United States; social justice, activism, and working within and against systems of social reproduction; future work as educators in schools, public or mental health, community, or other settings; examining and re-claiming their own learning and educational goals; and integrating field-based and academic learning.

Each education course includes a field component through which professors seek continuously to integrate theory and practice, asking students to bridge academic and experiential knowledge in the classroom and beyond it. Field placements in schools and other educational settings range from two hours per week in the introductory course to full-time student teaching in the certification program.

The bi-college Education Program offers several options. Students may:

- Explore one or more aspects of education in areas of particular interest—such as urban schooling—by enrolling in single courses;
- Pursue a minor in education leading to secondary teacher certification;
- Pursue a minor in educational studies;
- Complete the secondary teacher certification program in a fifth-year program after they graduate at a reduced cost;
- Complete elementary certification through the Swarthmore and Eastern Colleges’ elementary education certification program; and
- Sub-matriculate (as juniors or seniors) into the University of Pennsylvania, Graduate School of Education’s elementary or secondary education Master’s program.

The secondary certification sequence and the minor are described below. Students interested in either of these options—or in pursuing elementary education at Swarthmore or sub-matriculating into the University of Pennsylvania’s Graduate School of Education (not described here)—should meet with the program advisor as early as possible for advice on scheduling, preferably by the sophomore year.

**EDUCATION AND EDUCATIONAL STUDIES FACULTY**
Senior Lecturer Jody Cohen
Professor Alison Cook-Sather
Instructor Heather Carl
Instructor Debbie Flaks
Postdoctoral Fellow in Science Education Howard Glasser
Instructor Barbara Hall
Senior Lecturer and Director Alice Lesnick

**COORDINATOR**
Program Coordinator and Advisor Ann Brown

**REQUIREMENTS**

1. FOR CERTIFICATION

The Bryn Mawr/Haverford Education Program is accredited by the state of Pennsylvania to prepare undergraduates for secondary certification (grades 7-12) in the following areas: biology, chemistry, English, mathematics, physics, social studies (as well as citizenship education and social science), and world languages, including Chinese, French, German, Latin, Russian and Spanish. Pursuit of certification in Chinese, German, Latin and Russian is subject to availability of student-teaching placements.

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 in the subject area in which they seek certification. (Within their major, students must select courses that help them meet or exceed the state standards for teachers in that subject area). Students must also complete a minor in education, completing the secondary certification track courses listed below:

1. EDUC 200 (Critical Issues in Education).
2. PSYC 203 (Educational Psychology).
3. EDUC 210 (Special Education).
4. Either EDUC 250 (Literacies and Education) or EDUC 260 (Multicultural Education).

5. EDUC 301 (Curriculum and Pedagogy Seminar).

6. EDUC 302 (Practice Teaching Seminar) and EDUC 303 (Practice Teaching). These courses are taken concurrently and earn triple credit.

Furthermore, for social studies certification, as well as certification in the sciences, students must take courses outside their major to meet state standards.

Students preparing for certification must also take two English and two mathematics courses and must attain a grade point average of 3.0 or higher (state requirements). They must attain a GPA of 2.7 or higher in EDUC 200 (Critical Issues in Education) and in EDUC 301 (Curriculum and Pedagogy Seminar) to practice-teach and must receive a grade of 2.7 or higher in EDUC 302 (Practice Teaching Seminar) to be recommended for certification. They must also be recommended by the director of the Education Program and the chair of their major department.

Critical Issues in Education should be taken by the end of the sophomore year if at all possible. The Curriculum and Pedagogy Seminar is 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 an interdisciplinary exploration of the cultural, political, and interactional dimensions of teaching and learning and is designed for students with a broad range of education-related interests, such as plans for graduate study in education, pursuit of elementary or secondary certification after graduation or careers that require educational expertise. Many professions and pursuits—management and training positions, research, administration and policy work, and careers in social work, health and law—involves using an educator’s skills and knowledge. Civic engagement, community development and work towards social justice also require knowledge of how people learn. Because students interested in these or other education-related pursuits 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 advisor to design a coherent course of study that satisfies the requirements below:

- EDUC 200 Critical Issues in Education.
- Two required education courses (EDUC 210, 225, 260, 250, 266—see course descriptions below).
- One education-related elective (see program adviser for options).
- EDUC 310 Defining Educational Practice.
- EDUC 311 Fieldwork Seminar.

THE PORTFOLIO

To synthesize their work in the minor or the certification program, students create 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. The portfolio is developed over the course of the student’s college career and is completed in the Fieldwork Seminar (minor) or the Practice Teaching Seminar (certification).

Title II Reporting: Title II of the Higher Education Act (HEA) requires that a full teacher preparation report, including the institution’s pass rate as well as the state’s pass rate, be available to the public on request. Copies of the report may be requested from Ann Brown, program administrator and advisor, by e-mail at abrown@brynmawr.edu or phone at (610) 526-5376.

EDUCATION AND EDUCATIONAL STUDIES COURSES

200 Critical Issues in Education SO

H. Carl

Designed to be the first course for students interested in pursuing one of the options offered through the Education Program, this course is also open to students who are not yet certain about their career aspirations but are interested in educational issues. The course examines major issues in education in the United States within the conceptual framework of educational reform. The first phase of the course invites students to recognize and question prevailing assumptions, their own and those of the broader society, about authority, the political nature of knowledge, and the purposes of schooling that shape education in America. The second phase analyzes components of the teaching and learning process. The third phase seeks to engage students in imagining and enacting, through the completion of collaborative teaching projects, possibilities for reform and reinvention. Two hours a week of fieldwork are required. Enrollment is limited to 25 students with
priority given to students pursuing certification or the minor in educational studies. Students who have taken Writing Program/EDUC 138A (Critical Issues in Education: Politics and Practices) should not enroll in this course, since the two courses are very similar in focus. Typically offered every Semester.

210 Perspectives on Special Education SO
D.Flaks
This course is designed as a survey course. Its goal is to introduce students to a range of topics, challenges, dilemmas, and strategies in understanding and educating all learners—those considered typical learners as well as those considered “special” learners. The field of “Special Education” is vast; therefore, as the course progresses, students are encouraged to narrow their focus and area of interest on a student or group of students who share similar challenges as learners. By the end of the course, students will understand more about: how students’ learning profiles affect their learning in school from a functional perspective; how and why students’ educational experience is affected by special education law; major issues in the field of special education; and a-typical learners, students with disabilities, and how to meet diverse student needs in a classroom. Two to three hours of fieldwork per week required. Enrollment limited to 25 with priority given to students enrolled in the Education Program. Priority given to those in the Teacher Cen Program or minoring/concentrating in Educ. Typically offered every Fall.

220 B Changing Pedagogies in Math and Science Education HU
H.Glaser
This course examines perspectives related to teaching and learning math and science, including questioning why (if at all) it is important for people to learn these subjects, what is viewed as successful teaching and learning in these disciplines, and how people learn math and science. Students have a placement (2-3 hours/week) with a local teacher and will be expected to make connections between course concepts and these placement experiences. Priority is given to students enrolled in the Education Program.

225 B Empowering Learners: Theory and Practice of Extra-Classroom Teaching HU
A.Lenick
This seminar explores how to engage in tutoring, mentoring, and other types of learning support in ways that draw on and enrich students’ strengths and goals. It also investigates the significance of structural, macro-level understanding and advocacy to the goal of becoming an empowering learner: one whose learning creates occasions for others’ self-and/or group-empowerment. Field placements include campus roles as T.A., peer mentor, PLI leader; off-campus programs; and Bryn Mawr’s Teaching and Learning Initiative. Fieldwork of 2-3 hours per week. Enrollment limited to 20 students. Priority is given to students enrolled in the Education Program.

240 Qualitative Research: Theories, Texts and Practices SO
A.Lenick
This course—designed for students of education, psychology, and other social sciences—examines the nature and practice of qualitative research and the epistemological and ethical questions it both addresses and occasions. The purpose of the course is to prepare students as critical readers of qualitative research reports and as beginning writers of such research. Through the study of a series of linked topics in human development as it intersects with schooling, students will explore various qualitative literatures as they begin to practice as researchers. This is a Praxis course and 2-3 hours per week in a field placement are required.

250 Literacies and Education SO
B.Hall
A critical exploration of what counts as literacy, who decides, and what the implications are for teaching and learning. Students 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. Two-three hours per week of fieldwork. Priority given to students enrolled in the Education Program. Typically offered every Fall.

260 Multicultural Education SO
B.Hall
An investigation of the continually evolving theory and practice of multicultural education in the United States. This course explores and problematizes the history, politics, definitions, focuses, purposes, outcomes, and limitations of multicultural education as enacted in a range of school subjects and settings. Central topics may include: curriculum development, teacher training, language diversity, and public policy concerns. Students will also engage in researching and reinventing what is possible in education for, with, and about a diverse world. Two to three hours of fieldwork in a related setting per week required. Enrollment limited to 25. Priority given to students enrolled in the Education Program. Typically offered every Spring.

266 Schools in American Cities SO (Cross-listed as CITY B266 and SOCL B266)
J.Cohen
Taught at Bryn Mawr. This course examines issues, challenges, and possibilities of urban education in contemporary America. We use as critical lenses issues of race, class and culture; urban learners, teachers and school systems; and restructuring and reform. While we look at urban education nationally over several decades, we use Philadelphia as a focal “case” that students investigate through documents and school
placements. Enrollment is limited to 25 with priority given to students enrolled in the Education Program and to majors in Sociology and Growth and Structure of Cities. This is a Praxis I course (2-4 hours/week of fieldwork).

301 Curriculum and Pedagogy Seminar SO
H.Carl
Taught at Bryn Mawr. A consideration of theoretical and applied issues related to effective curriculum design, pedagogical approaches and related issues of teaching and learning. Fieldwork is required. Enrollment is limited to 15 with priority given first to students pursuing certification and second to seniors planning to teach. Typically offered every Fall.

302 Practice Teaching Seminar SO
H.Carl
Taught at Bryn Mawr. Drawing on participants’ diverse student teaching placements, this seminar invites exploration and analysis of ideas, perspectives and approaches to teaching at the middle and secondary levels. Taken concurrently with Practice Teaching. Open only to students engaged in practice teaching. Typically offered every Spring.

303 Practice Teaching SO
N/A
Supervised teaching in secondary schools (12 weeks). Two units of credit are given for this course. Open only to students preparing for state certification. Typically offered every Spring.

310 Defining Educational Practice SO
A.Lesnick
Taught at Bryn Mawr. An interdisciplinary inquiry into the work of constructing professional identities and roles in education-related contexts. Three to five hours a week of fieldwork are required. Enrollment is limited to 20 with priority given to students pursuing the minor in educational studies. 3-5 hours per week of field work in an educational setting required. Priority given to students in the minor. Typically offered every Fall.

311 Field Work Seminar SO
J.Cohen
Taught at Bryn Mawr. Drawing on the diverse contexts in which participants complete their fieldwork, this seminar invites exploration and analysis of ideas, perspectives and different ways of understanding his/her ongoing fieldwork and associated issues of educational practice, reform, and innovation. Five to eight hours of fieldwork are required per week. Enrollment is limited to 20. Open only to students completing the minor in educational studies. Typically offered every Spring.

360 Learning, Teaching a Foreign Language HU
(Cross-listed in Spanish)

480 Independent Study SO
Staff
FOR THE AREA OF CONCENTRATION IN EDUCATIONAL STUDIES:
To complete the concentration, students take four courses through the education program: Education 200, an education elective, Education 310, and Education 311, which includes a field placement for approximately five 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 coordinator and their major advisor about the possibility of an AOC in their department.

CHEMISTRY CONCENTRATION
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 CONCENTRATION
Students take the following courses:
Math 460 (teaching assistantship) in two different semesters, one half-credit each.
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 CONCENTRATION
Students take the following courses:
Physics 459b Teaching Laboratory Physics (typically in the second semester of the junior year); and 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 CONCENTRATION**

Students take two of the following courses:
- Psychology B206 (Developmental Psychology)
- Psychology B203 (Educational Psychology)
- Psychology 238 (Psychology of Language)

**SOCIOLOGY CONCENTRATION**

Students take:
- Sociology 235 (Class, Race, and Education)
- and one of the following:
- Sociology B258 (Sociology of Education)
- or
- Sociology B266 (Schools in American Cities)
ENGLISH

The English department offers courses in the literary traditions of the English-speaking world. The department aims to develop in its students the ability to respond to texts thoughtfully and critically, and to articulate those responses in clear and fluent English. In our curriculum, we seek to maintain a working balance between a commitment to the traditional canon of British and American literature and an expanding horizon of fresh concerns, including courses in African-American literature, Asian-American literature, South Asian literature, South African literature, Irish literature, gender and sexuality studies, and courses inflected by particular theoretical foci, such as performance theory, queer theory, post-colonial theory, trauma theory, media studies, and visual studies. 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.

Englishmajorswho plan to do post-graduate work should know that doctoral programs require a reading knowledge of one or two foreign languages.

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 their junior year, may be admitted to the creative writing “concentration,” which consists of three courses in creative writing, one of which is 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.

ENGLISH FACULTY

William R. Kenan, Jr. Professor of English
Kimberly Benston

C. Stephen Finley,
Professor

Mohan,
Associate Professor

M. McInerney,
Chair

associate Professor

Gustavus Stadler

Christina Zwarg

Laura McGrane

Debra Sherman

Theresa Tensuan

Visiting Assistant Professor

T. Devaney

Asali Solomon

Rosemary O’Neill

ENGLISH MAJOR REQUIREMENTS

English 299a/b; 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.

ENGLISH 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.

ENGLISH COURSES

150 Introduction to Literary Analysis HU (Cross-listed in Writing Program)
P. Gaffney, L. McGrane, M. McInerney, D. Sherman
Prerequisite: Open only to members of the first-year class as assigned by the Director of College Writing. (Satisfies the first year writing requirement.)

COURSES IN CLASSICAL STUDIES NOT REQUIRING GREEK OR LATIN

290 History of Literary Theory: Plato to Shelley
HU (Cross-listed in Comparative Literature and Classical Studies)
D. Roberts
Prerequisite: Sophomore standing or above. Typically offered in alternate years.

CREATIVE WRITING COURSES

291 Poetry Writing: A Practical Workshop HU
T. Devaney
Students will write a poem a week, usually following an assignment that focuses on a particular strategy or form, from dramatic monologues to prose poems to
sonnets. Students will present their work for discussion and friendly critique by the workshop, and will be encouraged to revise their work over the semester. There will be some in-class writing exercises but most writing will be done outside of class. Light reading assignments will include modern and contemporary as well as older poetry. There will also be a mini-session on the business of poetry. Prerequisite: Writing sample required for consideration.

292b Poetry Writing II: Contemporary Voices HU
T.Devaney
English 292-B01 is an advance creative writing workshop focusing on poetry. Student work is the focus along with analysis of selected readings. Students will write poems each week (using a modeling method) and respond to the selected readings. Students are required to keep an online journal. A final portfolio of revised work is required. Prerequisite: Writing sample required for consideration.

293 Fiction Writing: From the Conventional to the Experimental HU
A.Solomon
This course is an introduction to the techniques and strategies of fiction writing, with particular emphasis on the short story. Weekly reading assignments will include both anthologized stories and student-generated ones. Prerequisite: Writing sample required for consideration.

294 Fiction Writing HU
A.Solomon
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 pieces and two longer stories. Enrollment limited to 15. Prerequisite: Writing sample required for consideration.

LITERATURE COURSES

201 Chaucer: Canterbury Tales HU
M.McInerney
Course devoted to close reading of Chaucer's Canterbury Tales; secondary readings include critical approaches and brief excerpts from other medieval sources. Typically offered in alternate years.

205 Legends of Arthur HU
M.McInerney
An exploration of the Arthurian legend, from its earliest versions to most recent retellings. The tradition of Arthurian tales is complex and various, combining Celtic and Christian mythologies. Sometimes called the "matter of Britain," the Arthurian narrative has been critical in establishing national and ethnic identities ever since the Middle Ages. Medieval notions of chivalry and courtly love also raise fascinating questions about the conflict between personal and private morality, and about the construction of both identity and gender. Prerequisite: Freshman Writing.

206 American Autobiography HU (Cross-listed in Gender and Sexuality Studies)
T.Tennan
We will focus on 20th and 21st century life narratives that illuminate the generative tension between representations of individual subjects and the formulations of national identity, including issues surrounding the constitution of racial formations, the creation of gendered norms, the permutations of memory, and the practices of revision. Prerequisite: None; introductory emphasis course.

210 Reading Poetry HU
R.O'Neill
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, and other literature; of connotation and denotation; and of metaphor. Typically offered in alternate years.

211 Introduction to Postcolonial Literature HU (Cross-listed in Comparative Literature)
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, and 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. Typically offered in alternate years.

212 The Bible and Literature HU
S.Finley
A study of the Bible and its diverse genres, including legendary history, law, chronic, 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. Typically offered in alternate years.

213 Inventing [the] English HU
M.McInerney
An investigation of the evolution of both the English language and the concept of Englishness. This course will explore the literature of the British Isles ca. 1000-
217 Humananimality: (Dis)Figurations of the Animal in the Shaping of Human Institutions HU (Cross-listed in Independent College Programs)
K.Benston
An examination of how the animal, as both fact and image, functions in the construction and practice of human institutions. Conversations among historians, artists, anthropologists, philosophers, scientists, and jurists will guide exploration of animals’ place in human culture’s ongoing story.

218 The Western Dramatic Tradition HU (Cross-listed in Comparative Literature)
K.Benston
An investigation of Western drama through close study of major representative plays. Evolving notions of the dramatic event, from classical to modern and “post-modern” theaters, will be examined in relation to developing ideas of heroism, destiny, social structure, linguistic power, and theatricality itself. Emphasis will be placed on both thematic and structural problems of “play” and on the relation of the text to consequences of performance (e.g., acting, stagecraft, and audience response). In addition, we will read theoretical and cultural reflections on theater and the “performative” by such writers as Plato, Aristotle, Pico, Gosson, d’Aubignac, Nietzsche, and Foucault. Typically offered in alternate years.

220 The Epic in English HU (Cross-listed in Comparative Literature)
M.McInerney
An exploration of the long narrative poems that shape the epic tradition in anglophone literature. Readings in classical epic and medieval epic, Milton, Romantic epics and the modern aftermath of epic.

224 Early Modern Travel Narratives HU
Staff
Through a close study of the poetry written in the English Renaissance, this course will introduce students to the varieties of self-presentation as well as religious and political forces at work in the court and city. Emphasis will be placed upon the major poets, including Shakespeare, Sidney, Spenser, and Donne, in addition to less known figures.

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, skepticism, 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. Typically offered in alternate years.

240 As the World Turned: Milton and Early Modern Revolutions HU (Cross-listed in Comparative Literature)
D.Sedley
A study of John Milton’s major poems and prose in their historical contexts, with particular attention to Milton’s engagements with aesthetic, scientific, and political inventions of the seventeenth century. Prerequisite: Freshman Writing.

241 Inventing the Novel HU
L.McGrane
Poetry, drama, fiction and nonfiction prose of the Restoration and 18th century. Topic to be announced.

243 Trans-Atlantic Exchanges: Conversion & Revolution in Britain HU (Cross-listed in Comparative Literature)
L.McGrane
This 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. Typically offered in alternate years.

252 Romantic Poetry and Criticism HU
S.Finley
A reading of Blake, Wordsworth, Shelley, and Keats, with attention to early/fate works and to the interfiliation of theory and poetry.

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.

254 Pre-Raphaelites, Aesthetes and Decadents: Gender and Sexuality in 19th-century Literature HU (Cross-listed in Gender and Sexuality Studies)
D.Sherman
This course looks at the deliberately subversive in Victorian cultural practice which recalibrates issues of gender and sexuality, and through which, in the work of Wilde and others, structures of desire are
interrogated, denied and reinvented, reconfiguring both a politics of gender and the practice of art. Typically offered in alternate years.

257 British Topographies 1650-1914 HU
S.Finley
A study of the intersections of place, locality, topography, cartographies, gardening, self-mapping, self-canceling, ruin, remembrance, and trauma, amid the historical and cultural construction of landscape.

258 The Novel HU
R.Mohan
The course examines the British novel as a form crucially developed from the latter part of the eighteenth century to the middle of the nineteenth and thus subject to and implicated in the larger social transformation of largely agrarian communities into the “modern” industrial, and latterly imperial, Britain. Readings in Richardson, Austen, C. Bronte, Mary Shelley, Dickens, Lukacs, Bakhtin, and Said.

260 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. 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. Typically offered in alternate years.

261 American Literature 1865–1914 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.

262 The American Moderns 1915–1950 HU
Staff
Selected readings in poetry, fiction, and/or drama. Readings include Pound, Eliot, Hemingway, Fitzgerald, Faulkner, Barnes, West, Stevens, Toomer, Williams, Crane, Warren, and Kerouac.

265 African American Literature HU (Cross-listed in African and Africana Studies)
A.Solomon
Introduction to the study of literature written by African-American writers and the criticism of the literature in its different stages of development. Offered occasionally.

266 A Sense of Place HU
S.Finley
This course examines poetry and non-fiction writing about place in the work of American writers from Thoreau (Walden) to such recent writers as Annie Dillard (Pilgrim at Tinker Creek), John Elder (Reading the Mountains of Home), and Gary Snyder (The Practice of the Wild).

269 Another Country: Queer Sexualities in the American Novel HU (Cross-listed in Gender and Sexuality Studies)
G.Stadler
An examination of non-normative sexualities and gender identifications as the driving thematic and formal force in a series of U.S. novels, mostly canonical and mostly 19th century. Prerequisite: 150L or a 200 level course in English, or consent.

270 Portraits in Black: The Influence of an Emergent African-American Culture HU (Cross-listed in African and Africana Studies)
C.Zwarg

272 Introduction to Film: Form, History, Theory
P.Gaffney
This course aims to provide a comprehensive introduction to film. Structurally, it will trace film’s historical trajectory beginning with its invention as a technology, a look at early cinema as well as an exploration of film’s prototypes. The course concludes with an exploration of film’s reinvention as an apparatus in the age of digital filmmaking, a reinvention augured by contestations to the studio in avant-garde and experimental film forms. Prerequisite: Freshman Writing or permission. Offered occasionally.

273 Modern British Literature HU
R.Mohan
An exploration of literary modernism in Britain through analysis of fiction, criticism, and aesthetic manifestos in their historical contexts.

274 Modern Irish Literature HU
D.Sherman
Irish literature from Swift to O’Brien and Heaney. The course considers this literature as the politically articulate inscription of complex and multiple intersections of history, class and culture. Throughout the course, Irish history, particularly the Famine, reappears as an episode of trauma, historical memory and literary investment.
275 Thinking Globally, Writing Locally HU (Cross-listed in African and Africana Studies)  
R.Mohan  
The course will examine the ways the global circulation of people, ideas, languages, and literary and cultural forms brought about by colonialism, decolonization, and immigration shape specific Anglophone literary traditions.

276 Literature and Politics of South African Apartheid HU (Cross-listed in African and Africana Studies)  
L.McGrane  
This course explores the history and historiography of South African apartheid from its inception in 1948 to its democratic overthrow in 1994. We will consider the interplay between complex definitions of race, gender, nation and difference in novels, plays, and poetry written during the apartheid years. We will also discuss the tension between an ethics and aesthetics of literary production in a time of political oppression. What would it mean for one to write an apolitical text in a cultural space rife with racial and social tensions? Authors will include Nadine Gordimer, Alan Paton, J.M.Coetzee, Bessie Head, and Alex La Guma. Typically offered in alternate years.

278 Contemporary Women Writers HU (Cross-listed in Gender and Sexuality Studies)  
A.Solomon  
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 Moore, Jordan, Gatskill, Barry, Rankine, Parks, Ng, Morrison, etc. Typically offered in alternate years.

279 Asian American Literature HU  
T. Tensuan  
Works by Kingston, Li-Young Lee, Minatoya, Chang Rae Lee, and Hagedorn. The course considers this body of work in relation (cultural convergences, literary inheritances, thematic ties) to other canonical American literature. Whitman, Henry Adams, Chandler, and Dos Passos.

281 Fictions of Empire HU (Cross-listed in African and Africana Studies and Gender and Sexuality Studies)  
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.

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.

285 Disabilities: Autobiography, Education, and Theory HU  
S.Finley  
Contemporary autobiographies of disability, placed in the following four key contexts: literary history and genre, academic disability studies, rehabilitation sciences, and the American educational system as it has been shaped by the Americans with Disabilities Act of 1990. Typically offered in alternate years.

286 Arts of the Possible: Literature and Social Justice Movements HU (Cross-listed in Gender and Sexuality Studies and Peace and Conflict Studies-Bi Co Conc)  
T.Tensuan  
We will examine memoirs, essays, and poetry by American writers/activists whose works illuminate the formation of-and tensions between--civil rights struggles, peace movements, feminist organizing, and LGBT movements. Readings include Baldwin, Rukeyser, King, Rich, Malcolm X, Lorde, Moraga and Stringfellow.

289 Contemporary Poetry HU  
Staff  
Ostensibly a survey of American avant-garde poetry from 1950 to the present. This course will endeavor to examine the ways in which poetry since WWII has undertaken the task of redefining itself, and in the process also sought to redefine its relation to politics, to tradition and history, and more importantly to language.

295 Interpretation and the Other: Meaning, Understanding and Alterity HU (Cross-listed in Comparative Literature and Philosophy and Religion)  
D.Dawson, S.Finley  
Offered occasionally.

CORE COURSES

299 Junior Seminar HU  
G.Stadler  
Two-semester, year-long seminar, required of all English majors. Through class readings, discussion, and writing tutorials, students are expected to engage in (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, semiotics, 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 Topics in Middle English: Medieval Performance HU (Cross-listed in Gender and Sexuality Studies)
R.O’Neill

302 Speaking in Tongues HU (Cross-listed in Comparative Literature and Gender and Sexuality Studies)
M.McInerney
This course proposes to speak the unspeakable, to map the curious congruencies and disjunctions between mystical, aesthetic and philosophical modes of transcendence.

323 Shakespeare’s Contemporaries HU
W.Spates

325 Advanced Shakespeare HU
K.Benston
Interactions among historical, psychological, and theatrical interests in the development of Shakespeare’s vision will be explored alongside theoretical readings from various critical traditions (including cultural history, psychoanalysis, feminism, (post)structuralism, performance studies, & postcolonial studies).

343 Transatlantic Exchanges: Anatomies of Conversion and Revolution in Britain and Early America HU
L.McGrane
An exploration of political, philosophical, and popular literature that defined a Trans-Atlantic model of print culture in 18th-century Britain and America. Emphasis on comparative notions of literary, gender, national, and racial identities in interdisciplinary context.

346 Topics in 18th-century Literature HU
L.McGrane
Relying on recent theories of body, voice, and history, this course examines the agonistic relationship between the enlightened and irrational, written and spoken, scientific and magical in high and low cultural productions of the period, exploring the darker side of 18th-century visual and literary culture.

347 Spectacle & Spectatorship in 18th-century

London HU (Cross-listed in Gender and Sexuality Studies)
L.McGrane

352 Romanticism and Theory HU
S.Finley
This seminar will begin by posing a series of fundamental questions about romantic poems, beginning with Heidegger’s essay of 1946, “What Are Poets For?” Readings in the course will be drawn from five principal romantic careers: Blake, Wordsworth, Mary and Percy Shelley, and Keats.

353 Poverty and Its Representation in 19th-century Britain HU
S.Finley
A study of the “street-folk” and working poor of the 1840s and 1850s, in social documents, novels, and radical critique.

354 Remembrance and Mourning: Literature of the Great War HU
S.Finley
This course follows the responses of literature to the personal, historical, and spiritual catastrophe of the Great War, 1914-1918. Our theoretical center will be the study of the processes of traumatic memory.

356 Topics in Autobiography HU
S.Finley

361 Topics in African-American Literature HU (Cross-listed in African and Africana Studies)
K.Benston

362 Topics in American Literature HU (Cross-listed in Gender and Sexuality Studies)
G.Stadler

363 Topics in American Literature HU (Cross-listed in African and Africana Studies and Gender and Sexuality Studies)
C.Zwarg

364 After Mastery: Trauma, Reconstruction, and the Literary Event HU (Cross-listed in Gender and Sexuality Studies)
C.Zwarg
This course will expose students to recent trauma theory and the segregated traditions of literary history. Thinking about trauma theory before and after Freud, we will look again at authors attempting to bring together (and sometimes keep apart) cultural traditions interrupting into literary form throughout the 19th and early 20th centuries.

365 Topics in American Literature: How to Do Things With Books: Literature, Performance,
Pedagogy HU
G. Stadler
This course examines fiction, poetry, and criticism by a series of 19th-century American writers who have positioned the encounter between reader and text as an act or event with unpredictable effects. A central focus is these texts’ notion of pedagogy: framing our reading through contemporary theory, we will ask how literature teaches, what it teaches, how you come to believe that you’ve been taught something, or that you’ve not been taught something.

367 The Poems of Our Climate: Robert Frost, Wallace Stevens and William Carlos Williams HU
Staff

368 Topics in American Literature: Graphic Novels HU
T. Tensuan

371 Writing, Sound, and Modernity HU
G. Stadler
A textual, cultural, and historical study of transforming ideas about writing, sound, and their relationship to one another. The course’s focus will be the United States of the late-19th and early-20th centuries, but will also include relevant British and Continental works. Frames of study will include dialect literature, poetics and orality, urbanization, technologies of reproduction, theory and philosophy of cognition.

372 Topics in Irish Literature: Joyce/Beckett HU
D. Sherman
Looks at the work of these two major figures as epitomizing an Irish rhetoric in post-colonial reading which “enacts a movement that begins in aphasia and ends in eloquence” [Seamus Deane], in this case in a comprehensive reading of Joyce in the most prolix of texts, *Ulysses* and *Finnegan’s Wake*, and Beckett, where texts seemingly court in silence their own undoing.

373 Experimental 20th-century Narratives HU
R. Mohan
In this course we will study, under the rubric of the experimental, a set of narrative texts (mostly literary, but some cinematic) produced in Britain in the twentieth century. The strangest textual effects, the riskiest narrative strategies, the most disquieting subject matter these indicators of the experimental are the more pronounced when they first appear in ostensibly comprehensible form, in relation to the conventional. The experimental proves to be a species of the uncanny as Freud defines it.

377 Problems in Postcolonial Literature HU (Cross-listed in Comparative Literature)
R. Mohan
The decisive role that Fanon attributes to violence in the colonial context has had an inexorable afterlife in postcolonial societies. Course texts explore this dialectic of violation and violence, but they present it as a mutating, complex phenomenon, drawing its energies from multiple histories and traditions that are not always centered on the colonial experience.

380 Violence in Contemporary American Literature HU
T. Tensuan
We will be looking at works that situate acts of violence as part of ongoing narratives of oppression, exploitation, and dispossession. How do scenes of violence illustrate sites of cultural conflict and transformation?

381 Textual Politics: Marxism, Feminism, and the Deconstruction HU (Cross-listed in Comparative Literature and Gender and Sexuality Studies)
R. Mohan

382 On the Sublime HU (Cross-listed in Comparative Literature)
D. Sherman
A study of the literature of the sublime as, variously, a crisis of representation or the shattering of forms of knowledge; temporal and spatial disruption raised to a metaphysics of place and person; a deeply gendered and problematic poetics of (male) desire; a psychological structuring of the traumatic encounter with the Other; a recuperative gesture in a poetics of memory.

383 Topics in American Literature HU (Cross-listed in Gender and Sexuality Studies)
D. Sherman
In this course, we will focus on texts that define war not only as situations of state-sponsored violence, but also as ongoing practices of oppression, exploitation, and dispossession.

385 Apocalyptic Literature: Visions of the End HU
M. McInerney
This course questions the connections between mythology and eschatology, vision and violence, prophecy and poetry, memory and millennialism. Centered on readings of John, Langland, Dante and Blake, it will require the reading of images as well as texts, including medieval manuscript illuminations, allegorical paintings, and Blake’s *Illuminations*.

388 Problems in Narrative: Obsession, Trauma, Hysteria, Oblivion, Bliss HU (Cross-listed in Comparative Literature)
K. Benston
An inquiry into narrative process via scrutiny of moments, styles, themes, and perspectives that threaten to subvert, disable, or radically transform the very forms in which they appear. Texts for thus scrutinizing narrative and its internal transgressions.
will include novels, short-stories, films, plays, paintings, and theoretical ruminations.

389 Problems in Poetics: The Interpretation of Lyric HU (Cross-listed in Comparative Literature)
K.Benton
An examination of theoretical issues and presentational strategies in various verse structures from Ovid to Bishop. Close readings of strategically grouped texts explore the interplay of convention and innovation with close attention to rhetorics of desire, external and internal form, and recurrent lyric figures, tropes, and topoi.

390 The Celtic Fringe: Irish, Scots and Welsh Poetry 1747-2009 HU
M.McInerney
Readings in the English-language poetry of Scotland, Ireland and Wales. This course will explore works by Dylan Thomas, W.B. Yeats, Hugh MacDiarmid and Seamus Heaney, as well as those of more recent poets such as Paul Muldoon, Samantha Wynne-Rhydderch, Menna Elfyn and Leontia Flynn. Special attention will be paid to the roots of contemporary Welsh, Irish and Scottish poetics in the native traditions of the Celtic languages and to the contribution of these poems to post-colonial discourse.

399 Senior Conference HU
M.McInerney

480 Independent Study HU
Staff
The Johann Alderfer Harris Environmental Studies Program at Bryn Mawr College offers students the opportunity to complete an Environmental Studies concentration as an adjunct to any major at Bryn Mawr or Haverford, pending approval of the student’s coursework plan by the home department and the Environmental Studies director.

ENVIRONMENTAL STUDIES AT BRYN MAWR COLLEGE FACULTY
Associate Professor of Growth and Structure of Cities
Ellen Stroud, Program Director
Associate Professor of Geology and Harold Alderfer Chair in Environmental Studies
Donald C. Barber, Visiting Professor of Philosophy
Andrew Brook, Visiting Assistant Professor of Sociology
Ruth Simpson

ENVIRONMENTAL STUDIES REQUIREMENTS
The Environmental Studies concentration is an interdisciplinary program involving departments and programs in the natural and social sciences and humanities. The concentration allows students to explore the interactions among earth systems, human societies and local and global environments. General inquiries concerning the concentration should go to the Environmental Studies Program Director Donald Barber, (dbarber@brynmawr.edu). Members of the environmental studies steering committee can answer questions pertaining to the concentration in their departments or in allied programs. The concentration consists of six courses, four of which are fixed, and two of which are chosen from approved groups. Students should consult the catalog listings of their major department for disciplinary coursework specific to the concentration, if any. Additional program information is available on the Environmental Studies Web site: http://www.brynmawr.edu/es.

All concentrators must complete GEOL/CITY B103 Earth Systems and the Environment, CITY B175 Environment and Society and BIOL B220 Ecology. These three core courses must be completed before the senior year. As seniors, all concentrators reconvene in the Environmental Studies Senior Seminar (ANTH/BIOL/CITY/GEOL B397) to discuss in-depth issues within a broader environmental theme, set by mutual consent at the beginning of the semester. Because the Environmental Studies concentration seeks to provide perspective on policy questions and the human sides of environmental issues, students must choose courses outside the natural sciences. One of these courses should address issues of planning and policy, and one other should address issues of humans in the environment. Available recommended courses are listed below, divided into these two groups. Alternative courses not shown below also may fulfill these requirements, but the Environmental Studies director must approve any such course substitution. Students also are encouraged, but not required, to take additional science courses to augment their curriculum; possible courses are listed below. In addition to checking with the department Environmental Studies contact, each student’s coursework plan for the concentration must be reviewed by the Environmental Studies director. Check the ES website (www.brynmawr.edu/es) for the most current listing of course offerings.

Note: Some classes shown below have prerequisites; some are not offered every year.

Planning and Policy (one is required)
ANTH B210 Medical Anthropology
ECON B234 Environmental Economics
CITY/ANTH B190 Form of the City
CITY B217 Research in Policy Methods
CITY B229 Comparative Urbanism
CITY B345 Adv. Topics in Environment and Society
CITY B360 Urban Social Movements
POLS/CITY B222 Intro. to Environ. Issues
POLS B310 Comparative Public Policy
POLS B321 Technology and Politics
POLS B339 The Policy-making Process
POLS B354 Comparative Social Movements

Humans in the Environment (one is required)
ANTH B101 Intro. to Anthropology
ANTH B203 Human Ecology
ANTH H263 Anthropology and Architecture
CITY B278 American Environmental History
CITY B270/370 Japanese Architecture and Planning
HIST/CITY B237 Urbanization in Africa
ENGL B204 Literatures of American Expansion
ENGL B213 Nature Writing, Environ. Concern
ENGL B309 Native American Literature

Science of the Environment (suggested offerings)
GEOL B206 Energy, Resources and Environ. Policy
GEOL B209 Natural Hazards
GEOL B302 Low-temperature Geochemistry
GEOL B312 Quaternary Geology
GEOL B314 Marine Geology
BIOL B210 Biology and Public Policy
BIOL B215 Experimental Design and Statistics
BIOL B225 Biology of Plants
BIOL B309 Biological Oceanography
PHYS H111 Energy Options and Science Policy
CHEM H358 Environmental Chemistry

For a number of the courses listed above, especially those with a substantial component of independent inquiry, students are encouraged to select environmental topics.

In the senior year, in addition to the Environmental Studies Senior Seminar, each student should show evidence of advanced work in environmental studies. This may consist of a research project, a major thesis, or in some departments it would be a 300 level course in which the student deals extensively with environmental issues. In selected cases, with approval of the major department advisor and the Environmental Studies director, this advanced work may be undertaken as an internship or Praxis course. Additional courses of interest to students of all disciplines include courses at University of Pennsylvania or Swarthmore College. Certain classes from Junior Year Abroad programs may fulfill requirements for the concentration if pre-approved.

Given the flexible requirements of the concentration, it is important that students plan their curriculum as early as possible. Ideally planning should start no later than the first semester of the sophomore year.
Students may complete a minor in Film Studies. Film Studies is an interdisciplinary program of inquiry bringing a range of analytical methods to bear upon films, film audiences, and the social and industrial contexts of film and media production, distribution and exhibition. The courses that comprise the minor in film studies reflect the diversity of approaches in the academic study of cinema. The minor is anchored by core courses in formal analysis, history and theory. Elective courses in particular film styles, directors, national cinemas, genres, areas of theory and criticism, and issues in film and media culture add both breadth and depth to this program of study.

Film Studies is a Bryn Mawr College minor. Students must take a majority of courses on the Bryn Mawr campus; however, minors are encouraged to consider courses offered in the Tri-College consortium and at the University of Pennsylvania. Students should work with the director of the Film Studies Program to develop a minor workplan when declaring the minor.

**FILM STUDIES FACULTY**

**Director**
Homay King, History of Art

**Faculty**
Jaime Javier Nasser, Andrew W. Mellon Foundation Postdoctoral Fellow in the Humanities
Hoang Tan Nguyen, Assistant Professor

**Steering Committee**
Timothy Harte, Russian
Homay King, History of Art
Imke Meyer, German and German Studies
Hoang Nguyen, English
Michael Tratner, English (on leave semester I)
Sharon Ullman, History

**FILM STUDIES MINOR REQUIREMENTS**

In consultation with the program director, students design a program of study that includes a range of film genres, styles, national cinemas, eras and disciplinary and methodological approaches. Students are strongly encouraged to take at least one course addressing topics in global or non-western cinema. The minor consists of a total of six courses and must include the following:

1. One introductory course in the formal analysis of film
2. One course in film history or an area of film history
3. One course in film theory or an area of film theory
4. Three electives

At least one of the six courses must be at the 300 level. Courses that fall into two or more of the above categories may fulfill the requirement of the student’s choosing, but may not fulfill more than one requirement simultaneously. Students should consult with their advisers to determine which courses, if any, may count simultaneously for multiple credentials. Final approval is at the discretion of the program director.

**FILM STUDIES COURSES**

**Fall 2010**

ARTW B266 Screenwriting
CITY B293 Topics in Film, Television, and Media: Fragmented Media: Gender Identities
COML B238 History of Cinema, 1895-1945: Silent Film: From the United States to Russia and Beyond
ENGL B238 History of Cinema, 1895-1945: Silent Film: From the United States to Russia and Beyond
ENGL B334 Topics in Film Studies: Queer Cinema in a Transnational Frame
GERM B262 Film and the German Literary Imagination: Austrian Cinema from the Silent Era to the Present
HART B110 Identification in the Cinema
HART B238 History of Cinema, 1895-1945: Silent Film: From the United States to Russia and Beyond
HART B293 Topics in Film, Television, and Media: Fragmented Media: Gender Identities
HART B334 Topics in Film Studies: Queer Cinema in a Transnational Frame
RUSS B238 History of Cinema, 1895-1945: Silent Film: From the United States to Russia and Beyond
SPAN B318 Literary Adaptation in Spanish Cinema

**Spring 2011**

ENGL B205 Introduction to Film
ENGL B257 Gender and Technology
ENGL B299 History of Narrative Cinema, 1945-Present
ENGL B306 Film Theory
ENGL B367 Asian American Film, Video and New Media
GNST B255 Video Production

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HART B205 Introduction to Film
HART B299 History of Narrative Cinema, 1945-Present
HART B306 Film Theory
HART B367 Asian American Film, Video and New Media
HEBR B110 Israeli Cinema
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.

FINE ARTS FACULTY
Audrey A. and John L. Dusseau Professor in the Humanities and Curator of Photography William E. Williams
Professor of Fine Arts Ying Li
Associate Professor Markus Baenziger
Assistant Professor Hee Sook Kim, Chair
Visiting Assistant Professor Elizabeth Whalley
Visiting Assistant Professor Gerald Cyrus
Instructor John Goodrich

FINE ARTS MAJOR REQUIREMENTS
Fine arts majors are required to concentrate in either painting, drawing, sculpture, photography or printmaking; four 100 level foundation courses in each discipline from each faculty member; 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 or equivalent, 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.

FINE ARTS COURSES

101 Arts Foundation: Drawing HU
J. Goodrich
A seven-week introductory course for students with little or no experience in drawing. Students will first learn how to see with a painter’s eye. Composition, perspective, proportion, light, form, picture plane and other fundamentals will be studied. We will work from live models, still life, landscape, imagination and masterwork. Prerequisite: Over-enrollment will be determined by lottery conducted by Prof. on the first day of class.

102 Arts Foundation: Drawing HU
Staff
Prerequisite: Over-enrollment will be determined by lottery conducted by Prof. on the first day of class.

103 Arts Foundation: Painting HU
J. Goodrich
A seven-week introductory course for students with little or no experience in painting. Students will be introduced to the handling of basic tools, materials and techniques. We will study the color theory such as interaction of color, value & color, warms & cools, complementary colors, optical mixture, texture, surface quality. We will work from live models, still life, landscape, imagination and masterwork. Prerequisite: Preference to declared majors who need Foundations, and to students who have entered the lottery for the same Foundations course at least once without success. Preference will also be given to students with Foundations-Drawing experience. Over-enrollment will be determined by lottery conducted by Prof. on the first day of class.

104 Arts Foundation: Sculpture HU
Staff
Prerequisite: Over-enrollment will be determined by lottery conducted by Prof. on the first day of class.

106 Arts Foundation: Drawing HU
M. Baenziger
Prerequisite: Over-enrollment will be determined by lottery conducted by Prof. on the first day of class.

107 Arts Foundation: Painting HU
J. Goodrich
A seven-week introductory course for students with little or no experience in painting. Students will be introduced to the handling of basic tools, materials and techniques. We will study the color theory such as interaction of color, value & color, warms & cools, complementary colors, optical mixture, texture, surface quality. We will work from live models, still life, landscape, imagination and masterwork. Prerequisite: Preference to declared majors who need Foundations, and to students who have entered the lottery for the same Foundations course at least once without success. Preference will also be given to students with Foundations-Drawing experience. Over-enrollment will be determined by lottery conducted by Prof. on the first day of class.

108 Arts Foundation: Photography HU
W. Williams
Prerequisite: Over-enrollment will be determined by lottery conducted by Prof. on the first day of class. Course is a repeat of 103D/108H.

109 Arts Foundation: Sculpture HU
M. Baenziger
Over-enrollment will be determined by lottery conducted by Prof. on the first day of class. Prerequisite: Preference to declared majors who need Foundations, and to students who have entered the lottery for the same Foundations course at least once without success.

120 Foundation Printmaking: Silkscreen HU
H. Kim
A seven-week course covering various techniques and approaches to silkscreen, including painterly monoprint, stencils, direct drawing and photo-silkscreen. Emphasizing the expressive potential of the medium to create a personal visual statement. Prerequisite: Preference to declared majors who need Foundations, and to those who have entered the lottery for the same Foundations course at least once without success.

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without success. Lottery conducted by Prof. on the first day of class.

121 Foundation Printmaking: Relief Printing HU
E. Whalley
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. **Prerequisite:** Preference to declared majors who need Foundations, and to students who have entered the lottery for the same Foundations course at least once without success.

122 Foundation Printmaking: Lithography HU
H. Kim
A seven-week course covering various techniques and approaches to Lithography, including stone and plate preparation, drawing materials, editioning, black and white printing. Emphasizing the expressive potential of the medium to create a personal visual statement. **Prerequisite:** Preference to declared majors who need Foundations, and to students who have entered the lottery for the same Foundations course at least once without success.

123 Foundation Printmaking: Etching HU
E. Whalley
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. **Prerequisite:** Preference to declared majors who need Foundations, and to students who have entered the lottery for the same Foundations course at least once without success.

124 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. **Prerequisite:** Preference to declared majors who need Foundations, and to those who have entered the lottery for the same Foundations course at least once without success. Lottery conducted by Prof. on the first day of class.

216 History of Photography from 1839 to the Present HU
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.

217 The History of African-American Art from 1619 to the Present HU (Cross-listed in African and Africana Studies)
W. Williams
A survey course documenting and interpreting the development and history of African-American Art from 1619 to present day. Representative works from the art and rare book collections will supplement course readings. **Prerequisite:** Any HART Course, 200 level ARTS Studio Course, Anthropology of Art, AFST course.

218 Chinese Calligraphy As An Art Form HU (Cross-listed in East Asian Studies)
Y. Li
This course combines studio practice and creating art projects with slide lectures, readings, and museum visits. Students will study the art of Chinese Calligraphy, and its connection with Western art. No Chinese language required.

223 Printmaking: Materials and Techniques: Etching HU
H. Kim
Concepts and techniques of B/W & Color Intaglio. Line etching, aquatint, soft and hard ground, chine-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.

224 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:** An intro printmaking course or permission by portfolio review.

225 Lithography: Material and Techniques HU
H. Kim
An intermediate course covering B/W and Color Lithography in plates and stones. Combined methods with other printmaking techniques such as Paper lithography and Monotype are explored during the course along with photographic approaches. An edition of images is required along with experimental ones. Development of technical skills in traditional Lithography and personal visual study are necessary with successful creative solutions. A strong body of work following a specific theme is required. Individual discussions and group critiques are held periodically. Additional research on the history of
Students are encouraged to experiment with various drawing media and to explore the relationships between media, techniques and expression. Each student will strive to develop a personal approach to drawing while addressing fundamental issues of pictorial space, structure, scale, and rhythm. Students will work from observation, conceptual ideas and imagination. Course includes drawing projects, individual and group crits, slide lectures, museum and gallery visits. Prerequisite: Fine Arts Foundations or consent.

233 Painting: Materials and Techniques HU

Y. Li
Students are encouraged to experiment with various painting techniques and materials in order to develop a personal approach to self-expression. We will emphasize form, color, texture, and the relationship among them; influences of various techniques upon the expression of a work; the characteristics and limitations of different media. Students will work from observation, conceptual ideas and imagination. Course includes drawing projects, individual and group crits, slide lectures, museum and gallery visits. Prerequisite: Fine Arts Foundations or consent.

241 Drawing (3-D): All Media HU

Staff
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 Foundations or consent.

243 Sculpture: Materials and Techniques HU

M. Baenninger
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 Foundations or consent.

251 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.

253 The Theory and Practice of Conceptual Art HU (Cross-listed in Independent College Programs)

J. Muse
In this course, the specific mid-20th-century movement called Conceptual Art will be explored, as will its progenitors and its progeny. Students will study the founding manifestos, the canonical works and their critical appraisals, as well as develop tightly structured studio practices to embody the former research. The course invites artists, writers, activists, & cultural thinkers, those who want to know what it is to make things, spaces, situations, communities, allies, & trouble--without necessarily knowing how to draw, paint, sculpt, photograph, videotape, or film.

260 Photography: Materials and Techniques HU

W. Williams
Prerequisite: Fine Arts Foundations or consent.

321 Experimental Studio: Etching HU

H. Kim
An advanced course covers Color Etching using multiple plates. Viscosity printing, line etching, aquatint, soft-ground, surface roll, Chin-collé, plate preparation, registration, and editioning are covered. Students study techniques and concepts in Intaglio method as well as visual expressions through hands-on experiences. Development of technical skills of Intaglio and personal visual study are necessary and creative and experimental approaches beyond two-dimensional outcomes encouraged. A strong body of work following a specific theme is required. Individual discussions and group critiques are held periodically. Additional research on the history of printmaking is requested. Prerequisite: Permission of instructor by review of portfolio.

322 Experimental Studio: Lithography HU

H. Kim
An advanced course explores traditional and experimental lithographic printmaking techniques in multiple plates and stones. Two- and three-dimensional and design and drawing exploration in color also are addressed. During the semester, students use multiple-plate and stone lithography in colors. Registration, color separation, and edition are taught at an advanced level. Combining other mediums can be explored individually. Development of technical skills of the Lithographic process with personal visual study is necessary and creative and experimental approaches are highly encouraged. A
strong body of work following a specific theme is required. Individual discussions and group critiques are held periodically. Additional research on the history of printmaking is requested. **Prerequisite**: One course in printmaking or consent.

**327 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.

**331 Experimental Studio: Drawing HU**
*Y.Li*
Students will build on the work done in 200 level courses, to develop further their individual approach to drawing. Students are expected to create projects that demonstrate the unique character of drawing in making their own art. Completed projects will be exhibited at the end of the semester. Class will include weekly crits, museum visits, and visiting artists’ lecture and crits. Each student will present a 15-minute slide talk and discussion of either their own work or the work of artists who influenced them. **Prerequisite**: Fine Arts 231A or B, or consent.

**333 Experimental Studio: Painting HU**
*Y.Li*
Students will build on the work done in 200 level courses to develop further their individual approach to painting. Students are expected to create projects that demonstrate the unique character of their chosen media in making their own art. Completed projects will be exhibited at the end of semester. Class will include weekly crits, museum visits, visiting artists’ lecture and crits. Each student will present a 15-minute slide talk and discussion of either their own work or the work of artists who influenced them. **Prerequisite**: Fine Arts 223A or B, or consent.

**341 Experimental Studio: Drawing HU**
*Staff*
**Prerequisite**: Fine Arts 241A or B, or consent.

**343 Experimental Studio: Sculpture HU**
*M.Barneby*
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.

**351 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**
*Y.Li*

**480 Independent Study HU**
*Staff*
This course gives the advanced student the opportunity to experiment with concepts and ideas and to explore in depth his or her talent. **Prerequisite**: Consent of instructor.

**499 Senior Departmental Studies HU**
*Staff*
The student reviews the depth and extent of experience gained, and in so doing creates a coherent body of work expressive of the student’s insights and skills. At the end of the senior year the student is expected to produce a show of his or her work. **Prerequisite**: Senior Majors.
The Departments of French and Francophone Studies at Haverford and Bryn Mawr Colleges offer a variety of courses and two options for the major. The purpose of the major in French is to lay the foundation for an understanding and appreciation of French and Francophone literatures and cultures. Course offerings are intended to serve both those with particular interest in French and Francophone literatures, literary theory and criticism, as well as those with particular interest in France and French-speaking countries from an interdisciplinary perspective. A thorough knowledge of French is a common goal for both options, and texts and discussion in French are central to the program.

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. Two 200 level courses are devoted to advanced language training, and one to the study of theory. Advanced (300 level) courses offer detailed study of of individual authors, genres, and movements or of particular periods, themes, and problems in French and Francophone cultures. In both options, students are admitted to advanced courses after satisfactory completion of two semesters of 200 level courses in French.

All students who wish to pursue their study of French must take a placement examination upon entrance at Haverford and Bryn Mawr. 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 Introduction à l’analyse littéraire et culturelle 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 or 101-105). In either case, students who pursue French to the 200 level often find it useful to take as their first 200 level course either 212 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.

### French and Francophone Studies Faculty

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<thead>
<tr>
<th>At Haverford College</th>
<th>At Bryn Mawr College</th>
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<tr>
<td><strong>Professor Kofi Anyinefa</strong></td>
<td><strong>Eunice Morgan Schenk 1907 Professor Grace M. Armstrong</strong>, Acting Chair and Major Advisor</td>
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<tr>
<td><strong>Instructor Florence Echtman (at Haverford and Bryn Mawr)</strong></td>
<td><strong>Lecturer Benjamin Cherel</strong></td>
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<td><strong>Assistant Professor Duane W. Kight</strong></td>
<td><strong>Instructor Florence Echtman (at Bryn Mawr and Haverford)</strong></td>
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<td><strong>Associate Professor David L. Sedley, Chair and Major Advisor</strong></td>
<td><strong>Lecturer Mélanie Giraud</strong></td>
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<td><strong>Associate Professor Francis Higginson</strong></td>
<td><strong>Assistant Professor Rudy Le Menthuzé</strong></td>
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<tr>
<td><strong>Associate Professor and Director of the Avignon Institute Brigitte Mahuzier</strong></td>
<td><strong>Lecturer Agnès Peysson-Zeiss</strong></td>
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### French and Francophone Studies Major Requirements

1. French and Francophone Literature: French 005-102 or 005-105; 101-102 or 101-105; French 212 or 260; French 213 (Qu’est-ce que la théorie?); three semesters of 200 level literature courses; two semesters of 300 level literature courses; and the two-semester Senior Experience. The Senior Experience is composed of Senior Conference in the Fall semester and, in the Spring semester, either a Senior Essay, written in the context of a third 300 level course, or a Senior Thesis. Both Senior Thesis and Essay include a final oral defense. For more details regarding the Senior Experience see HONORS AND THE SENIOR EXPERIENCE (below).

2. Interdisciplinary Studies in French: French 005-102 or 005-105; 101-102 or 101-105; French 212 or 260; two 200 level courses within the French departments: e.g., French 255, 291 or 299; two 200 level courses to be chosen by the student outside the French departments (at HCBMC or JYJ) which contribute coherently to his/her independent program of study; French 325 or 326 (Etudes avancées de civilisation); two 300 level courses outside the French departments; and a thesis of one semester in French or English. (For further details concerning the thesis and the rest of the Senior Experience see HONORS AND THE SENIOR EXPERIENCE below). Students interested in this option must present the rationale and the projected content of their program for departmental approval during their sophomore year; they should have strong records in French and the other subjects involved in their proposed program.

3. Both concentrations: all French majors are expected to acquire fluency in the French language.
both written and oral. Unless specifically exempted by the department, they are required to take French 212 or 260, or their equivalent. 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 at Bryn Mawr.

**FRENCH AND FRANCOPHONE STUDIES MINOR REQUIREMENTS**
Requirements for a French minor are French 005-102 or 005-105; 101-102 or 101-105; French 212 or 260; and four courses at the 200 and 300 levels. At least one course must be at the 300 level.

**HONORS AND THE SENIOR EXPERIENCE**
For the French and Francophone Literature concentration, after taking Senior Conference in the Fall semester of senior year students have two options for the Spring semester. They may write a thesis (30-40 pp.) under the direction of a faculty member. Or, they may write an essay (15-20 pp.) in the context of a 300 level course. The first option allows students who have already developed a clearly defined subject in the Fall semester to pursue independent research and writing of a thesis with a faculty supervisor. The second option offers students the opportunity to produce a substantial, but shorter, piece of research within the structure of their 300 level course in the Spring semester. This option will appeal, for example, to double-majors with another thesis or to pre-medical students.

Departmental honors are awarded for excellence in the Senior Experience, whether it involves a Senior Essay or Senior Thesis, following the oral defense.

For the Interdisciplinary Studies in French concentration, students take French 325 or 326 in their senior year and, if they have not already done so, complete the two 300 level courses required outside the department. In the Spring semester they write a thesis in French or English under the direction of a member of the French faculty and a mentor outside the department. Departmental honors are conferred for excellence in the Senior Experience after the oral defense of the Senior Thesis.

**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.

**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 Bryn Mawr’s Graduate School of Arts and Sciences.

**FRENCH AND FRANCOPHONE STUDIES STUDY ABROAD**
Students majoring in French may, by a joint recommendation of the deans of the Colleges and the Department of French, be allowed to spend their junior year in France under one of the junior year plans approved by their respective college; those organized by Sweet Briar and Wellesley College are approved by both Haverford and Bryn Mawr. Haverford students may also apply to IES programs in France or to the University of Pennsylvania programs in Senegal.

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 undergraduate 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, art, and economics (including the possibility of internships in Avignon). 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.

**FRENCH AND FRANCOPHONE STUDIES COURSES**

**001, 002 Elementary French Non-Intensive HU**
A. Peysson-Zeiss, B. Cherel, D. Kight

The speaking and understanding of French are emphasized particularly during the first semester. The work includes regular use of the Language Learning Center and is supplemented by intensive oral practice sessions. The course meets five hours each week. This is a year-long course; both semesters (001 and 002) are required for credit.

**003, 004 Intermediate French Non-Intensive HU**
B. Cherel, F. Echtman, D. Kight, D. Sedley

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 three hours each week, 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:** French 002, non-intensive, and departmental placement.

**005 Intensive Intermediate French HU**
G. Armstrong, F. Echtman, A. Peysson-Zeiss

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.

101 Introduction à l’analyse littéraire et culturelle I HU
K.Anyinefa, G.Armstrong, 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. Open only to graduates of Intermediate French or to students specially placed by the department.

102 Introduction à l’analyse littéraire et culturelle II HU
K.Anyinefa, A.Peysson-Zeiss
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 seventeenth and eighteenth centuries and build to increasingly complex short stories, poetry, and novels of the nineteenth and twentieth centuries. Participation in guided discussion and practice in oral/written expression continue to be emphasized, as is grammar review. Offered in second semester. 
Prerequisite: French 005 or 101.

105 Directions de la France Contemporaine HU
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 105.

201 Le Chevalier, la dame et le prêtre: Littérature et publics du Moyen Age HU
G.Armstrong
Using literary texts, historical documents and letters as a mirror of the social classes that they address, this interdisciplinary course studies the principal preoccupations of secular and religious men and women in France from the Carolingian period through 1500. Selected works from epic, lai, roman courtois, fabliau, theater, letters and contemporary biography are read in modern French translation. Not offered in 2010-11.

202 Crises et identités: 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 2010-11.

204 Le Siècle des Lumières HU
R.Le Mentheur
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.

205 Le Temps des prophètes: de Chateaubriand à Baudelaire (1800-1860) HU
B.Mahuzier
From Chateaubriand and Romanticism to Baudelaire, a study of selected poems, novels, and plays. Not offered in 2010-11.

206 Le Temps des virtuoses: Symbolisme, Naturalisme et leur progéniture
B.Mahuzier
A study of selected works by Claudel, Gide, Proust, Rimbaud, Valéry, Verlaine and Zola.

207 Missionnaires et cannibales: Maîtres de l’époque moderne HU
B.Mahuzier
A study of selected works illustrating the principal literary movements from 1930 to the present.

212 Grammaire avancée: Composition et conversation HU
K.Anyinefa
A general review of the most common difficulties of the French language. Practice in composition, and conversation.
213 Theory in Practice: Humanities HU
F.Higginson
This seminar provides exposure to influential 20th-century French thinkers. It will examine three major currents: Postcolonial Theory; Feminist Theory; Post-Structuralist Theory. The primary goal here is to introduce students to exciting and difficult critical thought that will prove useful to their future studies and will begin to develop necessary critical skills. While the materials covered are primarily grounded in French intellectual history the course will also spend time situating these intellectual currents in broader transnational and transdisciplinary contexts. In other words, while “French” and “Francophone” centered, this course is explicitly designed to serve students in the humanities, regardless of field. This is a required course for the French major. Course taught in English and serving the humanities.

248 Histoire des femmes en France HU (Cross-listed in Gender and Sexuality)
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.) 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 1968. Not offered in 2010-11.

250 Introduction aux littératures francophones HU
K.Anyinefa
A study of representative male and female writers of Africa, the Maghreb, and the Caribbean. Not offered in 2010-11.

251 La Mosaïque France HU
B.Cherel
A study that opposes discourse of exclusion, xenophobia, racism and the existence of a mythical, unique French identity by examining 20th-century French people and culture in their richness and variety, based on factors such as gender, class, region, colonization and decolonization, immigration and ethnic background. Films and texts by Begag, Beauvoir, Cardinal, Carles, Duras, Ernaux, Helias, Modiano and Zobel. Not offered in 2010-11.

255 Cinéma français/francophone et post-colonialisme HU (Cross-listed in Comparative Literature and Africana and African Studies)
K.Anyinefa
A study of films from Africa, France, the Maghreb, and the Caribbean dealing with the colonial and post-colonial experience. Not offered in 2010-11.

258 L’Espace réinventé (Cross-listed in City B258)
M.Giraud
The cityscape is a dominant figure in the 19th and 20th centuries, influencing and even structuring beliefs. Urban theory and cultural criticism will supplement study of poems by Baudelaire, Rimbaud, Claudel, Apollinaire, Breton, Ben Jelloun and Reda. Not offered in 2010-11.

260 Stylistique et Traduction HU
R.Le Menthéour, A.Peysson-Zeiss
Intensive practice in speaking and writing. Conversation, discussion, advanced training in grammar and stylistics, and composition.

262 Débat, discussion, dialogue HU
Staff
Intensive oral practice intended to bring non-native French speakers to the highest level of proficiency through the development of debating and discussion skills. Prerequisite: French 212 or 260. Not offered in 2010-11.

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 2010-11.

302 Le Printemps de la parole féminine: Femmes écrivains des débuts HU (Cross-listed in Comparative Literature B302 and Gender and Sexuality)
G.Armstrong
This study of selected women authors from the French Middle Ages, Renaissance and Classical period—among them Marie de France, the troubadours, 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 2010-11.

306 Libertinage et érotisme HU
R.Le Menthéour
A discovery of the French eighteenth century through major works of the libertine genre: Diderot, Crebillon fils, Retif de la Bretonne, Sade, and Denon, among others, will illuminate the philosophical unrest which set the stage for the French Revolution. Students will also get an opportunity to work with original
illustrated books in our collections and see the Enlightenment through the lens of its clandestine cultures.

312a Advanced Topics: Le Genocide rwandais (1994) HU (Cross-listed in Comparative Literature and Africana and African Studies)
K.Anyinefa

312b Advanced Topics: "Les arts du roman du 16e au 18e siecle" HU (Cross-listed in Comparative Literature)
D.Sedley

325 Etudes avancées: Crimes et criminalité HU
B.Mahuzier

325 Etudes avancées: Lumières et Médecine HU
R.Le Menthéour

326 Etudes avancées HU

An in-depth study of a particular topic, event, or historical figure in French civilization. The seminar topic rotates among many subjects: La Révolution française: histoire, littérature et culture; L’Environnement naturel dans la culture française; Mal et valeurs éthiques; Le Cinéma et la politique, 1940-1968; Le Nationalisme en France et dans les pays francophones; Etude socio-culturelle des arts du manger en France du Moyen Age à nos jours.

350 Voix médiévales et échos modernes HU (Cross-listed in Comparative Literature B350)
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, Genoveix, Gracq, and Yourencier. Not offered in 2010-11.

398 Senior Conference HU
G.Armstrong

A weekly seminar examining two major French and Francophone literary texts and the interpretive problems they raise. A third theoretical text, which occupies a central, illuminating position vis-à-vis one or both literary works, will encourage students to think beyond traditional literary categories to interrogate for example issues of cultural memory, political engagement, gendered space, etc. This course prepares students for the second semester of their senior experience, during which seniors not writing a thesis are expected to choose a 300 level course and write a long research paper, related to their senior experience, which they will defend during an oral examination. Seniors writing a thesis in Semester II will defend it during their final oral examination.

480 Independent Study HU
Staff
Prerequisite: Consent of the instructor.

654 Nostalgie, la maladie du retour HU
R.Le Menthéour

This seminar will enquire on the origins and the development of the discourse on nostalgia in the 18th and 19th centuries. Nostalgia was first conceived as a real disease by physicians, who hesitated between a physical and a moral interpretation, and between a spatial and a temporal perspective. Rousseau and other prominent writers played a crucial role in defining and shaping an affection that became more and more fashionable. We shall discuss the (ab)use of nostalgia in medicine, politics, and literature.

689 Writing Music & Differences HU
F.Higginson

At the most abstract level, this course hopes to propose new and unorthodox approaches to literature. That is, the course offers creative, yet rigorously critical modes of engagement with text in which music plays a significant role. On a more specific level, it hopes to demonstrate the extent to which music and language have, throughout Western history, and more specifically and radically since the beginning of the nineteenth century—that is, the rise of romanticism—been fundamentally at odds with each other. It will try to show that Western philosophy has constructed their relationship as essentially antagonistic and what the ramifications of such a conflict might be.
Gender and Sexuality Studies is an interdisciplinary bi-college program that draws on the faculties of both Bryn Mawr and Haverford Colleges in a variety of traditional disciplines, such as Anthropology, Biology, Economics, English, German, History, Philosophy, Political Science, Spanish, and Religion, as well as interdisciplinary programs such as Africana Studies, Comparative Literature, East Asian Studies, and the Growth and Structure of Cities. Students graduate from the program with a high level of fluency and rigor in their understanding of the different ways in which issues of gender and sexuality shape our lives as individuals and as members of larger communities, both local and global.

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.

Students choosing a concentration, minor, or independent major in Gender and Sexuality Studies plan their programs in consultation with the Gender and Sexuality Coordinator on their home campus. Each year, approximately thirty students pursue either a Minor or Concentration in Gender and Sexuality Studies, and several design an independent major for themselves in the field.

Concentrators, minors, and majors have gone on to do advanced work in all of the undergraduate disciplines, in law, medicine, and theology, as well as into employment in a variety of related areas.

**GENDER AND SEXUALITY STUDIES**

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<th>COURSES IN GENDER AND SEXUALITY STUDIES OFFERED AT HAVERPORD COLLEGE 2010-2011</th>
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**CONCENTRATION REQUIREMENTS**

Six courses distributed as follows are required for the concentration:

1. An introductory course intended for first- and second-year students with no prior knowledge of the field such as Independent College Programs 190: Introduction to Gender and Sexuality Studies: Inventing Gender. This introductory requirement may also be met with a variety of courses, such as Philosophy 115: Introduction to Feminist Theory, English 286: Sex/Gender/ Representation: An Introduction to Theories of Sexualities, or Political Science 242: Women in War and Peace. Equivalent courses at Bryn Mawr, Swarthmore, or the University of Pennsylvania are also acceptable.

2. The core course, 290: Perspectives on Gender, a course intended for juniors and seniors who have completed other work in the program. This interdisciplinary course is taught by two faculty members, one from Haverford, one from Bryn Mawr, from different disciplinary backgrounds.

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.

**GENDER AND SEXUALITY STUDIES MINOR REQUIREMENTS**

Requirements for the minor are identical to those of the concentration, with the stipulation that no courses in Gender and Sexuality will overlap with courses taken to fulfill requirements in the student’s major.

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 a significant focus on the theoretical and critical issues foregrounded in gender and sexuality studies.

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 Programs (CSSP).
POLS H123 American Politics: Difference and Discrimination
POLS H229 Latino Politics in the U.S.
RELG H330 Seminar in the Writings of Women of African Descent

OTHER COURSES IN GENDER AND SEXUALITY STUDIES REGULARLY OFFERED AT HAVERFORD
Anthropology 216: Women and Power
Anthropology 245: Love and the Market
Biology 247: Human Genetics, Ethics, and Public Policy
Biology 248: Disease and Discrimination
East Asian Studies 262: Chinese Social History
East Asian Studies 310: Religion and Gender in Pre-Modern Japan
Economics 224: Women in the Labor Market
English 254a: Pre-Raphaelites, Aesthetes, & Decadents; Gender and Sexuality in 19th Century Literature
English 260b: Another Country: Queer Sexualities in the American Novel
English 263: 19th Century Women’s Narratives
English 277: Postcolonial Women Writers
English 281: Fictions of Empire
English 284: Sex/Gender/Representation
English 286a: Arts of the Possible: Cultures of Social Justice Movements
English 301: The Hundred Years War and the Production of Literary Culture
English 347b: Spectacle and Spectatorship in 18th Century London
English 362: Genius and Gender in 19th Century U.S. Culture
English 364: After Mastery
English 381: Textual Politics: Marxism, Feminism, and Deconstruction
English 383: American Autobiography: Life During Wartime
German 262: The Male Body in Contemporary Cinema
History 229: Gender, Sex, and Power in Early Modern Europe
History 231: The Age of Enlightenment
History 354: Law, Crime, and the Police in Early Modern Europe
Independent College Programs 135: Introduction to Feminist Theory
Independent College Programs 190: Introduction to Gender and Sexuality Studies: Inventing Gender
Independent College Programs 244a: Queer Social Witness
Philosophy 105: Love, Friendship and the Ethical Life
Philosophy 155: Introduction to Feminist Theory
Philosophy 229: Latino Politics in the U.S.
Philosophy 231: Continental Feminist Philosophy
Philosophy 258: Philosophy of the Body
Political Science 235: African Politics
Political Science 359: Feminist Political Theory
Religion 204: Women and Judaism
Religion 221: Women and Gender in Early Christianity
Religion 223: Body, Sexuality, and Christianity
Religion 301: Jerusalem: History and Representation
Religion 303: Evangelicalism, Anti-Slavery, and Feminism in Uncle Tom’s Cabin
Religion 350: Seminar in the Religious History of African American Women
Spanish 324: Sexual Minorities in the Spanish Speaking World
Spanish 352: Evita and her Sisters

COURSES IN GENDER AND SEXUALITY STUDIES OFFERED AT BRYN MAWR COLLEGE

Fall 2010
ANTH B101 Introduction to Anthropology
ANTH B316 Gender in South Asia
COML B220 Writing the Self
COML B314 Troilus and Criseyde
CSTS B220 Writing the Self
EDUC B280 Gender, Sex, and Education
ENGL B314 Troilus and Criseyde
ENGL B334 Topics in Film Studies: Queer Cinema through a Transnational Frame
HART B108 Women, Feminism, and the History of Art
HART B334 Topics in Film Studies: Queer Cinema through a Transnational Frame
PHIL B225 Global Ethical Issues
POLS B375 Women, Work, and Family
SOCL B375 Women, Work, and Family

Spring 2011
ANTH B102 Introduction to Cultural Anthropology
ANTH B312 Anthropology of Reproduction
ANTH B350 Advanced Topics in Gender Studies
ARCH B303 Classical Bodies
CITY B293 Fragmented Media: Film, Television, and Gendered Identities
ENGL B257 Gender and Technology
ENGL B263 Toni Morrison and the Art of Narrative Conjure
ENGL B269 Vile Bodies in Medieval Literature
ENGL B367 Asian American Film, Video and New Media
ENGL B369 Women Poets
GERM B321 Advanced Topics in German Cultural Studies: Vienna 1900
HART B293 Fragmented Media: Film, Television, and Gendered Identities
HART B340 Topics in Baroque Art: Costume and Consumer Culture
HART B348 Topics in German Art
ITAL B235 Italian Women’s Movement
PHIL B344 Development Ethics
POLS B282 Exotic Other: Gender in the Middle East
SOCL B262 Sociology of Public Opinion
SOCL B350 Movements for Social Justice
SPAN B223 Genero y modernidad en la narrativa del siglo XIX
Students may complete a major or minor in Geology. Within the major, students may complete concentrations in Environmental Studies, geoarchaeology or geochemistry.

The department seeks to make students more aware of the physical world around them and of its development through time. The subject includes a study of the materials from which the Earth is made; of the physical processes which have formed the Earth; of the history of the Earth and its organisms; and of the various techniques necessary to investigate Earth processes and the geologic record.

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. Fieldwork is an essential part of geologic training and is part of all introductory courses, most other classes and most independent research projects.

GEOLOGY FACULTY
Associate Professor Donald Barber
Lecturer Lynne Jessica Elkins
Lecturer Katherine Nicholson Marenco
Assistant Professor Pedro Jose Marenco
Associate Professor and Chair Arlo Brandon Weil

GEOLOGY MAJOR REQUIREMENTS
Thirteen courses are required for the major: GEOL 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 CHEM (103-104) or PHYS (101-102 or 121-122); GEOL 399; and either two advanced geology courses or one advanced geology course and an additional upper-level course in biology, 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 (GEOL 399) and write a thesis in the spring semester of her senior year.

GEOLOGY MINOR REQUIREMENTS
A minor in geology consists of two of the 100 level geology courses, and any four of the 200 or 300 level courses offered by the department.

GEOLOGY REQUIREMENTS FOR HONORS
Honors are awarded to students who have outstanding academic records in geology and allied fields, and whose research is judged by the faculty of the department to be of the highest quality.

CONCENTRATION IN ENVIRONMENTAL STUDIES
The Environmental Studies concentration allows students to explore interactions of the geosphere, biosphere and human societies. The concentration represents interdisciplinary cooperation among departments in the natural and social sciences and humanities, and is open to students from any major, pending approval of the home department.

The Environmental Studies concentration in Geology consists of GEOL 101 and 103, 202 and two other 200 level geology courses, 302, 397, one other 300 level geology course and 399; CITY/SOCL 175, BIOL 220; two semesters of chemistry; and two semesters of math, statistics or computational methods. Two additional environmental courses outside of the natural sciences also are required: one addressing issues of planning and policy, and one that addresses issues of humans in the environment. The Environmental Studies Web site (http://www.brynmawr.edu/es/core.htm) lists approved courses in these categories. Paperwork for the concentration should be filed at the same time as the major work plan. Students also should carefully consider their options with regard to study abroad in the junior year. Early consultation with the current director of Environmental Studies is advised in the planning of courses.

CONCENTRATION IN GEOARCHAEOLOGY
The Department of Anthropology, Classical and Near Eastern Archaeology, and Geology offer a concentration in geoarchaeology for existing majors in these departments. Please consult with Professor Magee regarding this program.

Requirements for the concentration:
1. Two 100 level units from Anthropology, Classical and Near Eastern Archaeology or Geology, of which one must be from the department outside the student’s major.
2. ANTH/ARCH/GEOL 270: Geoarchaeology (Magee, Barber).
3. BIOL/ARCH/GEOL 328: Geospatial Data Analysis and GIS (staff).
4. Two elective courses, to be chosen in consultation with the major adviser, 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), ARCH 308 (Ceramic Analysis), ARCH 332 (Field Techniques), GEOL 202 (Mineralogy), GEOL 205 (Sedimentology), GEOL 310 (Geophysics), and GEOL 312 (Quaternary Climates).

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: GEOL 101, 103, 202, 205; 302 or 305; CHEM 101 or 103, 104 and 221 or 222. Additional chemistry courses might include 211 (Organic Chemistry). Other courses that complement this concentration are: calculus, linear algebra, computer programming and computer modeling. Paperwork for the concentration should be filed at the same time as the major work plan. For course planning advice, contact Pedro Marenco or Lynne Elkins (Geology) or Sharon Burgmayer (Chemistry).

GEOL B101 How the Earth Works
A. Weil
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. Three lectures and one afternoon of laboratory or fieldwork a week. One required one-day field trip on a weekend.

GEOL B102 Earth History
P. Marenco
The history of the Earth from its beginning and the evolution of the living forms that have populated it. Three lectures, one afternoon of laboratory a week. A required two-day (Fri.-Sat.) field trip is taken in April.

GEOL B103 Earth Systems and the Environment
(Cross-listed as CITY B103)
D. Barber
This integrated approach to studying the Earth focuses on interactions among geology, oceanography, and biology. Also discussed are the consequences of population growth, industrial development, and human land use. Two lectures and one afternoon of laboratory or fieldwork per week. A required two-day (Fri.-Sat.) field trip is taken in April.

GEOL B115 Living with Volcanoes
L. Elkins
This course explores how people have long lived alongside, in the shadow of, and at times directly on top of active volcanoes. Volcanic centers are hosts to sporadic and difficult-to-predict destructive and explosive activity, persistent and damaging passive degassing, valuable nutrient-rich soils, vibrant ecosystems, and important geothermal energy systems. The goals of this class are to examine the scientific basis for understanding volcanoes and predicting their behavior; to study the role of volcanoes in history and lore across human societies; and to examine our complicated relationship with them in the modern world.

GEOL B120 Origin & Early Evolution of Life
K. Marenco
Where and how did life originate on Earth? What are the minimum conditions for life to arise, and persist, on any planet? Scientists are closer now than ever before to answering these intriguing questions. In this course, we will explore the fundamental requirements for life; critically examine many of the hypotheses that have been proposed to explain the origin of life on Earth; survey the fossil, geochemical, and molecular evidence for early life; from the earliest-known examples through the “Cambrian Explosion,” and propose means of identifying life and its effects elsewhere in the universe. Two lectures per week, plus a one-day field trip.

GEOL B202 Mineralogy and Crystal Chemistry
L. Elkins
The crystal chemistry of representative minerals, descriptive and determinative mineralogy, as well as the relation between the physical properties of minerals and their structures and chemical compositions. The occurrence and petrography of typical mineral associations and rocks is also covered. Lecture three hours, laboratory at least three hours a week. Prerequisite: Introductory course in geology or chemistry (both recommended).

GEOL B203 Invertebrate Paleobiology
P. Marenco
Biology, evolution, ecology, and morphology of the major marine invertebrate fossil groups. Three lectures and one three-hour laboratory a week. A semester-long research project culminating in a scientific manuscript will be based on material collected on a two-day trip to the Tertiary deposits of the Chesapeake Bay.

GEOL B204 Structural Geology
A. Weil
An introduction to the study of rock deformation in the Earth’s lithosphere viewed from all scales—from the microscopic (atomic scale) to the macroscopic (continental scale). This class focuses on building a foundation of knowledge and understanding that will allow students to broaden their appreciation and understanding of the complexity of the Earth system and the links between geologic structures at all scales.
and plate tectonics. Three lectures and three hours of laboratory a week, plus weekend field trips. 

Prerequisites: GEOL 101 and MATH 101.

GEOL B205 Sedimentary Materials and Environments
D. Barber
An introduction to sediment transport, depositional processes, and stratigraphic analysis, with emphasis on interpretation of sedimentary sequences and the reconstruction of past environments. Three lectures and one lab a week, plus a weekend field trip. 

Prerequisite: GEOL 101, 102, 103 or instructor permission. Recommended: GEOL 202 and 203.

GEOL B206 Resources
D. Barber
An examination of issues concerning the supply of energy and raw materials required by humanity. This includes an investigation of the geological framework that determines resource availability, and of the social, economic, and political considerations related to energy production and resource development. Two 90-minute lectures a week. 

Prerequisite: One year of college science.

GEOL B209 Natural Hazards (Cross-listed as CITY B210)
A. Weil
A quantitative approach to understanding the earth processes that impact human societies. We consider the past, current, and future hazards presented by geologic processes, including earthquakes, volcanoes, landslides, floods, and hurricanes. The course includes discussion of the social, economic, and policy contexts within which natural geologic processes become hazards. Case studies are drawn from contemporary and ancient societies. Lecture three hours a week, with one day-long field trip. 

Prerequisite: One semester of college science or permission of instructor. Not offered in 2010-11.

GEOL B230 The Science of Soils
Staff
Physical, chemical, and biological processes within soil systems. Emphasis is on factors governing the physical properties, nutrient availability, and plant growth and production within soils. How to classify soils and assess nutrient cycling and contaminant fate will be covered. 

Prerequisite: At least one introductory course in Geology, Biology or Chemistry. Not offered in 2010-11.

GEOL B236 Evolution (Cross-listed as BIOL B236 and ANTH B236)
S. Gardiner, P. Marenco

GEOL B250 Computational Methods in the Sciences (Cross-listed as BIOL B250 and CMSC B250)

M. Sears
Not offered in 2010-11.

GEOL B255 Problem Solving in the Environmental Sciences
Staff
Provides basic quantitative and numerical modeling skills that can be applied to any of the natural sciences, including geology and environmental studies. 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. 

Lecture/discussion three hours a week. Not offered in 2010-11.

GEOL B270 Geoarchaeology (Cross-listed as ARCH B270 and ANTH B270)
D. Barber, P. Magee
Not offered in 2010-11.

GEOL B302 Low-Temperature Geochemistry
Staff
The geochemistry of Earth surface processes. Emphasis is on the chemistry of surface waters, atmosphere-water environmental chemistry, chemical evolution of natural waters, and pollution issues. Fundamental principles are applied to natural systems with particular focus on environmental chemistry. 

Prerequisites: CHEM 103, 104 and GEOL 202 or two 200 level chemistry courses, or permission of instructor. Not offered in 2010-11.

GEOL B303 Advanced Paleobiology/Advanced Evolution Seminar
P. Marenco
Principles, theory, and application of various aspects of paleobiology such as evolution. Seminar-based, with a semester-long research project or paper. Three hours of seminar a week and a weekend field trip. 

Prerequisite: GEOL 203 or permission of instructor. Not offered in 2010-11.

GEOL B304 Tectonics
A. Weil
Plate tectonics and continental orogeny are reviewed in light of the geologic record in selected mountain ranges and certain geophysical data. Three hours of lecture and a problem session a week. 

Prerequisite: GEOL 204 or permission of instructor.

GEOL B305 Igneous and Metamorphic Petrology
L. Elkins
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. Three lectures and three hours of laboratory or equivalent field work a week. Occasional weekend field trips.

Not offered in 2010-11.
Prerequisites: GEOL 202 and CHEM 101 or 103, and 104.

GEOL B310 Introduction to Geophysics
A. Weil
An overview covering how geophysical observations of the Earth’s magnetic field, gravity field, heat flow, radioactivity, and seismic waves provide a means to study plate tectonics. Also covered are the geophysical techniques used in mineral and energy resources exploration, and in the monitoring of groundwater, earthquakes and volcanoes. Three class hours a week. Prerequisites: GEOL 101 and PHYS 101, 102. Not offered in 2010-11.

GEOL B312 Quaternary Geology
D. Barber
The Quaternary Period comprises the last 1.8 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 used to reconstruct Quaternary climate variability. Three class hours a week, including hands-on data analysis exercises. Prerequisite: GEOL 103 or 205, or permission of instructor. Not offered in 2010-11.

GEOL B314 Marine Geology
D. Barber
An introduction to the structure of ocean basins, and the marine sedimentary record. Includes an overview of physical, biological, and chemical oceanography, and modern coastal processes such as shoreline erosion. Meets twice weekly for a combination of lecture, discussion and hands-on exercises, including one day-long field trip. Prerequisite: GEOL 101, 102 or 103, and 205, or permission of instructor. Not offered in 2010-11.

GEOL B328 Analysis of Geospatial Data Using GIS (Cross-listed as ARCH B328, BIOL B328 and CITY B328)
Staff

GEOL B350 Advanced Topics in Geology (Fall 2010): Time Scales of Climate Change
D. Barber, P. Marenco
A seminar course designed to familiarize students with primary scientific literature in the often contentious research fields attempting to determine how, when, why and at what rates earth’s climate has varied over geologic history.

GEOL B350 Advanced Topics in Geology (Spring 2011): Carbonate Petrography and Geochemistry
P. Marenco
This course is designed to help students learn techniques for understanding Earth’s changing environments by using mineral and geochemical indicators preserved in carbonate rocks. The course is largely laboratory-based, with an emphasis on making predictions, observations, and interpretations for rocks collected by the class. To this end, students will be learning how to use advanced petrographic and geochemical tools such as cathodoluminescence petrography, inductively coupled plasma mass spectrometry and ion chromatography.

GEOL B397 Senior Seminar in Environmental Studies (Cross-listed as ANTH B397, BIOL B397, and POLS B397)
D. Barber, C. Hager
A seminar course that encourages and facilitates environmental problem solving by interdisciplinary teams of ES concentrators. Coursework may take the form of civic engagement (Praxis) projects. Students hone their research, collaboration, and leadership abilities by working on real problems facing our community and the broader world. Students will provide oral and written progress reports and submit written summaries of their findings. Collaborative research projects also are possible. Three hours per week.

GEOL B399 Senior Thesis
A. Weil
An independent project in the field, laboratory, or library culminating in a written report and oral presentation. Required for all geology majors in the spring semester of the senior year.

GEOL B403 Independent Research
Staff

GEOL B425 Praxis III
D. Barber
Independent or group projects with a significant emphasis on community outreach and service. Projects usually focus on addressing environmental issues through collaborative work with off-campus practitioners. Prerequisites: Advanced standing in the environmental studies concentration or permission of the instructor.
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.

GERMAN AND GERMAN STUDIES FACULTY
At Haverford College:

Associate Professor Ulrich Schönberg, Co-Chair
Visiting Assistant Professor Imke Brust

At Bryn Mawr College:

Fairbank Professor in the Humanities and Professor of German and Comparative Literature Azade Seyhan (on leave Spring 2011)
Professor Imke Meyer, Co-Chair
Visiting Assistant Professor David Kenosian

AFFILIATED FACULTY

At Haverford College:

Professor of Philosophy Kathleen Wright
Associate Professor of Music Richard Freedman

At Bryn Mawr College:

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

GERMAN AND GERMAN STUDIES

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 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 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 521 (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.

GERMAN AND GERMAN STUDIES

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.

GERMAN AND GERMAN STUDIES

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.

**GERMAN AND GERMAN STUDIES REQUIREMENTS FOR HONORS**

Any student whose grade point average in the major 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.

**GERMAN AND GERMAN STUDIES COURSES**

**001 Elementary German HU**

I.Brust
Meets five hours a week with the individual class instructor, one hour with student drill instructor. 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.

**002 Elementary German HU**

I.Brust

**101 Intermediate German HU**

U.Schönherr
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. Does not count toward the major.

**102 Intermediate German HU**

U.Schönherr
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**

U.Schönherr
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. Weekly grammar reviews will complement these activities. **Prerequisite:** Intermediate German.

**202 Advanced Training: Introduction to German Studies HU**

I. Meyer/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. **Prerequisite:** Intermediate German.

**212 Revolution and German Culture (1789-1989) HU**

U.Schönherr
Focusing on exemplary philosophical, political, and literary texts (including movies), the course will closely examine the multi-faceted German reception of the revolutions of 1789, 1848, and 1918, as well as the student rebellion of 1968. In addition, we will analyze the various narrative strategies employed by philosophers of history, politicians, and writers alike to conceptualize and represent the historical events.

**214 Survey of Literature in German HU**

U.Schönherr
A study of the major periods of German literature within a cultural and historical context, including representative texts for each period.

**215 Survey of Literature in German HU**

I.Brust
The seminar is designed to give a broad overview of the various aesthetic trends which have shaped contemporary German-speaking literature. Focusing on representative works--including prose, drama, and poetry--this course will retrace and engage with the historical role of literature in the German speaking world over time, and access the importance of German literature in the current era of globalization and mass communication.

**223 Writing Nations: Africa and Europe HU**
224 Visualizing Europe HU (Cross-listed in Gender and Sexuality Studies)  
I. Brust

258 Re-imagining the City: Berlin and Vienna in Literature and Film HU (Cross-listed in Comparative Literature)  
I. Meyer  
An examination of the imagination and re-imagination of two important European capitals, Berlin and Vienna, in twentieth-century literature and film, especially in the aftermath of the world wars. We will pay special attention to the geographical, cultural, religious, and political differences between the two cities, and we will ask to what extent such differences produced different forms of artistic re-imaginings, and different artistic responses to the destruction and transformation brought about by war. Prerequisite: Sophomore standing.

305 Modern German Drama HU  
U. Schönher

320 Sex, Crime, Madness: The Birth of Modernism and Aesthetics of Transgression HU  
U. Schönher

321 Berlin Germany from a Transnational Perspective HU (Cross-listed in Comparative Literature)  
I. Brust

359 Music - Text - Performance HU (Cross-listed in Comparative Literature and Gender and Sexuality Studies)  
U. Schönher  
This course will explore the rich and diverse representations of music in all its socio-aesthetic complexity from antiquity to the present. The thematic scope of our investigations shall range from mythological, philosophical, theological, and semiotic questions, through issues of gender, race, and politics, to theories of (operatic) performance. (Taught in English with an extra session in German.) Prerequisite: One 200 level course in the Humanities.

399 Senior Conference HU  
U. Schönher, I. Brust

480 Independent Study HU  
U. Schönher  
Prerequisite: Consent of the instructor.

HAVERFORD

Comparative Literature 200 Intro to Comparative Literature
Music 250b Words and Music World
Philosophy 225a Hegel
Philosophy 229b Nineteenth-Century Philosophy

COURSES AT BRYN MAWR COLLEGE

Comparative Literature 211 The Holocaust and Its Aftermath
History 319 Hitler, National Socialism, and German Society
History of Art 348 Topics in German Art
Political Science 308 Germany and Its Neighbors

RECOMMENDED ELECTIVES AT HAVERFORD

Comparative Literature 200 Intro to Comparative Literature
Music 250b Words and Music World
Philosophy 225a Hegel
Philosophy 229b Nineteenth-Century Philosophy
Students may complete a major or minor in Growth and Structure of Cities. Complementing the major, students may complete a concentration in Environmental Studies or Latin American, Latino, and Iberian Peoples and Cultures. Students also may enter the 3-2 Program in City and Regional Planning, offered in cooperation with the University of Pennsylvania.

The interdisciplinary Growth and Structure of Cities major challenges students to understand the dynamic relationships connecting urban spatial organization and the built environment with politics, economics, cultures and societies worldwide. Core introductory classes present analytic approaches that explore changing forms of the city over time and analyze the variety of ways through which women and men have re-created global urban life through time and across cultures. With these foundations, students pursue their interests through classes in architecture, urban social and economic relations, urban history, studies of planning and the environmental conditions of urban life. Opportunities for internships, volunteering, and study abroad also enrich the major. Advanced seminars further ground the course of study by focusing on specific cities and topics.

GROWTH AND STRUCTURE OF CITIES FACULTY
Associate Professor and Chair Juan Manuel Arbona
Senior Lecturer Jeffrey A. Cohen
Professor Carola Hein (on leave semesters I and II)
Professor Gary Wray McDonogh
Visiting Studio Critic Samuel Olshin
Lecturer Ingrid Anne Steffensen
Associate Professor Ellen Frances Stroud
Senior Lecturer Daniela Holt Voith
Instructor David Consiglio
Lecturer Shira Walinsky
Lecturer Jane Golden

GROWTH AND STRUCTURE OF CITIES MAJOR REQUIREMENTS
A minimum of 15 courses (11 courses in Cities and four allied courses in other related fields) is required to complete the major. Two introductory courses (185, 190) balance sociocultural and formal approaches to urban form and the built environment, and introduce cross-cultural and historical comparison of urban development. The introductory sequence should be completed with a broader architectural survey course (253, 254, 255) and a second social science course that entails extended analysis (217 or 229). These courses should be completed as early as possible in the first and second years; at least two of them must be taken by the end of the first semester of the sophomore year. Students are encouraged to use other writing-intensive classes within the major to develop a range of skills in methods, theory, and presentation.

In addition to these introductory courses, each student selects six elective courses within the Cities Department, 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, CITY 398. Occasionally, however, after consultation with the major advisers, the student may elect another 300-level course or a program for independent research. This is often the case with double majors who write a thesis in another field.

Each student must also identify four courses outside Cities that represent additional expertise to complement her work in the major. These may include courses such as physics and calculus for architects, or special skills in design, language, or regional interests. Any minor, concentration, or second major also fulfills this requirement. Cities courses that are cross-listed with other departments or originate in them can be counted only once in the course selection, although they may be either allied or elective courses.

Both the Cities Department electives and the four or more allied courses must be chosen in close consultation with the major advisers in order to create a strongly coherent sequence and focus. This is especially true for students interested in architecture, who will need to arrange studio time (226, 228) as well as accompanying courses in math, science and architectural history; they should contact the department director or Daniela Voith in their first year. Likewise, students interested in pursuing a concentration in Environmental Studies should consult with Ellen Stroud early in their career, and those interested in pursuing Iberian, Latin American, and Latina/o themes should consult with Gary McDonogh or Juan Arbona. All students will be asked to provide a statement of their interests and goals to enrich the advising process.

Finally, students should also note that many courses in the department are given on an alternate-year basis. Many carry prerequisites in art history, economics, history, sociology, or the natural sciences.

Programs for study abroad or off campus are encouraged, within the limits of the Bryn Mawr and Haverford rules and practices. In general, a one-semester program is strongly preferred. The Cities Department 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 who would like to spend part or all of their junior year away must consult with the major advisers and appropriate deans early in their sophomore year.

Cities majors have created major plans that have allowed them to coordinate their interests in cities with architecture, planning, ethnography, history, law, environmental studies, mass media, social justice, medicine, public health, the fine arts, and other fields. No matter the focus, though, each Cities major must develop a solid foundation in both the history of architecture and urban form and the analysis of urban culture, experience, and policy. Careful methodological choices, clear analytical writing, and critical visual analysis constitute primary emphases of the major. Strong interaction with faculty and other students are an important and productive part of the Cities Department, which helps us all take advantage of the major’s flexibility in an organized and rigorous way.

**GROWTH AND STRUCTURE OF CITIES**

**MINOR REQUIREMENTS**

Students who wish to minor in the Cities Department must take at least two out of the four required courses and four cities electives, including two at the 300 level. Senior Seminar is not mandatory for fulfilling the cities minor.

**3-2 PROGRAM IN CITY AND REGIONAL PLANNING**

Over the past two decades, many Cities majors have entered the 3-2 Program in City and Regional Planning, offered in conjunction with the University of Pennsylvania. Students interested in this program should meet with Carola Hein early in their sophomore year.

**GROWTH AND STRUCTURE OF CITIES COURSES**

- **CITY B103 Earth System Science and the Environment (Cross-listed as GEOL B103)**
  D.Barber

- **CITY B104 Archaeology of Agricultural and Urban Revolutions (Cross-listed as ARCH B104)**
  P.Magee
  *Not offered in 2010-11.*

- **CITY B110 The World Through Classical Eyes (Cross-listed as ARCH B110, CTSC B110)**
  A. Donohue

- **CITY B115 Classical Art (Cross-listed as ARCH B115, CSTS B116, and HART B115)**
  A. Donohue

- **CITY B136 Working with Economic Data (Cross-listed as ECON B136)**
  D. Ross
  *Not offered in 2010-11.*

- **CITY B160 Daily Life in Ancient Greece and Rome (Cross-listed as ARCH B160 and CSTS B160)**
  A. Donohue
  *Not offered in 2010-11.*

- **CITY B175 Environment and Society: History, Place, and Problems (Cross-listed as SOCL B175)**
  R. Simpson, E. Stroud
  This course introduces the ideas, themes, and methodologies of the interdisciplinary field of environmental studies, beginning with definitions: what is nature? what is environment? and how do people and their settlements fit into each? It then examines distinct disciplinary approaches in which scholarship can and does (and does not) inform others. Assignments introduce methodologies of environmental studies, requiring reading landscapes, working with census data and government reports, critically interpreting scientific data, and analyzing work of experts.

- **CITY B180 Introduction to Urban Planning**
  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 such as waterfront development or sustainability. *Not offered in 2010-11.*

- **CITY B185 Urban Culture and Society (Cross-listed as ANTH B185)**
  J. Arbona, G. McDonogh
  Examines techniques and questions 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. Philadelphia features prominently in discussion, reading and exploration as do global metropolitan comparisons through papers involving fieldwork, critical reading and planning/problem solving using qualitative and quantitative methods.

- **CITY B190 The Form of the City: Urban Form from Antiquity to the Present (Cross-listed as ANTH B190 and HART B190)**
  J. Cohen, I. Steffenen
  This course studies 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.
CITY B203 Ancient Greek Cities and Sanctuaries
(Cross-listed as ARCH B203)
J. Wright
Not offered in 2010-11.

CITY B206 Statistical Methods in Economics
(Cross-listed as ECON B203)
R. Stahnke, T. Vartanian
Not offered in 2010-11.

CITY B207 Topics in Urban Studies: Writing Architecture
J. Cohen
An intensive writing course for mid-level students where we explore how we understand and write about architecture and architectural history, including the analysis of visual materials in texts and in real sites.

CITY B209 Medical Anthropology (Cross-listed as ANTH B210)
M. Pashigian
Not offered in 2010-11.

CITY B210 Natural Hazards (Cross-listed as GEOL B209)
A. Weil
Not offered in 2010-11.

CITY B212 Medieval Architecture (Cross-listed as HART B212)
D. Kinney
Not offered in 2010-11.

CITY B213 Taming the Modern Corporation
(Cross-listed as ECON B213)
D. Ross, D. Alger
Not offered in 2010-11.

CITY B214 Public Finance (Cross-listed as ECON B214)
M. Weinberg

CITY B215 Urban Economics (Cross-listed as ECON B215)
R. Stahnke

CITY B217 Research Methods and Theories
J. Arbona
This course will provide the student with the basic skills to design and implement a research project. The emphasis will be on the process (and choices) of constructing a research project and on “learning by doing.” The course will encompass both quantitative and qualitative techniques and will examine the strengths and weaknesses of each strategy. By the end of the semester students will have learned the basics for planning and executing research on a topic of their choice.

CITY B218 Globalization and the City
J. Arbona
This course introduces students to contemporary issues related to the urban built environment in Africa, Asia and Latin America (collectively referred to as the Third World or developing countries) and the implications of recent political and economic changes. Not offered in 2010-11.

CITY B222 Introduction to Environmental Issues:
Policy-Making in Comparative Perspective (Cross-listed as POLS B222)
C. Hager
Not offered in 2010-11.

CITY B225 Economic Development (Cross-listed as ECON B225)
M. Rock

CITY B226 Introduction to Architectural Design
S. Olshin, D. Voith
This studio design course introduces the principles of architectural design. Prerequisites: Drawing, some history of architecture, and permission of instructor.

CITY B227 Topics in Modern Planning (Cross-listed as HART B227)
C. Hein
This course examines topics in planning as defined by specific areas (modern European metropolises) or themes (the impact of oil). It is a writing intensive course. Not offered in 2010-11.

CITY B228 Problems in Architectural Design
Advanced Architecture and Urban Design
S. Olshin, D. Voith
A continuation of CITY 226 at a more advanced level. Prerequisites: CITY 226 or other comparable design work and permission of instructor.

CITY B229 Comparative Urbanism Divided Cities:
Race, Class, Gender, and Other Divisions (Cross-listed as ANTH B229, EAST B229 and SOCL B230)
G. McDonagh
This class builds upon foundations in urban social sciences and visual methods through the systematic comparative examination of four major global cities—Hong Kong, Paris, São Paulo, and Los Angeles—as arenas in which social and cultural divisions are lived, challenged, and recreated. By limiting ourselves to a few cases studied in depth through multiple drafts of a comparative research problem we can explore theoretical and methodological issues raised by divisions that structure everyday life, rights, space, and opportunities. This also allows us to link data and methods to theory, with special reference to critical
theories on race, class, gender and identity. Limited to 25 with preference to Cities majors.

CITY B234 Environmental Economics (Cross-listed as ECON B234)
D. Ross

CITY B237 Themes in Modern African History: Urbanization in Africa (Cross-listed as HIST B237)
K. Ngalamulume
Not offered in 2010-11.

CITY B238 The Economics of Globalization (Cross-listed as ECON B236)
J. Ceglowski
Not offered in 2010-11.

CITY B242 Urban Field Research Methods (Cross-listed as SOCL B242)
A. Takenaka

CITY B244 Great Empires of the Ancient Near East (Cross-listed as ARCH B244, HIST B244, and POLS B244)
M. Atac
Not offered in 2010-11.

CITY B247 Topics in German Cultural Studies (Cross-listed as GERM B223 and HIST B247)
D. Kenosian
Not offered in 2010-11.

CITY B248 Modern Middle East Cities (Cross-listed as POLS B248 and HEBR B248)
D. Harrold
Not offered in 2010-11.

CITY B249 Asian American Communities (Cross-listed as ANTH B249 and SOCL B249)
A. Takenaka

CITY B250 Twentieth Century U.S. Urban History: Philadelphia Architecture (Cross-listed as HIST B251)
J. Cohen
This course explores the recent history of U.S. cities as both physical spaces and social entities. How have the definitions, political roles, and social perceptions of U.S. cities changed since 1900? And how have those shifts, along with changes in transportation, communication, construction, and other technologies affected both the people and places that comprise U.S. cities? In 2010-2011, the class will use the built environment of Philadelphia to tackle these issues.

CITY B251 La Mosaique France (Cross-listed as FREN B251)
B. Cherel
Not offered in 2010-11.

CITY B253 Survey of Western Architecture (Cross-listed as HART B253 and HIST B253)
D. Cast
Not offered in 2010-11.

CITY B254 History of Modern Architecture (Cross-listed as HART B254)
J. Steffensen
A survey of the development of modern architecture since the 18th century. The course concentrates on the period since 1890, especially in Europe and North America.

CITY B255 Survey of American Architecture (Cross-listed as HART B255)
J. Steffensen
An examination of landmarks, patterns, landscapes, designers, and motives in the creation of the American built environment over four centuries. The course will address the master narrative of the traditional survey course, while also probing the relation of this canon to the wider realms of building in the United States.

CITY B258 L’Espace réinventé (Cross-listed as FREN B258)
Staff
Not offered in 2010-11.

CITY B260 Show and Spectacle in Ancient Greece and Rome (Cross-listed as CSTS B255, ARCH B255 and HIST B285)
A. Baertschi, R. Scott, J. Wright
Not offered in 2010-11.

CITY B266 Schools in American Cities (Cross-listed as EDUC B266 and SOCL B266)
Judy Cohen

CITY B267 Philadelphia, 1682 to Present (Cross-listed as HIST B267)
E. Shore
Not offered in 2010-11.

CITY B276 Philadelphia Mural Arts History, Activism, Design
Judy Cohen, J. Golden, S. Walinsky
Philadelphia is home to 3,000 murals. Students will explore this exciting movement in civic activism and the arts, leading the design and execution of a legacy mural project celebrating Bryn Mawr’s 125th. Students will gain experience with community organizing for this project, in Philadelphia as well as on campus.

CITY B278 American Environmental History (Cross-listed as HIST B278)
E. Strand
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This course explores major themes of American environmental history, examining changes in the American landscape, development of ideas about nature and the history of environmental activism. Students will study definitions of nature, environment, and environmental history while investigating interactions between Americans and their physical worlds.

CITY B286 Themes in British Empire (Cross-listed as HIST B286 and POLS B286)  
M. Kale  
Not offered in 2010-11.

CITY B287 Urbanism as a Way of Life (Cross-listed as SOCL B287)  
R. Simpson  
Not offered in 2010-11.

CITY B293 Topics in Film, Television, and Media (Cross-listed as HART 293)  
J. Naser  
An examination of approaches and topics in international media, using social science, historical and humanistic techniques. In 2010, the class will focus on "Fragmented Cities" dealing with issues of gender, ethnicity and identity in U.S., Latino and Latin American media.

CITY B299 Cultural Diversity and Its Representations (Cross-listed as GERM B299 and COML B299)  
A. Seyhan  
Not offered in 2010-11.

CITY B301 Topics in Modern Architecture: Cars and the City  
I. Steffen  
This course will examine the role of the automobile in the development of architecture and urbanism in the twentieth century. From the invention of the horseless carriage to Henry Ford's development of the assembly line, to the postwar explosion of car production and ownership, we will trace the technological development of the automobile. We will also examine the interaction between the automobile and the single-family residence; the growth of cities and suburbs in relation to the automobile; and how the automobile plays a defining role in shaping the spaces of modern life.

CITY B305 Ancient Athens (Cross-listed as ARCH B305)  
A. Lindenlauf  
Not offered in 2010-11.

CITY B306 Advanced Fieldwork Techniques: Places in Time  
J. Cohen  
A workshop for research into the histories of places, intended to bring students into contact with some of the raw materials of architectural and urban history. A focus will be placed on historical images and texts, and on creating engaging informational experiences that are transparent to their evidentiary basis.

CITY B308 Topics in Photography (Cross-listed as HART B308)  
Staff  
Not offered in 2010-11.

CITY B319 Advanced Topics in German Cultural Studies (Cross-listed as GERM B321, COML B321 and HART B348)  
I. Meyer, D. Kenosian  
Not offered in 2010-11.

CITY B321 Technology and Politics (Cross-listed as POLS B321)  
C. Hager  
Not offered in 2010-11.

CITY B322 Topics in German Literature (Cross-listed as GERM B310)  
D. Kenosian  
Not offered in 2010-11.

CITY B323 Topics in Renaissance Art  
D. Cast  
Not offered in 2010-11.

CITY B325 Topics in Social History: The Body (Cross-listed as HIST B325)  
E. Stroud  
This topics class explores major themes in American social history. This year, the class will focus on the history of the American body, investigating the ways in which both living and dead human bodies have shaped and been shaped by American culture, landscapes, and institutions.

CITY B328 Analysis of Geospatial Data Using GIS (Cross-listed as GEOL B328, ARCH B328 and BIOL B328)  
D. Consiglio  
An introduction to analysis of geospatial data, theory, and the practice of geospatial reasoning. As part of this introduction students will gain experience in using one or more GIS software packages and be introduced to data gathering in the field by remote sensing. Each student is expected to undertake an independent project that uses the approaches and tools presented.

CITY B330 Comparative Economic Sociology (Cross-listed as SOCL B330)  
M. Osirim  
Not offered in 2010-11.
CITY B331 Palladio and Neo-Palladianism (Cross-listed as HART B331)
D.Cast
Not offered in 2010-11.

CITY B335 Mass Media and the City (Cross-listed as ANTH B335)
G.McDonogh
Maps and murals, newspapers and graffiti, theater and internet—how do they pattern how we imagine cities, dwell in them, or battle for our places within them? This seminar entails a critical examination of the crucial nexus of cities, modernities and media, drawing on theoretical models from linguistics, communication, film and cultural studies, and Marxist analysis while exploring case materials from the Americas, Asia, Africa, and Europe. Students will be expected to critique models and cases while anchoring their own research in a portfolio about a single city. Limited to 15; For advanced students with preference to Cities majors.

CITY B338 The New African Diaspora: African and Caribbean Immigrants in the United States (Cross-listed as SOCL B338)
M.Osirim
Not offered in 2010-11.

CITY B345 Advanced Topics in Environment and Society: Environmental Justice (Cross-listed as SOCL B346)
E.Stroud
This topics class explores major themes of American environmental history, examining changes in the American landscape, the development of ideas about nature, and the history of environmental politics. This year, the class will focus on questions of environmental equity and environmental justice.

CITY B348 Culture and Ethnic Conflict (Cross-listed as POLS B348)
M.Ros
Not offered in 2010-11.

CITY B355 Topics in the History of London (Cross-listed as HART B355)
D.Cast
Not offered in 2010-11.

CITY B360 Topics in Urban Culture and Society: Cities, Nature and Identities in Brazil (Cross-listed as ANTH B359 and HART B359)
G.McDonogh
With a population nearing 200,000,000 Brazil is the fifth largest nation by both size and population in the world. In five hundred years of history and culture, moreover, it also has become an arena for profound ecological transformation, intense social debate over race, class, and culture, and exciting proposals for the transformation of cities and society. This class entails an overview of the negotiation of cities, citizenship, and ecology, from the tensions of Amazonia and coastal settlement to colonial structures of natural and human exploitation through the development of imperial and post-imperial society. It pays particular attention to Brazilian imaginations.

CITY B377 Topics in Modern Architecture: The Architecture of Art Museums (Cross-listed as HART B377)
I.Steffensen
This course begins with the European origins of the art museum in palaces and private residences, and follows the development of the art museum as an institution both in Europe and the United States, as well as the architecture that emerged to answer the needs of this burgeoning institution. Given the cultural preeminence of the art museum, the response of architects to the challenge of designing these emblematic institutions was to push boundaries, make statements, and develop ambitious plans that were often extreme in terms of size, design, and technological developments. Not offered in 2010-11.

CITY B378 Formative Landscapes: The Architecture and Planning of American Collegiate Campuses
J.Cohen
An exploration of the architecture, planning, and visual rhetoric of American collegiate campuses from their early history to the present. Historical consideration of architectural trends and projected imageries will be complemented by student exercises involving documentary research on design genesis, typological contexts, and critical reception. Not offered in 2010-11.

CITY B398 Senior Seminar
J.Arbona, J.Cohen, G.McDonogh
An intensive research seminar designed to guide students in writing a senior thesis.

CITY B403 Independent Study
J.Arbona, J.Cohen, G.McDonogh, E.Stroud

CITY B415 Teaching Assistant
J.Arbona, J.Cohen, G.McDonogh, E.Stroud
An exploration of course planning, pedagogy and creative thinking as students work to help others understand pathways they have already explored in introductory and writing classes. This opportunity is available only to advanced students of highest standing by professorial invitation.

CITY B425 Cities: Praxis Independent Study
Staff
A collective opportunity for students to come together on the basis of engagement in praxis in the greater Philadelphia area; internships generally must be arranged prior to registration for the semester in
which the internship is taken. Limited to five students per semester by permission of the instructor.

CITY B450 Urban Internships/Praxis

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.
Modern Hebrew language instruction is available at Bryn Mawr through the intermediate level; at Swarthmore College biblical Hebrew is offered in a two-semester sequence through the first-year level, and additional reading in Classical Jewish texts is available in directed reading, one-half-credit courses. 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 Tri-Co Course Guide under the heading “Hebrew and Judaic Studies.”

HEBREW AND JUDAIC STUDIES

FACULTY

Lecturer Amiram Amitai
Professor and Coordinator of Middle Eastern Languages
Grace Morgan Armstrong (on leave semester II)
Lecturer and Coordinator of Middle Eastern Studies
Deborah Harrold
Visiting Assistant Professor Tamara Neuman

HEBREW AND JUDAIC STUDIES

COURSES

HEBR B001 Elementary Hebrew
A.Amitai
This is a year-long course. This course prepares students for reading classical religious texts as well as modern literary work. It covers grammar, composition, and conversation with primary emphasis on fluency in reading as well as the development of basic conversational skills. Not offered in 2010-11.

HEBR B002 Elementary Hebrew
A.Amitai
This is a year-long course. This course prepares students for reading classical religious texts as well as modern literary work. It covers grammar, composition, and conversation with primary emphasis on fluency in reading as well as the development of basic conversational skills. Not offered in 2010-11.

HEBR B101 Intermediate Hebrew
A.Amitai
The course is designed for students who took the Elementary Hebrew course in Bryn Mawr or its equivalents in other institutions, assuming basic fluency in reading, writing, grammar, syntax, and conversation in Hebrew. It expands the knowledge of the above, while emphasizing reading, writing, and class discussions of modern literary works as well as some classical religious texts. It integrates textbooks’ material with Hebrew videos and films, short stories and songs. Students who feel qualified to take this course, but have not taken Elementary Hebrew at Bryn Mawr, are encouraged to discuss it with the instructor. This is a year-long course.

HEBR B102 Intermediate Hebrew
A.Amitai
The course is designed for students who took the Elementary Hebrew course in Bryn Mawr or its equivalents in other institutions, assuming basic fluency in reading, writing, grammar, syntax, and conversation in Hebrew. It expands the knowledge of the above, while emphasizing reading, writing, and class discussions of modern literary works as well as some classical religious texts. It integrates textbooks’ material with Hebrew videos and films, short stories and songs. Students who feel qualified to take this course, but have not taken Elementary Hebrew at Bryn Mawr, are encouraged to discuss it with the instructor. This is a year-long course.

HEBR B110 Israeli Cinema
A.Amitai
The course traces the evolution of the Israeli cinema from an ideologically charged visual medium to a universally recognized film art, as well as the emergent Palestinian cinema and the new wave of Israeli documentaries. It will focus on the historical, ideological, political, and cultural changes in Israeli and Palestinian societies and their impact on films’ form and content.

HEBR B211 Primo Levi: The Holocaust and its Aftermath
N.Patruno

HEBR B248 Modern Middle East Cities (Cross-listed as POLS B248 and CITY B248)
D.Harrold
Not offered in 2010-11.

HEBR B261 Palestine and Israeli Society (Cross-listed as ANTH B261 and HIST B261)
T.Neuman
Not offered in 2010-11.

HEBR B283 Introduction to the Politics of the Modern Middle East and North Africa (Cross-listed as POLS B283 and HIST B283)
D.Harrold
Not offered in 2010-11.

HEBR B310 Topics in German Literature: Leaps of Faith: Religion in German Literature and Culture (Cross-listed as GERM B310)
M.Meyer
HEBR B342 Middle Eastern Diasporas (Cross-listed as ANTH B342 and GNST B342)
T. Neuman
Not offered in 2010-11.

HEBR B380 Topics in Contemporary Art (Cross-listed as HART B380 and GERM B380)
L. Saltzman
Not offered in 2010-11.

HEBR B403 Supervised Work in Intermediate Hebrew
A. Amitai

From year to year, additional course listings in the departments of Foreign Languages, History, and History of Art may also be appropriate for credit in this program.
HISTORY

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 Studies, East Asian Studies, Education and Educational Studies, Gender and Sexuality 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 are encouraged to pursue foreign languages to enable advanced research in seminars and theses.

HISTORY FACULTY
Professor Linda G. Gerstein
Professor Emma Jones Lapsansky
John R. Coleman Professor of Social Sciences Paul Jakov Smith
Frank A. Kafker Associate Professor Lisa Jane Graham
Associate Professor Alexander Kitroeff
Associate Professor James Krippner, Chair
Associate Professor Bethel Saler
Assistant Professor Darin Hayton
Assistant Professor Andrew Friedman

HISTORY 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 (Origins of the Global South)
   - History 115 (Postcards from the Atlantic World)
   - History 117 (Modern Mediterranean History)
   - History 118 (Introduction to the History of Science)
   - History 120 (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. All majors must complete three of the designated six fields. A student must take two courses above the 100 level within a field to complete each field requirement. The history department currently 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 and Medicine. In addition, a student may design a field based on courses offered at Bryn Mawr (such as British Colonial, Atlantic World, or African History) or that addresses specific approaches or themes (such as comparative history, religious 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).

HISTORY 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.

HISTORY 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 an excellent 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.

HISTORY COURSES
111 Introduction to Western Civilization Since 1500 So
L. Graham
The fall semester course is a survey of Western Civilization from the fall of Rome to the sixteenth century. It focuses on the institutional and intellectual dimensions of the western tradition, by closely interrogating both primary sources and secondary
accounts. The second semester of this course (which may be taken independent of the first semester) picks up at the end of the sixteenth century and goes to the present. It explores the development of the modern European world.

114 Origins of the Global South SO (Cross-listed in African and Africana Studies)
J.Krippner
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.

115 Postcards from the Atlantic World SO
B.Saler
An exploration of the movement of peoples, goods and ideas across the four continents that border the Atlantic basin (Africa, Europe, North America and South America) over the transformative periods of exploration and empire from the fifteenth to the nineteenth centuries.

117 Modern Mediterranean History SO
A.Kritzeff
This course examines the ways the countries & peoples of the Mediterranean region—Southern Europe, North Africa and the Middle East—responded to the main events & trends in the 19th-20th centuries: the French revolution, the industrial revolution, nationalism, imperialism, fascism, the two world wars, the Cold War, anti-colonialism. The Mediterranean lies between Europe, Africa and Asia geographically but also in a normative sense, representing a region whose historical trajectory echoed that of the developed West but also the colonized, less developed East. Its study, therefore, enables students to understand the main historical trends in the modern era on a global scale. This course also introduces students to the ways historians analyze and explain social change over time. It focuses on how historians assess the role of specific causes e.g. agency or structure, economic or political causes or the role of individuals. Finally, this course models the ways historians research and read primary sources, especially diplomatic reports, documentaries, memoirs, newspaper articles and public speeches.

118 Introduction to the History of Science SO
D.Hayton
Although science is an essential characteristic 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 can include science and medicine in antiquity, Islamic sciences, Byzantine and medieval sciences, early-modern science and the Scientific Revolution.

119 International History of the United States SO
A.Friedman
This course surveys the international history of the United States in the 20th century. It encourages students to conceptualize U.S. history as a series of transnational encounters and systems that represent a country outside its formal borders. Capitalism, the environment, postcolonialism and Third Worldism, Atlantic crossings, modernity, imperialism, diaspora and migration, world war, travel, United Nations and our America serve as organizing motifs. In considering the history of this country outside its formal borders, students will gain a facility with the languages of hemispheric and global imagining that structure the pursuit of contemporary U.S. history, while sharpening analytical skills working with primary texts.

120 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 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.

200 Sophomore Seminar: Methods and Approaches in East Asian Studies HU (Cross-listed in East Asian Studies)
P.Smith
Prerequisite: Required of East Asian Studies majors and minors; open to History majors and other interested students.

203 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. **Prerequisite:** Sophomore standing or above. **Typically offered in alternate years.**

204 History of Gender and U.S. Women to 1870 SO (Cross-listed in Gender and Sexuality Studies) 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. **Prerequisite:** Sophomore standing or above. **Typically offered in alternate years.**

208 Colonial Latin America SO (Cross-listed in Latin American and Iberian Studies and Peace and Conflict Studies-Bi Co Conc) J.Krippner
This course introduces students to modern Latin American history from the 19th century demise of Spanish & Portuguese colonialism through the present. We shall discuss all the major regions & cultural zones of contemporary Latin America, though in varied depth given the inevitable constraints of time & disciplinary boundaries. Particular attention will be paid to the interplay of gender, race, and class in specific contexts, and we shall examine how social conflict has influenced historical change.

215 Sport and Society SO A.Kitroeff
This course examines the evolution of sport in the Americas and Europe in the 19th and 20th centuries from its amateur beginnings to its transformation into a lucrative business with a global scope in the late 20th century. The course is divided into three broad chronological sections: the 19th century, the 20th century through World War II, and the post-1945 era. In each of these segments we are concerned with the way social changes affected the way sport was played, administered, experienced as a spectacle, and how it was treated as an important social institution. **Prerequisite:** An introductory social science course.

225 Europe: 1870-1914 SO L.Gerstein
Topics included are Marxism, The Dreyfus Affair, Imperialism, Sexual Anxiety, and Art Nouveau. **Typically offered in alternate years.**

226 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.

227 Statecraft and Selfhood in Early Modern Europe SO L.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. **Prerequisite:** Sophomore standing or above. **Typically offered in alternate years.**

228 The French Revolution SO L.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. **Prerequisite:** Sophomore standing or above. **Typically offered in alternate years.**

229 Gender, Sex and Power in Europe, 1550-1800 SO (Cross-listed in Gender and Sexuality Studies) L.Graham
This course traces the evolving definitions of gender and sexuality in Europe from the Renaissance to the Enlightenment. Primary sources and theoretical readings explore the construction of gender roles and sexuality in different arenas of early modern life such as political thought, law, work, family, art and performance. Topics include masculinity and effeminacy, court culture and power, the rise of print technology and literacy, religious conflict and scientific discovery. **Typically offered in alternate years.**

230 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. Offered occasionally.

231 The Age of Enlightenment SO
L. 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. Typically offered in alternate years.

233 Perspectives on Civil War and Revolution: Southern Europe and Central America SO (Cross-listed in Political Science)
A. Isaacs/A. Kitroeff
Prerequisite: One course in history or one course in political science.

234 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. Typically offered in alternate years.

237 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 filmmakers 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 to 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. Typically offered in alternate years.

240 History and Principles of Quakerism SO (Cross-listed in Religion and Peace and Conflict Studies-Bi Co Conc)
E. Lapuante
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.

244 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. Typically offered in alternate years.

245 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. Typically offered in alternate years.

256 Zen Thought, Zen Culture, Zen History HU (Cross-listed in East Asian Studies and Religion)
H. Glassman

257 The Scientific Revolution SO
D. Hayton
The revolution in the sciences that occurred between 1500 and 1750 completely reshaped our understanding of the natural world and our place in it. Simultaneously, the methods used to interrogate that natural world changed dramatically. This course explores these transformations. Prerequisite: Sophomore standing. Typically offered in alternate years.

259 Collecting and Displaying Nature SO
D. Hayton
Collecting, classifying and displaying natural artifacts acquired new significance in early-modern Europe and played an important role in the development of modern science. This course explores the motivations and contexts for such collecting and classifying activities. Prerequisite: Sophomore standing or consent.

260 Mid Imperial China (ca. A.D. 850-1600) SO (Cross-listed in East Asian Studies)
P. Smith
Surveys the fundamental transformation of Chinese society between the 9th and 16th centuries, with particular stress on exams and the rise of a literocentric elite; Neo-Confucianism’s impact on social and gender relations; fraught relations between China and the steppe; and China’s role in the premodern global economy. Prerequisite: Not open to Freshmen.

261 Late Imperial China, 1600-1900 SO (Cross-listed in East Asian Studies)
P. Smith
Surveys Chinese culture and society at the height of the imperial era through the 19th century and the ensuing political and cultural crises catalyzed by
institutions and Western imperialism in the 19th and early 20th centuries. Prerequisite: Sophomore standing and one course in either History or East Asian Studies.

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. Typically offered in alternate years.

267 The Medieval Transformation of Eurasia, ca. 1000-1400 SO (Cross-listed in East Asian Studies)  
P. Smith  
Historians now agree that the 10th through the 14th centuries witnessed transformations across Eurasia that had long-term consequences for subsequent developments throughout the Old World. This course surveys the nature of and linkages between those changes in Europe, the Islamic world, China, and Japan, with a primary focus on travelers’ accounts and such literary sources as The Canterbury Tales (Europe), The Arabian Nights (Middle East), Tale of the Heike (Japan), and The Story of the Western Wing (China). Prerequisite: One 100 level introductory course in History or East Asian Studies.

268 Transformations of Medieval Afro-Eurasia, 10th to 15th centuries SO (Cross-listed in East Asian Studies)  
P. Smith  
This course uses literature and travelers’ accounts to trace the rise and displacement of a multi-polar Afro-Eurasian system of trade, communications, and cultural encounters during the 10th through 15th centuries and the internal social transformations that accompanied those exchanges. Prerequisite: At least one introductory history course.

270 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. Typically offered in alternate years.

281 Mexican Cultural History: Ancient and Colonial SO (Cross-listed in Latin American and Iberian Studies)  
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. Prerequisite: Sophomore standing or instructor consent.

282 Mexican Cultural History: Modern and Postmodern SO (Cross-listed in Latin American and Iberian Studies)  
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. Prerequisite: Sophomore standing or instructor consent.

317 Visions of Mexico SO (Cross-listed in Latin American and Iberian Studies)  
J. Krippner  
This course introduces students to some of the cultural theories that have influenced the recent work of historians as well as examples of historical monographs that take a theoretical approach. It highlights imaginative & innovative approaches to history rather than a particular geographic or chronological period. Among the cultural theorists whose work we will examine will include Michel Foucault, Clifford Geertz, Pierre Bourdieu, Edward Said, and Dipesh Chakrabarty. Prerequisite: Senior or Junior standing or consent. Typically offered in alternate years.

341 The Early Republic SO  
B. Saler  
Prerequisite: Sophomore standing or consent of the instructor.

347 War and Warriors in Chinese History SO (Cross-listed in East Asian Studies)  
P. Smith  
Prerequisite: Upper-class standing.

349 Topics in Comparative History SO (Cross-listed in East Asian Studies)  
P. Smith

350 Courtly Science in Late Medieval
Renaissance Europe SO
D. Hayton

354 Topics in Early Modern Europe SO
L. Graham
Prerequisite: One prior course in Hist or consent.

356 Literature and Society in Modern Russia SO
(Cross-listed in Russian)
L. Gerstein

357 Topics in European History: Nationalism and Migration SO
A. Kitroff

358 Topics in Enlightenment History SO
L. Graham
Prerequisite: Junior or senior status and at least one prior course in history.

400 Senior Thesis Seminar SO
J. Krippner
History 400 is designed to expose students to different historical methods and guide them through the conceptualization of a topic, the research, and the writing of a thesis proposal.

480 Independent Study SO
L. Gerstein
Prerequisite: Consent of the instructor.

COURSES AT BRYN MAWR COLLEGE
101 The Historical Imagination SO
102 Intro to African Civilizations SO
212 Pirates and Travelers SO
225 19th Century Europe: Industry, Empire and Globalization SO
242 American Pol & Soc: 1940-Pres SO
253 Survey of Western Architecture HU
258 Brit Empire: Imagining Indies SO
271 Medieval Islamic Society & Pol SO
283 Modern Middle East/North Africa Middle East and North Africa SO
285 Sport & Spectacle Anc Greco-Rome HU
318 Topics in Modern European Hist Media Revolutions: Print, Radio and Internet SO
325 Topics in Social History: Sexuality in America SO
336 Topics in African History: Social & Cultural History of Medicine SO
357 Topics in British Empire: Race, Nation and the Making of Britain SO
376 Origins Amer Constitutionalism SO
383 Islamic Reform & Radicalism SO
395 Exploring History SO

154
Students may complete a major or minor in 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 Haverford, Swarthmore, and the University of Pennsylvania. Majors are also encouraged to study abroad for a semester. Should they choose to do so, they should plan to undertake that work during the spring semester of their junior year.

**HISTORY OF ART FACULTY**

Professor David J. D. Cast  
Professor Christiane Hertel  
Associate Professor Homay King  
Professor Dale Kinney (on leave semester I)  
Professor and Chair Steven Z. Levine  
Professor Gridley McKim-Smith  
Andrew W. Mellon Foundation Postdoctoral Fellow in the Humanities Jaime Javier Nasser  
Professor Lisa R. Saltzman  
Lecturer Diala Toure

**HISTORY OF ART MAJOR REQUIREMENTS**

The major requires eleven units, approved by the major adviser. A usual sequence of courses would include at least one 100 level “critical approaches” seminar, four 200 level lecture courses, four 300 level seminars, and junior seminar in the fall semester of the junior year and senior conference in the spring semester of senior year. 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 adviser, 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.

**HISTORY OF ART 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 adviser.

**HISTORY OF ART REQUIREMENTS FOR 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. Two or three faculty members discuss the completed thesis with the honors candidate in a one-hour oral examination.

**HISTORY OF ART COURSES**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Instructor(s)</th>
<th>Notes</th>
</tr>
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<tbody>
<tr>
<td>HART B100</td>
<td>The Stuff of Art (Cross-listed as CHEM B100)</td>
<td>S. Burgmayer</td>
<td>Not offered in 2010-11.</td>
</tr>
<tr>
<td>HART B104</td>
<td>Critical Approaches to Visual Representation: The Classical Tradition</td>
<td>D. Cast</td>
<td>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.</td>
</tr>
<tr>
<td>HART B107</td>
<td>Critical Approaches to Visual Representation: Self and Other in the Arts of France</td>
<td>S. Levine</td>
<td>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.</td>
</tr>
<tr>
<td>HART B108</td>
<td>Critical Approaches to Visual Representation: Women, Feminism, and History of Art</td>
<td>L. Saltzman</td>
<td>An investigation of the history of art since the Renaissance organized around the practice of women artists, the representation of women in art, and the visual economy of the gaze.</td>
</tr>
<tr>
<td>HART B110</td>
<td>Critical Approaches to Visual Representation: Identification in the Cinema</td>
<td>H. King</td>
<td>An introduction to the analysis of film through particular attention to the role of the spectator.</td>
</tr>
<tr>
<td>HART B115</td>
<td>Classical Art (Cross-listed as ARCH B115, CITY B115 and CSTS B115)</td>
<td>A. Donohue</td>
<td>Not offered in 2010-11.</td>
</tr>
</tbody>
</table>
HART B125 Classical Myths in Art and in the Sky (Cross-listed as ARCH B125 and CSTS B125)  
A. Lindenlauf  
Not offered in 2010-11.

HART B190 The Form of the City (Cross-listed as CITY B190 and ANTH B190)  
J. Cohen, C. Hein  
Not offered in 2010-11.

HART B204 Greek Sculpture (Cross-listed as ARCH B205)  
A. Donohue  
Not offered in 2010-11.

HART B205 Introduction to Film (Cross-listed as ENGL B205)  
M. Tratner  
Not offered in 2010-11.

HART B206 Hellenistic and Roman Sculpture (Cross-listed as ARCH B206)  
A. Donohue  
Not offered in 2010-11.

HART B210 Medieval Art  
Staff  
An overview of artistic production in Europe antiquity to the 14th century. Special attention will be paid to problems of interpretation and recent developments in art-historical scholarship. Not offered in 2010-11.

HART B212 Medieval Architecture (Cross-listed as CITY B212)  
Staff  
Not just Gothic cathedrals, medieval architecture includes mosques, synagogues, fortifications, palaces, monasteries and other residential structures produced in Europe, North Africa and the Middle East between about 300 and 1350 CE. This course offers a selective overview and an introduction to research in this broad and diverse field of study. Not offered in 2010-11.

HART B213 Theory in Practice: Critical Discourses in the Humanities (Cross-listed as FREN B213, COML B213, GERM B213 and RUSS B213)  
P. Higginson

HART B225 Topics in Modern Chinese Literature (Cross-listed as EAST B225 and HIST B220)  
P. Lin  
Not offered in 2010-11.

HART B227 Topics in Modern Planning (Cross-listed as CITY B227, FREN B227 and GERM B227)

C. Hein  
Not offered in 2010-11.

HART B229 Comparative Urbanism (Cross-listed as CITY B229, ANTH B229, EAST B229)  
G. McDonough  
Not offered in 2010-11.

HART B230 Renaissance Art  
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.

HART B234 Picturing Women in Classical Antiquity (Cross-listed as ARCH B234 and CSTS B234)  
A. Lindenlauf  
Not offered in 2010-11.

HART B238 The History of Cinema 1895 to 1945 Silent Film: From United States to Soviet Russia and Beyond (Cross-listed as ENGL B238, COML B238 and RUSS B238)  
T. Harte  
Introduction to the international history of film as a narrative and aesthetic form, with consideration of cultural, social, political, technological, and economic determinants that allowed film across the world to evolve, thrive, and become the defining artistic medium of the 20th century.

HART B241 New Visual Worlds in the Spanish Empire 1492 - 1820  
G. McKim-Smith  
The events of 1492 changed the world. Visual works made at the time of the Conquest of the Caribbean, Mexico and South America by Spain and Portugal reveal multiple and often conflicting political, racial and ethnic agendas, with connections to Asia, Islam, Northern Europe and pre-Columbian cultures. Not offered in 2010-11.

HART B242 Material Identities in Latin America 1820 - 2010  
G. McKim-Smith  
Revolutions in Latin America begin around 1810. By the 20th and 21st centuries, there is an international viewership for the works of Latin American artists, and in the 21st century the production of Latina and Latino artists living in the United States becomes particularly important.

HART B250 Nineteenth-Century Art in France  
S. Levine  
Close attention is selectively given to the work of Cézanne, Courbet, David, Degas, Delacroix, Géricault, Ingres, Manet, and Monet. Extensive
readings in art criticism are required. Not offered in 2010-11.

HART B253 Survey of Western Architecture (Cross-listed as CITY B253 and HIST B253)
D.Cast
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 considered. Not offered in 2010-11.

HART B254 History of Modern Architecture (Cross-listed as CITY B254)
I.Steffensen

HART B255 Survey of American Architecture (Cross-listed as CITY B255)
I.Steffensen
Not offered in 2010-11.

HART B260 Modern Art
L.Saltzman
This course will involve an inquiry into the history of 20th-century visual culture, European and American, through an exploration of art practice, art history, art criticism and art theory. Against the dominant and paradigmatic theorization of modernism, the course will introduce and mobilize materials aimed at its critique. Not offered in 2010-11.

HART B266 Contemporary Art: 1945 to the Global Present
L.Saltzman
America, Europe and beyond; from the 1950s to the present, in visual media and visual theory.

HART B268 Greek and Roman Architecture (Cross-listed as ARCH B268 and CITY B268)
P.Webb
Not offered in 2010-11.

HART B272 Topics in Early and Medieval China: Chinese Cities and City Culture (Cross-listed as EAST B272 and CITY B273)
P.Lin
Not offered in 2010-11.

HART B282 Arts of Sub-Saharan Africa
D.Toure
This course examines the significant artistic and architectural traditions of African cultures south of the Sahara in their religious, philosophical, political, and social aspects.

HART B299 History of Narrative Cinema, 1945 to Present (Cross-listed as ENGL B299)
H.King
This course surveys the history of narrative film from 1945 through the contemporary moment. We will analyze a series of styles and national cinemas in chronological order, including Italian Neorealism, the French New Wave, and other post-war movements and genres. Viewings of canonical films will be supplemented by more recent examples of global cinema. While historical in approach, this course emphasizes the theory and criticism of the sound film, and we will consider various methodological approaches to the aesthetic, socio-political, and psychological dimensions of cinema. Fulfills the history requirement or the introductory course requirement for the Film Studies minor.

HART B305 Classical Bodies (Cross-listed as ARCH B305)
A.Donohue
Not offered in 2010-11.

HART B306 Film Theory (Cross-listed as ENGL B306 and COML B306)
H.King
This course covers a selection of key texts in film theory. Our primary method of inquiry will be close analysis of primary theoretical texts. Topics of discussion may include the ontology of the photographic image, the ethics of cinema, cinematic space and temporality, and film theory's relationship to other forms of visual media. Film screenings will serve to illustrate and complicate theoretical concepts. Fulfills the theory requirement for Film Studies minors. Prerequisites: HART 110, ENGL 205, HART 299, or instructor permission. Enrollment is limited to 15, priority given to Film Studies minors, History of Art majors, and English majors.

HART B311 Topics in Medieval Art (Cross-listed as CITY B312)
Topics change annually. Not offered in 2010-11.

HART B323 Topics in Renaissance Art: The Fresco as Public Art (Cross-listed as CITY B323)
D.Cast
Selected subjects in Italian art from painting, sculpture, and architecture between the years 1400 and 1600.

HART B331 Palladio and Neo-Palladianism (Cross-listed as CITY B331)
D.Cast
A seminar on the diffusion of Palladian architecture from the 16th century to the present. Not offered in 2010-11.

HART B334 Topics in Film Studies: Queer
Cinema in a Transnational Frame (Cross-listed as ENGL B334)
H.Nguyen

HART B336 Topics in Film (Cross-listed as ENGL B336)
H.Nguyen
Not offered in 2010-11.

HART B340 Topics in Baroque Art: Costume and Consumer Culture in Spain and Latin America (Cross-listed as COML B340)
G.McKim-Smith
The course considers costume and fashion from the perspective of visual and cultural studies, combined with a historical acknowledgment of consumerism. Representations of costume in Europe from the fifteenth century forward to the present day are central, and although some non-Western images from Latin America or Asia will occasionally be shown, a grasp of the history of Western costume is important because that discourse has defined the topic so far. How do clothes create and mediate identity, sexuality and gender roles, ideology, social rank and subjectivity? What is the impact of consumer culture for the last five or six centuries?

HART B348 Advanced Topics in German Cultural Studies: Vienna 1900 (Cross-listed as GERM B321, CITY B319 and COML B321)
C.Hertel, M.Meyer

HART B349 Theories of Authorship in the Cinema (Cross-listed as ENGL B349)
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. Not offered in 2010-11.

HART B350 Topics in Modern Art: Portraiture and Self-Portraiture
S.Levin
Topics vary. The topic for Fall 2010 is portraiture and self-portraiture, from sixteenth-century courts to the Internet today.

HART B355 Topics in the History of London (Cross-listed as CITY B355 or HIST B355)
D.Cast
Selected topics of social, literary, and architectural concern in the history of London, emphasizing London since the 18th century. Not offered in 2010-11.

HART B358 Topics in Classical Art and Archaeology (Cross-listed as ARCH B359 and CSTS B359)
A.Donohue

HART B362 The African Art Collection
D.Toure
This seminar will introduce students to the African art holdings that are part of the Art and Archaeology Collections.

HART B367 Asian American Film, Video and New Media (Cross-listed as ENGL B367)
H.Nguyen
Not offered in 2010-11.

HART B377 Topics in Modern Architecture: War, Catastrophes, and Reconstruction (Cross-listed as CITY B377)
C.Hein, I.Steffensen
Not offered in 2010-11.

HART B380 Topics in Contemporary Art (Cross-listed as GERM B380 and HEBR B380)
L.Saltzman

HART B397 Junior Seminar
C.Hertel, S.Levin
Designed to introduce majors to the canonical texts in the field of art history and to formalize their understanding of art history as a discipline. Required of and limited to History of Art majors.

HART B399 Senior Conference
D.Cast, L.Saltzman
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.

HART B403 Supervised Work
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 adviser is required.

HART B425 Praxis III
Staff
Students are encouraged to develop internship projects in the college’s collections and other art institutions in the region.
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.

### INDEPENDENT COLLEGE PROGRAMS

#### FACULTY

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<td><strong>Professor Linda G. Gerstein</strong></td>
<td>Associate Professor M. Kaye Edwards</td>
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<td><strong>Visiting Professor Neal Grabel</strong></td>
<td>Visiting Associate Professor Carol Solomon</td>
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#### COURSES

**101 Introduction to African and Africana Studies**

*HU (Cross-listed in African and Africana Studies)*

T. Hucks/K. Ngalamulume

An interdisciplinary introduction to Africana Studies, emphasizing change and response among African peoples in Africa and outside.

**104 Calculus: Concepts and History**

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

J. Tecosky-Feldman

Prerequisite: Not ordinarily open to students who have studied calculus previously. Offered occasionally.

**111 Introduction to Peace and Conflict Studies**

*SO (Cross-listed in Peace and Conflict Studies-Bi Co Conc)*

Staff

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 peacebuilding efforts.

**217 Humananimality: (Dis)Figurations of the Animal in the Shaping of Human Institutions**

*HU (Cross-listed in English)*

K. Benston

**221 Epidemiology and Global Health**

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. **Prerequisite:** College-level biology course; a course in statistics is recommended. **Typically offered in alternate years.**

**231 Paris in the 19th Century: Visual Culture and the Psychopathology of the Modern City**

*HU*

C. Solomon

Explores effects of modernization and the transformation of the city on Parisian society in the 19th century through the lens of art and visual culture. Topics: Hausmannization, urban types, psychological responses to modernity, prostitution, flaneur, caricature, impact of photography.

**235 The Post-Impressionists: Cezanne, Seurat, Van Gogh, and Gauguin**

*HU*

C. Solomon

Using various art-historical approaches, this course focuses on the major Post-Impressionist artists: Seurat, Cezanne, Van Gogh, and Gauguin. Course includes visit to the Barnes Foundation, one of the world’s largest collections of Impressionist and Post-Impressionist paintings.

**236 Art, Politics, and Society in Nineteenth-Century Europe**

*HU*

C. Solomon

This course explores European art in the context of political, social, and cultural developments in the period from the late eighteenth century to the middle decades of the nineteenth century. Neoclassicism, Romanticism, and Realism are the artistic movements of this period. Artists discussed will include David, Goya, Friedrich, Turner, Constable, and Gericault among others. Course will include at least one visit to the Phila. Museum of Art.

**237 Art and Cultural Identity**

*HU*

C. Solomon

Interdisciplinary examination of the issues, with texts by Appiah, Bhabha, Fanon, Hall, Said and others. Concepts include exile, diaspora, alienation, transnationalism, hybridity, cosmopolitanism, and global identity. Topics include cultural imperialism, orientalism, and cultural property debates. Strategies employed by artists from the mid-19th century to the present who negotiate the terrain of cultural identity. Visits to related exhibition “Mapping Identity” on view at Cantor Fitzgerald Gallery. Discussion with participating artists.
241 The Economics and Finances of Higher Education SO
R. Wynn
This course explores the economics of higher education as part of the non-profit sector of the U.S. economy, focusing specifically on the business and financial structure of Haverford College as the prototype of an independent, not-for-profit organization. The course begins with an overview of the non-profit sector and the higher education industry, and includes such topics as long range and strategic planning, budgeting, endowment management, socially responsible investing, assessing financial health, as well as other topics. Typically offered in alternate years.

244 Quaker Social Witness SO (Cross-listed in Gender and Sexuality Studies)
K. Edwards
Seminar course examining the commitment to social justice within the Religious Society of Friends (Quakers), exploring its religious foundation and highlighting historical and current manifestations. Readings on Quaker testimonies and on the roles of Quakers in abolition, suffrage, and peace will be complemented by guest speakers from Quaker social justice organizations.

252 Women, Medicine and Biology SO (Cross-listed in Biology and Gender and Sexuality Studies)
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. Prerequisite: Preference given to Gender and Sexuality Studies Concentrators. Offered occasionally.

277 Aristotle and Arthur Andersen: Ethical Behavior in the Professional and Corporate World SO
N. Grabell
Through an exploration of ethical theory and case studies, we will examine topics such as: the tension between compliance with the law and the profit motive, professional responsibility and detachment, the proper treatment of clients/patients, short-term vs. long-term benefits, the relevance of social benefits claims to business practice, doing "well" by doing "good," and the dilemma of ethical relativism in the world of international business. Prerequisite: Sophomore standing or higher.

278 Documentary Film and Approaches to Truth
V. Funari
This course explores the challenge of truth-telling in documentary film and video. What practices have documentarians engaged in to acknowledge, deny, undermine, complicate, and perhaps solve the problem of truth? Readings, film viewings with discussions, and exercises in video production and editing, leading to the creation of final videos by students. Prerequisite: Sophomore standing or higher.

281 Violence and Public Health SO (Cross-listed in Peace and Conflict Studies-Bi Co Conc and Gender and Sexuality Studies)
K. Edwards
An interdisciplinary seminar course analyzing the advantages and limitations of a public health perspective on violence. We will examine how everyday violence, direct political violence, and structural violence effect public health, as well as evidence that violence is preventable and amenable to public health strategies. Prerequisite: One of the following: ANTH 111, ICPR 221, or ICPR 222. Does not count toward the major.

290 Interdisciplinary Perspectives on Gender HU (Cross-listed in Gender and Sexuality Studies)
G. Stadler, S. Ullman

301 Human Rights: Development and International Activism SO (Cross-listed in Peace and Conflict Studies-Bi Co Conc and Peace, Justice, Human Rights - New Conc)
B. Uygun

302 Bodies of Injustice: Health, Illness and Healing in Contexts of Inequality SO
K. Edwards
Prerequisite: Lottery priority to students returning from CPGC-sponsored internships.

480 Independent Study SO
K. Edwards

494 Senior Conference in Science and Society NA (Cross-listed in Gender and Sexuality Studies)
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. Offered occasionally.
Students may complete a major or minor in Italian. Based on an interdisciplinary approach that views culture as a global phenomenon, the aims of the major in Italian are to acquire a knowledge of Italian language and literature and an understanding of Italian culture, including cinema. The Department of Italian cooperates with the Departments of French and Spanish in the Romance Languages major and with the other foreign languages in the Tri-co for a major in Comparative Literature. The Italian Department also cooperates with the Center for International Studies (CIS).

College Foreign Language Requirement

The College’s foreign language requirement may be satisfied by completing ITAL 105 (intensive) with a grade of 2.0, or by completing ITAL 101 and 102 (non-intensive) with an average grade of at least 2.0 or with a grade of 2.0 or better in ITAL 102.

Students may obtain permission from the instructor to transfer from a regular language course to an intensive language course.

ITALIAN FACULTY

Haverford College
Instructor Ute Striker

Bryn Mawr College
Visiting Associate Professor Dennis J. McAuliffe
Language Assistant Gabriella Troncelliti
Associate Professor and Chair of Italian Roberta Ricci, Director of Summer in Pisa Program
Professor Emeritus Nicholas Patruno
Professor Nancy J. Vickers
Lecturer Giuliana Perco

ITALIAN MAJOR REQUIREMENTS

Major requirements in Italian are 10 courses: ITAL 101, 102 and eight additional units, at least three of which are to be chosen from the offerings on the 300 level, and no more than one from an allied field. All students must take a course on Dante (301), one on the Italian Renaissance (304), two on modern Italian literature, and one on literary theory/literary criticism. 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 ITAL 101 and 102 or from ITAL 105.

ITALIAN MINOR REQUIREMENTS

Requirements for the minor in Italian are ITAL 101, 102 and four additional units including two at the 200 level and two at the 300 level. With departmental approval, students who begin their work in Italian at the 200 level will be exempted from ITAL 101 and 102 or from ITAL 105, For 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 summer program at the University of Pisa offers courses for major credit in Italian (both in Intensive Elementary/Intensive Intermediate and in Italian Literature/Culture/Cinema), or students may study in other approved summer programs in Italy or in the United States. Courses for major credit in Italian may also be taken at the University of Pennsylvania (Department of Italian).

ITALIAN REQUIREMENTS FOR HONORS

The opportunity to conduct a project of supervised sustained research (ITAL 403 Independent Study) is open to all majors with a 3.7 GPA. Students who want to graduate with honors are asked to write a senior thesis and to defend it with members of the Italian Department and/or a third outside reader at the end of the senior semester. Students wishing to do so will present a topic that a faculty member is willing to supervise, a written proposal of the topic chosen, and, if approved by the department, will spend one semester in the senior year working on the thesis.

ITALIAN COURSES

ITAL B001, H001, B002, H002 Elementary Italian I/II: Non-intensive

U. Striker, Staff

The course is for students with no previous knowledge of Italian. It aims at giving the student a complete foundation in the Italian language, with particular attention to oral and written communication. The course will be conducted in Italian and will involve the study of all the basic structures of the language—phonological,
grammatical, syntactical— with practice in conversation, reading, composition and translation. The readings are chosen from a range that includes journalistic prose, recipe books, the language of publicity, literary prose and poetry, and use of the language is encouraged through songs, games and creative composition.

ITAL B010, B011 Elementary Italian I/II: Intensive
G. Pero
This intensive communicative course is an accelerated introduction to speaking, understanding, reading, and writing. Aspects of Italian culture and contemporary life are introduced through the use of video, songs, film, etc. The course is taught completely in Italian, and authentic contemporary materials are used to immerse the student into an integrative linguistic environment.

ITAL B101, B102 Intermediate Italian
G. Pero, Staff
This course provides students with a broader basis for learning to communicate effectively and accurately in Italian. While the principal aspect of the course is to further develop language abilities, the course also imparts a foundation for the understanding of modern and contemporary Italy. Students will gain an appreciation for Italian culture and be able to communicate orally and in writing in a wide variety of topics. We will read a novel, as well as newspaper and magazine articles to analyze aspects on modern and contemporary Italy. We will also view and discuss Italian films and discuss Internet materials.

ITAL B105 Intensive Intermediate Italian
G. Pero
This course builds on the previous two courses of intermediate Italian (001-002) in the development of speaking, understanding, reading, and writing, and completes the study of Italian grammar. In addition to enriching students’ knowledge of both written and spoken Italian, this course will provide a window onto aspects of contemporary Italian culture and society. In addition we will study aspects of the evolution of Italian from a literary language through SMS messaging; festivals and folklore; political satire; popular songs as windows onto their times; and detective movies. The students will practice writing and will revise compositions after initial draft versions.

ITAL B200 Pathways to Proficiency: Culture, Language, Writing
G. Pero
The purpose of this course is to increase fluency in Italian and to facilitate the transition from language to literature courses. The course, taught in Italian, integrates language and cultural studies. Students are exposed not only to different topics, but also to different writing genres: from literary narrative texts, to academic texts, to argumentative or informative texts taken from Italian newspapers and periodicals. Students will also produce different types of texts: from descriptions, to letters, to film or book reviews, to argumentative texts, in order to build the skills necessary to write academic papers.

ITAL B201 Prose and Poetry of Contemporary Italy
Staff
A study of the artistic and cultural developments of pre-Fascist, Fascist, and post-Fascist Italy seen through the works of poets such as Montale, Quasimodo, Ungaretti, and through the narratives of Carlo Emilio Gadda, Ginzburg, Italo Svevo, Primo Levi, Moravia, Pavese, Pirandello, Silone, Vittorini, Calvino, and others. We will examine issues of gender, identity, and politics, colonial and post-colonial, modernity and post-modernity. Not offered in 2010-11.

ITAL B203 Italian Theater (in Italian)
D. McAuliffe
The course consists of a close reading in Italian of representative theatrical texts from the contemporary stage to the origins of Italian theater in the 16th century, including pieces by Dario Fo, Luigi Pirandello, Carlo Goldoni, the Commedia dell’arte, and Niccolo Machiavelli. Attention will be paid to the development of language skills through reading out loud, performance, and discussion of both form and content, enhanced by the use of recordings, videos and YouTube. Attention will also be paid to the development of critical-analytical writing skills through the writing of short reviews and the research and writing of a term paper. Not offered in 2010-11.

ITAL B204 Manzoni
D. McAuliffe
Why is I promessi sposi considered by many the best historical novel in Italian and one of the best in any language? What contribution did Manzoni’s novel make to the development of the Italian language? To the Italian unification movement? To the understanding of Italian Catholicism? To the Italian romantic movement? Seminar discussions will be based on a close reading of the novel, as well as short selections of Manzoni’s other works. A variety of critical methods of interpretation will be explored both in class and in research projects leading to a critical analytical research paper. Conducted in Italian. Not offered in 2010-11.

ITAL B207 Dante in Translation
D. McAuliffe
A reading of the Vita Nuova and Divina Commedia in order to discover the subtle nuances of meaning in the text and to introduce students to Dante’s tripartite vision of the afterlife. Dante’s masterpiece lends itself to study from various perspectives: theological, philosophical, political, allegorical, historical, cultural, and literary. Personal and civic responsibilities, love,
genre, governmental accountability, church-state relations, economics and social justice, the tenuous balance between freedom of expression and censorship—these are some of the themes that will frame the discussions.

ITAL B208 Petrarca and Boccaccio in Translation

D.McAuliffe

The course will focus on a close analysis of Petrarch's *Canzoniere* and Boccaccio's *Decameron*, with attention given also to their minor works and the historical/literary context connected with these texts. Attention will also be given to Florentine literature, art, thought, and history from the death of Dante to the age of Lorenzo de' Medici. Texts and topics available for study include the Trecento vernacular works of Petrarch and Boccaccio: Florentine humanism from Salutati to Alberti; and the literary, artistic, and intellectual culture of the Medici court in the 1470s and 80s (Ficino, Poliziano, Lorenzo de' Medici, Botticelli).

ITAL B209 Humanism and the Renaissance in Translation

R.Ricci

As well as a detailed analysis of some of the most fascinating texts of the period, this course offers the opportunity to explore broader questions, such as the impact of the massive expansion of the printing industry on literary culture, the nature of the cultural impact of the Counter Reformation on literature, the construction of gender and the place of women in cinquecento literary culture, the questione della lingua and its impact on literary culture, the chivalric and epic genre, and the neo-Platonic debate on beauty. Prerequisite: Two years of Italian or the equivalent. Not offered in 2010-11.

ITAL B211 Primo Levi, the Holocaust, and Its Aftermath (Cross-listed as COML B211 and HEBR B211)

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 women writers whose works are also connected with the Holocaust.

ITAL B212 Italia D'Oggi

Staff

This course, taught in Italian, will focus primarily on the works of the so-called "migrant writers" who, having adopted the Italian language, have become a significant part of the new voice of Italy. In addition to the aesthetic appreciation of these works, this course will also take into consideration the social, cultural, and political factors surrounding contemporary Italy and contemporary Italian. We will also interrogate the relationship between this multifarious discourse on other cultures and the question of the Italian national identity.

ITAL B225 Italian Cinema and Literary Adaptation

R.Ricci

A study 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 by well-known directors, including Belloccio, Bertolucci, Ross, the Taviani brothers, and L. Visconti. Not offered in 2010-11.

ITAL B235 The Italian Women's Movement (in Italian)

D.McAuliffe

An examination of the medieval and early modern roots of the women's movement in Italy. Literature produced by women in Italy from 1200 to 1600 has at its center universal themes of the position of women in society and the struggle for equality and justice for women. Readings will include works by mystic women writers (Chiara d'Assisi, Caterina da Siena, Angela da Foligno, Caterina da Genova) and women poets (Vittoria Colonna, Veronica Gambara, Veronica Franco, Moderata Fonte).

ITAL B255 Uomini d'onore in Sicilia

R.Ricci

The course will explore historical and fictional presentations which contribute to the myth of the Italian and Italian-American mafia in Italian literature and cinema, starting from the "classical" example of Sicily. The course will introduce Italian studies and Italian narrative fiction from an interdisciplinary perspective and will present the historical development of the Sicilian Mafia from the mid-1800s through the 1980s with the examination of official documents, such as court files, documentaries and newspaper articles. Prerequisite: ITAL B102 or B105 or permission of the instructor. Not offered in 2010-11.

ITAL B301 Dante

D.McAuliffe

Prerequisite: Two years of Italian and at least one 200-level course. Taught in Italian. See course description for ITAL B207.

ITAL B303 Petrarca and Boccaccio

D.McAuliffe

The focus of the course is on *The Decameron*, one of the most entertaining and imitated prose works ever written. *The Decameron* will be read in its entirety in Italian. Special class presentations will treat questions of Boccaccio's belief system as manifested in *The
Decameron, his sources and his imitators, and the socio-cultural milieu in which he wrote. Attention will also be paid to Petrarca's Pastorela. Topics include how each author treated the courtly love tradition and how each represented women in the context of 14th-century Italy. Prerequisite: Two years of Italian and at least one 200 level course. Taught in Italian. Not offered in 2010-11.

ITAL B304 Il Rinascimento in Italia: letteratura e oltre
D. McAuliffe
Prerequisite: Two years of Italian and at least one 200-level course. Taught in Italian. See course description for ITAL 209.

ITAL B310 Italian Popular Fiction (Cross-listed with COML B310)
G. Perco
This course explores the Italian "giallo" (detective fiction), today one of the most successful literary genres among Italian readers and authors alike. Through a comparative perspective, the course will analyze not only the inter-relationship between this popular genre and "high literature," but also the role of detective fiction as a mirror of social anxieties. Thus, it will for instance discuss why unsolved mysteries have a strong appeal on contemporary readers, why easily predictable (and often repetitive) plots keep attracting a wide and varied readership, or what kind of escapist fiction is popular in particular historical moment. In Spring 2011, ITAL B310 will be offered in English. Italian majors taking this course for Italian credit will be required to meet for an additional hour with the instructor and to do the readings and writing in Italian. Prerequisite: At least one literature course at the 200 level.

ITAL B398 Senior Seminar
Staff

ITAL B399 Senior Conference
Staff
Under the direction of a professor, each student prepares a senior thesis on an author or a theme that the student has chosen. This course is open only to senior Italian majors.

ITAL B403 Supervised Work
Staff
Offered with approval of the Department.
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.

**LATIN AMERICAN AND IBERIAN STUDIES FACULTY**  
Associate Professor Roberto Castillo Sandoval, Coordinator

**LATIN AMERICAN AND IBERIAN STUDIES 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/Independent College Programs 240 at Haverford, or General Studies 145 at Bryn Mawr. One of these two courses will be taught every year, alternating between Haverford and 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.


**LATIN AMERICAN AND IBERIAN STUDIES COURSES**
Please note that this list is not exhaustive; see c) above.

**INDEPENDENT PROGRAMS**  
240b Latin American and Iberian Cultures and Civilizations

**HISTORY**  
114a Origins of the Global South  
209a Colonial Latin America  
209b Modern Latin America  
281a Mexican Cultural History: Ancient and Colonial  
282b Mexican Cultural History: Modern and Postmodern  
317b Topics in Latin American History: Visions of Mexico

**POLITICAL SCIENCE**  
131b Comparative Government and Politics  
229b Latino Politics in the U.S  
233b Perspectives on Civil War and Revolution: Southern Europe and Central America  
237a Latin American Politics  
239a The United States and Latin America  
339a Research Seminar: Transitional Justice

**SPANISH**  
All courses at the 200 and 300 levels in Spanish at Haverford, Bryn Mawr, and Swarthmore count toward the concentration.
Students may major in Linguistics through Swarthmore College and minor in Linguistics through Haverford College.

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.

**LINGUISTICS FACULTY COORDINATORS**

Associate Professor of Chinese and Linguistics and C.V. Starr Professorship in Asian Studies Shizhe Huang, Bi-College Coordinator

Visiting Assistant Professor of Linguistics Jason Kandybowicz, Tri-College Coordinator

**AFFILIATED FACULTY**

At Haverford College:

Professor of Psychology Marilyn Boltz
Professor of Philosophy Ashok Gangadean
T. Wistar Brown Professor of Philosophy Danielle Macbeth
Associate Professor of Chinese and Linguistics and C.V. Starr Professorship in Asian Studies Shizhe Huang
Assistant Professor of Spanish Ana López-Sánchez

At Bryn Mawr College:

Professor of Computer Science Deepak Kumar
Assistant Professor of Anthropology Amanda Weidman

At Swarthmore College:

Professor of Linguistics Theodore Fernald
Professor of Linguistics Donna Jo Napoli (on leave spring 2011)
Associate Professor of Linguistics K. David Harrison, Chair
Assistant Professor Jason Kandybowicz (Tri-College)

**LINGUISTICS 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.

**LINGUISTICS MINOR REQUIREMENTS**

Students may minor in linguistics through Haverford by completing six credits in the following three areas of study:

A. Mandatory Foundation Courses (three credits):
   - LING H113 or LING S050 Introduction to Syntax
   - LING H114 or LING S040 Introduction to Semantics
   - LING H115 Phonetics and Phonology

B. Synthesis Courses (choose one):
   - LING H282 Structure of Chinese
   - LING H382 Topics in Chinese Syntax and Semantics
   - LING S060 Structure of Navajo
   - LING S062 Structure of American Sign Language
   - LING S064 Structure of Tuvan

C. Elective Courses (choose two):
   - LING/PSYC H238 The Psychology of Language
   - LING B101 Introduction to Linguistics
   - LING H242 Chinese Language in Culture and Society
   - LING/PHIL H253 Analytic Philosophy of Language
   - LING/PHIL H260 Historical Introduction to Logic
   - LING/ANTH B281 Language in the Social Context
   - LING H295 Seminar in Syntax: The Minimalist Program
   - LING/CMSC B325 Computational Linguistics
   - LING/SPAN H365 The Politics of Language in the Spanish-Speaking World

All linguistics courses offered at Swarthmore College will be accepted for credit for various categories.

**LINGUISTICS COURSES**

Haverford College currently offers the following courses in Linguistics:
LING H113 Introduction to Syntax  
S. Huang
This course is designed to provide an overview of the study of sentence structures in human language, emphasizing insights from linguists over the past 40 years. The class will develop increasingly complex theories starting with basic assumptions and seeing where they lead. Students will gain a clearer understanding of grammar, develop and refine skills of analysis, writing, and argumentation. We will focus on English, occasionally using other languages to look at ways human languages are similar and how they differ.

LING H114 Introduction to Semantics  
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.

LING H115 Phonetics and Phonology  
J. Kandybowicz
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.

PHIL 251 Analytic Philosophy of Language  
Staff
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 course or equiv or consent.

LING H282 Structure of Chinese  
S. Huang
This course is designed to provide an overview of the Chinese language and its structures in terms of sound, form, and meaning. The goal is to help students look at Chinese from both a historical and a theoretical perspective. Students from a linguistics background will have an opportunity to enrich and broaden their understanding of linguistic theories and methodologies and to develop skills in analyzing a non Indo-European language systematically, while students who have completed at least Second-Year Chinese will be exposed to systematic analyses of the language to learn the general patterns. Prerequisites: At least TWO of the following: Introduction to Syntax, Introduction to Semantics, Introduction to Linguistics, Second-Year Chinese or above. Of consent of the instructor. Cross-listed in East Asian Studies.

LING/SPAN H365 The Politics of Language in the Spanish-Speaking World  
A. López-Sánchez
The course will explore the relationship between (national) identity and language, and the specific outcomes of (language) policies and educational practices in societies where Spanish is spoken, generally alongside other mother tongues, often as the dominant language, but also in a minority situation. Prerequisite: A 200 level or consent of instructor. Enrollment limited to 18 students. Not offered in 2010-2011.

LING H382 Topics in Chinese Syntax and Semantics  
S. Huang
In this course we will concentrate on one or two topics exemplifying core issues in the study of Chinese syntax and semantics. Topics vary but may include modification structure, quantification, or event semantics. The aim is to examine a rich array of data as analyzed by specialists and study the inner workings of the language and their theoretical implications. Prerequisites: Introduction to Syntax, and Introduction to Semantics. Recommended: Structure of Chinese (but not required). Sophomore standing or above. No knowledge of Chinese is required. Cross-listed in East Asian Studies. Not offered in 2010-2011.

Bryn Mawr College courses in Linguistics:
LING B239 Introduction to Linguistics  
LING B281 Language in Social Context  
CMSC B325 Computational Linguistics  
Not offered in 2010-11.

Swarthmore College currently offers the following courses in Linguistics:

Fall 2010
LING S001 Introduction to Language and Linguistics  
LING S004 FYS: American Indian Languages  
LING S007 Hebrew for Text Study I  
LING S015 Introduction to the Lenape Language  
LING S020 Natural Language Processing  
LING S020 Natural Language Processing Lab  
LING S033 Introduction to Classical Chinese  
LING S040 Semantics  
LING S045 Phonetics and Phonology  
LING S050 Syntax  
LING S052 Historical/Comparative Linguistics  
LING S053 Language Minority Education

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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 made important contributions to each other’s disciplines. 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 work he did in game theory 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 appreciate the ways in which they are related.

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 all economics majors), and two economics electives that involve significant mathematics.

Economics students with a variety of backgrounds and career interests can 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 graduate programs in public policy. Many economics-related jobs in government, business and finance require strong quantitative skills, and students interested in seeking such positions are well-served by the concentration.

The Area of Concentration in Mathematical Economics can also benefit 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.

REPRESENTATIVES AND COORDINATORS
Assistant Professor Indradeep Ghosh, Economics Department Representative and Concentration Coordinator
Professor Lynne Butler, Mathematics Department Representative

MATHEMATICAL ECONOMICS CONCENTRATION REQUIREMENTS
I. For students majoring in mathematics, the requirements of the concentration consist of six courses:

(A) Three required economics courses:
(i) ECON 101 (Introduction to Microeconomics)
(ii) ECON 102 (Introduction to Macroeconomics)
(iii) ECON 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 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.)
ADDITIONAL REMARKS FOR MATHEMATICAL ECONOMICS

Students should consult with the concentration coordinator about the selection of the electives taken for the concentration (parts (B) and (C) of the requirements above).

Some examples of courses that may fulfill part (C) of the requirements for mathematics majors are the following: MATH 204 (Differential Equations), MATH 210 (Linear Optimization and Game Theory; cross-listed as ECON 210), MATH 218 (Probability), MATH 222 (Scientific Computing), and MATH 396 (Mathematical Statistics).

Some examples of courses that may fulfill part (C) of the requirements for economics majors are the following: ECON 210 (Linear Optimization and Game Theory; cross-listed as MATH 210), ECON 237 (Game Theory in Economics), ECON 249 (Political Economy and Game Theory), ECON 311 (Theory of Non-Cooperative Games), ECON 312 (General Equilibrium Theory) and ECON 365 (Computational Methods in Macroeconomics and Finance).

The Area of Concentration in Mathematical Economics differs from the minors in mathematics and economics is a specific way. The concentration 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 interdisciplinary 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 may not enroll in the Area of Concentration in Mathematical Economics.
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 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, 203, 210, 215, and 286 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 105, 206, through applied math electives (like Math 204, 218, or 222), 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 or in scientific computing (the former being more theoretical, and the latter more applied). 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 concentrations in computer science, scientific computing, 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 statistics (Math 203 or 286) and mathematical modeling (Math 204, 210, or 222). Minors preparing for graduate work in physical chemistry or theoretical physics should take Complex Analysis (Math 392) 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).

MATHEMATICS FACULTY
Professor Emeritus William C. Davidon
Professor Lynne Butler
J. McLain King Professor of Mathematics Curtis Greene
Associate Professor Yung-sheng Tai
William H. and Johanna A. Harris Associate Professor of Computational Science Robert Manning
Associate Professor Weiwen Miao
Assistant Professor Joshua Sabloff
Senior Lecturer Jeffrey Tecosky-Feldman
Visiting Assistant Professor David Lippel
Visiting Assistant Professor Clay Shonkwiler

MATHEMATICS MAJOR REQUIREMENTS
(1) Mathematics 215, and either Mathematics 121 or Mathematics 216.
(2) Mathematics 317 and 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 this requirement.
(4) The senior seminar. Fall and 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.

MATHEMATICS 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.
**Mathematics 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.

**Mathematics Core Courses**

**113 Calculus I NA/QU**

C. Shonkwiler

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. Discussion 3 hours MWF 3-4 is mandatory. Prerequisite: A solid background in precalculus. Does not count toward the major. Typically offered every Spring.

**114 Calculus II NA/QU**

Staff

A continuation of Math 113 that includes an introduction to the theory and applications of the definite and indefinite integral, as well as an introduction to infinite series and Taylor approximations. May include other topics, e.g., differential equations, parametric curves, polar coordinates, or complex numbers. Prerequisite: Math 113 or advanced placement. Does not count toward the major. Typically offered every Spring.

**115 Enriched Calculus II NA/QU**

C. Greene

A "bridge" course for students who have completed most of a standard college first-year calculus class. Includes a careful treatment of the convergence of sequences and infinite series, the theory of Taylor series, and substantial treatment of an additional topic, often introducing an area of math distinct from calculus, e.g., probability or discrete math. Prerequisite: Advanced placement (equivalent to mastery of AB Calculus). Does not count toward the major. Typically offered every Spring.

**121 Calculus III NA/QU**

Y. Tai

An introduction to functions of several variables, vector geometry, partial derivatives, maxima & minima, Taylor's Theorem, multiple integrals, line integrals, and Green's and Stokes' Theorems. Prerequisite: MATH 114 or 115 or equivalent placement. Typically offered every Spring.

**215 Linear Algebra NA/QU**

J. Tecosky-Feldman

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 or 115 or 121 or equivalent placement. Typically offered every Spring.

**216 Advanced Calculus NA**

J. Sahaff

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. Typically offered every Spring.

**317 Analysis I NA**

C. Shonkwiler

A rigorous development of topics in 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. Typically offered every Fall.

**318 Analysis II NA**

C. Shonkwiler

A continuation of MATH 317, focusing particularly on sequences and series of functions with applications (e.g., Fourier series, existence and uniqueness of solutions to differential equations). Other advanced topics (such as measure theory, the Lebesgue integral, calculus of variations, Fourier transforms, approximation theorems or fixed point theorems) are included according to instructor and student interest. Prerequisite: MATH 317. Typically offered every Spring.

**333 Algebra I NA**

L. Butler

A rigorous treatment of fundamental algebraic structures. Topics include: axioms for integers, modular arithmetic, polynomials, rings, fields, and introduction to groups. Prerequisites: Math 215 and either Math 121 or 216, or instructor consent. Corequisite of Math 299 for students who have not had Math 216 or math at the 300 level. Typically offered every Fall.

**334 Algebra II NA**

L. Butler

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 or instructor consent. Typically offered every Spring.
399 Senior Seminar NA
D. Lippel, R. Manning, W. Miao, C. Greene, L. Butler, C. Shonkwiler
Seminar for students writing senior papers, dealing with the oral and written exposition of advanced material. Prerequisite: Open to senior mathematics majors.

MATHEMATICS ELECTIVE COURSES

103 Introduction to Probability and Statistics NA/QU
R. Manning
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, confidence intervals and hypothesis tests. Typically offered in alternate years.

104 Calculus: Concepts and History NA/QU (Cross-listed in Independent College 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. Offered occasionally.

105 Applied Modeling with Calculus NA/QU
J. Tecosky-Feldman
An introduction to aspects of calculus useful in applied work in the natural and social sciences, with a strong emphasis on developing mathematical modeling skills. Topics include differential calculus of functions of one and several variables, differential equations, applications to biology, economics, and physics. Does not count toward the major.

123 Community Math Teaching Project NA/QU (Cross-listed in Education)
J. Salaff
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. Offered occasionally.

202 Introduction to Number Theory NA
Y. Taki
An introduction to the classical theory of numbers. Topics include: primes and divisibility, congruences, the Chinese Remainder Theorem, quadratic reciprocity, sums of squares, Diophantine equations, continued fractions, approximation by rationals, Pell's equation. Time permitting, we will discuss arithmetic functions related to the distribution of prime numbers. Emphasis will be placed on learning to generalize from examples to precise conjectures. Prerequisite: MATH 115 or instructor consent. Offered occasionally.

203 Statistical Methods and Their Applications NA/QU
L. Butler
An introduction to statistical methods used to analyze data in the natural and social sciences. It covers descriptive statistics, the binomial and normal distributions, expected value and variance, confidence intervals and hypothesis testing, comparison of two samples, regression, and analysis of variance. A required computer lab, using R, is taught alongside this course. Prerequisite: MATH 114 or placement at the level of MATH 115 or higher. Typically offered every Fall.

204 Differential Equations NA/QU
J. Tecosky-Feldman
Ordinary differential equations: the general theory of first-order equations, linear equations of higher order, qualitative analysis of nonlinear systems, and computational methods. Other topics, such as series solutions or an introduction to partial differential equations and Fourier series, may be 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. Offered occasionally.

205 Topics in Geometry NA/QU
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 115 or instructor consent. Typically offered in alternate years.

210 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 and hidden Markov models. 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 215 or MATH 115 and concurrent registration in MATH 215. **Typically offered in alternate years.**

218 Probability NA/QU  
W.Miao  
An introduction to probability theory. Topics include: sample spaces, combinatorics, conditional probability, independence, discrete and continuous random variables, functions of random variables, expected value and variance, the moment generating function, and some basic limit theorems. **Prerequisite:** MATH 116 or 121, or consent. **Typically offered in alternate years.**

222 Scientific Computing: Continuous Systems  
NA/QU  
R.Manning  
A survey of major algorithms in modern scientific computing, with a focus on continuous problems. Topics include root-finding, optimization, Monte Carlo methods, and discretization of differential equations, with applications in the natural and social sciences. **Prerequisite:** MATH 114 or 115 or equivalent placement. **Typically offered in alternate years.**

235 Information and Coding Theory NA (Cross-listed in Computer Science)  
S.Lindell  
**Prerequisite:** Math 215 (may be taken concurrently). **Offered occasionally.**

286 Applied Multivariate Statistical Analysis  
NA/QU  
W.Miao  
An introduction to multivariate statistical analysis. The course includes methods for choosing, fitting, and evaluating multiple regression models and analysis of variance models. A required computer lab, using R, is taught alongside this course. **Prerequisite:** One of the following: MATH 203, PSYC 200, or ECON 203 or 204 or consent of instructor. MATH 215 is recommended. **Typically offered in alternate years.**

299 Bridge to Advanced Mathematics NA  
D.Lippel  
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. This is a quarter-long course; it is taught in the first half of the fall semester. **Prerequisite:** MATH 121 and MATH 215. Concurrent registration in MATH 317 or MATH 333. Does not count toward the major.

335 Topology I NA  
J.Sabloff  
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. **Typically offered yearly in alternation with Bryn Mawr.**

336 Topology II NA  
C.Shonkwiler  
Algebraic topology and its applications to low-dimensional topology. The course investigates surfaces, knots, and 3-manifolds using the fundamental group, basic simplicial homology, and the mapping class group. **Prerequisite:** Math 335. **Typically offered yearly in alternation with Bryn Mawr.**

340 Analysis of Algorithms NA (Cross-listed in Computer Science)  
S.Lindell  
**Prerequisite:** CMSC 206. **Typically offered in alternate years.**

345 Theory of Computation NA (Cross-listed in Computer Science)  
S.Lindell  
**Prerequisite:** CMSC/MATH 231. **Typically offered in alternate years.**

390 Algebraic Number Theory NA  
Y.Tai  
**Prerequisite:** MATH 333 or consent. **Offered occasionally.**

391 Advanced Topics in Geometry and Topology NA  
Staff  
**Prerequisite:** MATH 317. **Offered occasionally.**

392 Complex Analysis NA  
Staff  
**Prerequisite:** MATH 317 or consent. **Typically offered yearly in alternation with Bryn Mawr.**

394 Advanced Topics in Theoretical Computer Science & Discrete Mathematics NA (Cross-listed in Computer Science)  
D.Lippel  
**Prerequisite:** MATH 317 or 333. **Typically offered in alternate years.**
395 Advanced Topics in Combinatorics NA
Staff
Prerequisite: MATH 333 or consent. Offered occasionally.

396 Advanced Topics in Probability and Statistics NA
W. Miao
Prerequisite: MATH 218 or consent. Typically offered in alternate years.

397 Partial Differential Equations NA
R. Manning
Prerequisite: MATH 317 or instructor consent. Offered occasionally.

460 Teaching Assistantship in Mathematics NA
L. Butler
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. Does not count toward the major.

480 Independent Study NA
W. Miao
Prerequisite: Instructor consent.

MATHEMATICS COURSES AT BRYN MAWR COLLEGE
005 Math Workshop
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
231 Discrete Mathematics
290 Elementary Number Theory
295 Select Topics in Mathematics
301, 302 Introduction to Real Analysis
303, 304 Abstract Algebra
311 Partial Differential Equations
312 Topology I
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. They can also receive credit for Private Study in voice or their chosen instrument.

MUSIC FACULTY
Ruth Marshall Magill Professor Curt Cacioppo
John C. Whitehead Professor Richard Freedman, Chairperson
Associate Professor Ingrid Arauco
Associate Professor Heidi Jacob, director of the Haverford-Bryn Mawr Orchestral Program
Associate Professor Thomas Lloyd, director of the Haverford-Bryn Mawr Choral Program (on leave 2010-2011)
Visiting Instructor Christine Cacioppo
Visiting Instructor of Music and Interim Director of the Choral and Vocal Studies Program Ng Tian Hui

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 Daedalus Quartet, pianist Charles Abramovic, violinist Arnold Steinhardt, and the Network for New Music. The William Hearts-Reese Music Fund was established in 1977 to honor William Hearts 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 (administered jointly with the John Hurford ’60 Humanities Center) 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.

MUSIC MAJOR REQUIREMENTS
1) Theory-composition: 203, 204, 303.
2) Musicology: three courses, as follows: 229, plus any two of 220, 221, 222, 223, 224, and 225 or 325.
3) Two electives in music, chosen from: 207, 220, 221, 222, 223, 224, 225, 246, 250, 251, 265, 266, 304, and 325.
4) Performance: participation in a department-sponsored performance group is required for at least a year. Music 208, 209, or 210 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.

MUSIC MINOR REQUIREMENTS
1) Theory-Composition: 203 and 204
2) Musicology: 229, plus any one of 220, 221, 222, 223, 224, and 225 or 325.
3) One elective chosen from: 207, 220, 221, 222, 223, 224, 225, 246, 250, 251, 265, 266, 304, and 325.
Music

4) Music 208, 209, 210 instrumental or vocal private study or department ensemble participation for one year. Continuing ensemble participation and instrumental or vocal private study are strongly urged.

5) Minors are expected to attend the majority of department-sponsored concerts, lectures, and colloquia.

Substitutions for Haverford College courses in fulfillment of the major or minor in music must be approved in advance by the music department.

Music 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.

Theory and Composition Courses

110 Musicianship and Literature HU
L.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.

203 Tonal Harmony I HU
C.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.

204 Tonal Harmony II HU
L.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.

265 Symphonic Technique and Tradition HU
L.Arauco
In this course, we will be familiarizing ourselves with significant orchestral repertoire 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.

266 Composition HU
L.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.

303 Advanced Tonal Harmony HU
L.Arauco
Study of late nineteenth-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.

304 Counterpoint HU
C.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.

325 Seminar in 20th Century Theory and Practice HU
L.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 Courses

102 Chorale HU
Ng Tian Hui
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. Entrance by audition. Students can start Chorale at the beginning of any semester. Prerequisite: Audition and consent of the instructor.

107 Introductory Piano HU
C.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).

207 Topics in Piano: J.S. Bach HU  
C.Cacioppo  
Prerequisite: Audition and consent of instructor.

208 Private Study: Instrumental HU  
H.Jacob  
All students enrolled in the private study program 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 & consent of supervisor.

209 Private Study: Voice HU  
Ng Tian Hui  
10 hour-long voice lessons with approved teachers for 1/2 credit, graded. Jury exam at end of semester. Must participate in Chorale or Chamber Singers the same semester to be eligible for credit or partial subsidy for cost of lessons, which is not covered by tuition. Prerequisite: Departmental audition & consent of supervisor.

210 Private Study: Piano and Organ HU  
C.Cacioppo  
Prerequisite: Departmental audition and consent of supervisor.

214 Chamber Singers HU  
Ng Tian Hui  
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.

215 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.

216 Orchestra HU

H.Jacob
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.

219 Art Song HU  
Ng Tian Hui  
A performance course devoted to the French, German, English, and American art song literature from Schubert to the present. Weekly performance classes will be accompanied by weekly individual coachings with the instructor, culminating in a public recital at the end of the semester. Prerequisite: Audition and consent of instructor.

MUSICOCOLOGY COURSES

111 Introduction to Western Music HU  
R.Freedman  
A survey of the European musical tradition from the middle ages to modern times. Students will hear music by Monteverdi, Bach, Mozart, Beethoven, Wagner, Stravinsky, Glass, among many others, developing both listening skills and an awareness of how music relates to the culture that fosters it. In addition to listening and reading, students will attend concerts and prepare written assignments.

220 Saints and Sinners: Musical Europe before 1400 HU  
R.Freedman  
The course will explore music and its cultural uses in Medieval Europe. We will study the main genres and forms in secular and sacred contexts, from monasteries, convents, and cathedrals, to courts and cities. We will trace the changing character of music itself, from plainsong to polyphonic and from troubadour tunes to art song of the 14th century, in works by figures like Hildegard, Leonin, Machaut, Landini, and Vitry. We will study transformations in musical notation, theoretical underpinnings of musical time and counterpoint, and the status of music itself in the divine cosmos. We will also pause to put all of this in the context of current scholarship and historical performance practice. Prerequisite: Any full-credit course in Music (such as Music 110, 111, 229, 203), or equivalent prior experience in musical study.

221 Music, Ritual, and Representation: 1400-1600 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 or 111 or consent of instructor.

**222 Composers, Players, and Listeners in the 17th and 18th Centuries HU**  
*R. Freedman*  
This course traces sharp changes in musical style and the equally striking changes in roles for soloists, composers, and audiences in an international context of patronage and publishing. From Monteverdi, Schütz and Lully to Rameau, Bach, and Handel. **Prerequisite:** Music 110 or 111 or consent of instructor.

**223 Between Galant and Learned: Musical Life and the Enlightenment HU**  
*R. Freedman*  
This course ranges from the conservatories of Naples to opera houses of Vienna and Paris. Music by Pergolesi, Gluck, Haydn, Mozart, the young Beethoven, and many others; debates on music and language; the craft of composition; private patrons and public music; music and social change. **Prerequisite:** Music 110 or 111 or consent of instructor.

**224 Music, Myth, and Meaning in the 19th Century HU**  
*R. Freedman*  
An exploration of songs, operas, piano music and symphonic works of Berlioz, Liszt, Schubert, the Schumanns, Loewe, Wagner, Verdi, Dvorak, Mahler, and Brahms in the rich landscape of literary Romanticism and nationalism; philosophies of music and music history. **Prerequisite:** Music 110 or 111, or consent of instructor.

**225 Novelty and Renewal in 20th-Century Music HU**  
*R. Freedman*  
An exploration of how composers, musicians, and listeners have behaved (and have misbehaved) during the last 100 years. Works by Debussy, Schoenberg, Berg, Stravinsky, Bartok, Hindemith, Weill, Prokofiev, Shostakovich, Rochberg, Glass, and many others, considered through priorities of modernist aesthetics and the changing place of music in society. Central themes will include the search for order and control; music and the state; music, film, and electronic technologies; new roles for composers, performers, and listeners. **Prerequisite:** Any full-credit course in Music (such as Music 110, 111, 229, 203), or equivalent prior experience in musical study.

**229 Thinking about Music: Ideas, History, and Musicology HU**  
*R. Freedman*  
Core concepts and perspectives for the serious study of music. Students will explore music, meaning, and musicological method in a variety of contexts through a set of six foundational themes and questions: Music and the Idea of Genius, Who Owns Music? Music and Technology, The Global Soundscape, Music and the State, Tonality, Sense, and Reason. Each unit will use a small number of musical works, performances, or documents as focal points. In each unit we will also read current musicological work in an attempt to understand the methods, arguments, and perspectives through which scholars interpret music and its many meanings. **Prerequisite:** Music 110, 203, or equivalent prior knowledge of music.

**246 Words and Music: Wagner’s Ring and the Modern World HU**  
*R. Freedman*  

**250 Words and Music. Topic: Words, Tones, and Images HU (Cross-listed in Comparative Literature)**  
*C. Cacioppo*  
**Prerequisite:** One 100 level course in Music or consent.

**251 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 1930s through the 1950s by composers such as Auric, Copland, Eister, Herrmann, Korngold, Prokofiev, Shostakovich, Steiner, Tjomkin 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.

**257 Sociology of the Arts SO (Cross-listed in Sociology)**  
*L. McCormick*  
Typically offered in alternate years.

**480 Independent Study HU**  
*L. Arauco, C. Cacioppo, R. Freedman, H. Jacob*  
**Prerequisite:** Approval of department and consent of instructor.

**DIVERSE TRADITIONS COURSES**

**149 Native American Music and Belief HU**  
*C. 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.
227 Jazz and the Politics of Culture HU (Cross-listed in African and Africana Studies)
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. Prerequisite: Sophomore standing or higher.
The desire to understand human and animal behavior in terms of nervous system structure and function is long standing. Historically, this task has been approached from a variety of disciplines including medicine, biology, psychology, philosophy and physiology. The field of neuroscience emerged as an interdisciplinary approach, combining techniques and perspectives from these disciplines, as well as emerging fields such as computation and cognitive science, to yield new insights into the workings of the nervous system and behavior.

The concentration in the neural and behavioral sciences is designed to allow students to pursue their interests in behavior and the nervous system across disciplines. The concentration is available to majors in Psychology or Biology at Haverford or Bryn Mawr. Students must satisfy the requirements of the department in which they major, with appropriate modifications related to the concentration (consult departmental advisors listed below). For the concentration itself, students must take a series of courses that represent the background in the neural and behavioral sciences and other sciences common to all approaches to the nervous system and behavior. All students, regardless of major, must fulfill the requirements of the core program.

NEURAL AND BEHAVIORAL SCIENCE

NEURAL AND BEHAVIORAL SCIENCE FACULTY COORDINATOR
Associate Professor of Psychology at Haverford
Rebecca Compton

ADVISORY COMMITTEE

At Haverford:
Assistant Professor of Biology Andrea Morris,
Concentration Advisor
Professor of Psychology Wendy F. Sternberg,
Concentration Advisor

At Bryn Mawr College:
Associate Professor of Computer Science Douglas Blank
Professor of Biology Peter D. Brodchuehr,
Concentration Advisor
Professor of Biology Karen F. Greif
Professor of Biology Paul Grobstein
Professor of Computer Science Deepak Kumar
Professor of Psychology Leslie Rescorla
Professor of Psychology Earl Thomas, Concentration Advisor
Associate Professor of Psychology Anjali Thapar

NEURAL AND BEHAVIORAL SCIENCE CONCENTRATION REQUIREMENTS
1. Introductory-level work, with lab, outside the major (at least one semester) in psychology and biology.
2. Core course in neural and behavioral sciences. One of the following three: Neurobiology and Behavior (BIOL 202 at Bryn Mawr), Behavioral Neuroscience (PSYC 218 at Bryn Mawr) or Biological Psychology (PSYC 217 at Haverford).

Requirements 1 and 2 must be completed before the senior year.

3. Three courses in neural and behavioral sciences (from the list below or approved by the student’s major department), two of which must be from outside the major department.
4. Senior Seminar for concentrators (BIOL 396, PSYC 396 at Bryn Mawr).
5. Two semesters of senior research, in a manner that is consistent with the requirements of the major department.

NEURAL AND BEHAVIORAL SCIENCE COURSES

Note—Not all courses are offered in a given year.

PSYCHOLOGY
B201 Learning Theory and Behavior
B209 Abnormal Psychology
B212 Human Cognition
H213 Memory and Cognition
H220 Psychology of Time
H238 Psychology of Language
H240 Psychology of Pain and Pain Inhibition
H250 Biopsychology of Emotion and Personality
H260 Cognitive Neuroscience
B323 Cognitive Neuroscience
B350 Developmental Cognitive Disorders
B351 Developmental Psychopathology
H370 Neuroscience of Mental Illness
B395 Psychopharmacology

BIOLOGY
H187 Computing Across the Sciences
B205 Brain, Education and Behavior
B244 Behavioral Endocrinology
B250 Computational Models in the Sciences
B271 Developmental Biology
H302 Cell Architecture
B303 Animal Physiology
B304 Cell and Molecular Neurobiology
H306 Inter and Intracellular Communication
H309 Molecular Neurobiology
H312 Development and Evolution
B313/314 Integrative Organismal Biology I and II
B321 Neuroethology
B322 From Channels to Behavior  
H330 Laboratory in Neural and Behavioral Science: Molecular Development*  
H350 Pattern Formation in the Nervous System*  
B364 Developmental Neurobiology  

*half-credit courses

ALLIED DISCIPLINES:

COMPUTER SCIENCE  
B120 Visualizing Information  
B250 Computational Models in the Sciences  
B325 Computational Linguistics  
B361 Emergence  
B371 Cognitive Science  
B372 Introduction to Artificial Intelligence  
B376 Androids: Design and Practice  
B380 Developmental Robotics  

LINGUISTICS  
H113 Introduction to Syntax  
H114 Introduction to Semantics  
H245 Phonetics and Phonology  

PHILOSOPHY  
H106 The Philosophy of Consciousness and the Problem of Embodiment  
H251 Philosophy of Mind
The interdisciplinary concentration in Peace, Justice and Human Rights offers students the opportunity to study the history, philosophy and critiques of the rights tradition, examine themes of human rights and justice in their local and international contexts, and apply philosophical, social scientific and ethical reasoning to real-world problems. Three core courses are combined with three elective courses focused on a particular theoretical problem, geographical region, or comparative study, which will expand upon the focus students pursue in their majors. Students will also learn to communicate about their studies across disciplinary boundaries, and will be encouraged to develop creative new perspectives on entrenched problems.

The concentration is open to students in any major who wish to focus on topics such as:
• human rights and critical rights discourse (universalism, localism, relativism, formal equality, group and special rights categories, individual and state responsibility, critiques of the rights tradition);
• recovery from conflict and mass violence (reconciliation, restorative justice, reparations, truth commissions, cultural renewal, legal mechanisms);
• war, conflict, peace-keeping and peace-making (weapons, conflict resolution, just war, sustainable peace);
• globalization and global governance (sovereignty, trade and capital, global justice, international economic institutions, technology, the media, immigration);
• politics of life (medicine/health, environment);
• space and the built environment (links between rights, social justice and the building of urban spaces, policing urban areas, urban poor);
• technology and politics (technology and media, weaponry).

The above fields are not intended as tracks or limitations. The list of topics will be as long as the creativity of students and faculty will allow.

CONCENTRATION REQUIREMENTS

CORE COURSES
Sophomores meet with the director in the spring of their sophomore year to work out a plan for the concentration. All concentrators are required to take three core courses: PEAC 101 Introduction to PJHR (or POLS B 111 Intro to PACS); PEAC 201 Ethics and Justice: Applied Ethics of PJHR; and PEAC 395 Advanced Topics in PJHR (or a similar advanced course chosen in consultation with the director or acting advisor).

One course must be from a discipline outside the major and, if possible, outside the major’s division, but with compatible focus. No fewer than two but no more than three courses for the concentration must also form part of the student’s major.

ELECTIVES
Students are required to take three additional elective courses for the concentration. They will choose these courses in consultation with the director or acting advisor, working out a plan that focuses the second part of the concentration regionally, conceptually, or around a particular substantive problem. Possible areas of focus include: transitional justice viewed comparatively or regionally; philosophical or historical analysis of possibilities for peace; comparative study of genocide; race and human rights; gender and international justice; rights and the media; public health; literatures of conflict or reconciliation; technologies of war; the relationship between history, memory and trauma; social justice and urban space; environmental justice/injustice; energy and weapons; critique of the rights tradition; etc.

The field is full of possibilities, and students will be encouraged to come up with creative new approaches to current problems and historical ways of thinking.

INTERNSHIP OR RESEARCH EXPERIENCE
Students will also be encouraged to undertake an internship, research project, or other form of field learning as part of their concentration. This will help students face the challenges of integrating data and theory into original analyses.

COURSES IN PEACE, JUSTICE, AND HUMAN RIGHTS

The courses below offer a partial listing of courses that may count towards the concentration. Because the concentration in interdisciplinary and open to new ideas, a listing of courses will never cover every possible combination. Contact the concentration’s Director, Jill Stauffer, for further course recommendations or to suggest courses to add to this list.

PEACE, JUSTICE & HUMAN RIGHTS (DEPARTMENT)
PEAC H101 Intro to Peace, Justice and Human Rights
PEAC H201 Applied Ethics of Peace, Justice and Human Rights
PEAC H202 Forgiveness, Mourning, and Mercy in Law and Politics

ANTHROPOLOGY
ANTH H249 Colonialism, Law and Human Rights in Africa
ANTH H263 Architecture and Space
ANTH H315 Human Rights, Gender and
Knowledge

**BIOLOGY**
BIOL B210 Biology and Public Policy

**COMPARATIVE LITERATURE**
COML B211 Primo Levi, Holocaust and Aftermath
COML H322 Politics of Memory in Latin America

**ENGLISH**
ENGL H211 Intro to Postcolonial Literature
ENGL H343 Transatlantic Exchanges

**FRENCH**
FREN H312 Le Genocide Rwandais

**HISTORY**
HIST B287 Immigration in the U.S.
HIST H310 Political Technologies of Race and Body (Cross-listed in Peace, Justice & Human Rights)
HIST B325 Topics in Social History: Radical Movements
HIST H347 War and Warriors in Chinese History

**INDEPENDENT COLLEGE PROGRAMS**
ICPR H281 Violence and Public Health
ICPR H221 Epidemiology and Global Health
ICPR H301 Human Rights: Development and International Activism
ICPR H302 Bodies of Injustice
ICPR H310 Restorative Justice

**PHILOSOPHY**
PHIL H302 Topics in Philosophy of Law (Cross-listed in Peace, Justice & Human Rights)
PHIL B225 Global Ethical Issues
PHIL H257 Critical Approaches to Ethical Theory
PHIL B344 Development Ethics

**POLITICAL SCIENCE**
POLS B141 International Politics
POLS H151 International Politics
POLS H161 Politics of Globalization
POLS H171 Democratic Authority
POLS H232 Peace Building
POLS H266 Sovereignty
POLS H345 Islam, Democracy and Development
POLS H229 Latino Politics in the U.S. (Cross-listed in Peace, Justice & Human Rights)
POLS H285 African Politics
POLS H334 Politics of Violence (Cross-listed in Peace, Justice & Human Rights)
POLS H370 Topics in Political Theory (Cross-listed in Peace, Justice & Human Rights)

**SOCIOLOGY**
SOCL H235 Class, Race, and Education
SOCL B354 Comparative Social Movements

**CORE COURSE DESCRIPTIONS**

**PEAC H101 Introduction to Peace, Justice and Human Rights**
*J. Stauffer*
This course offers an introduction to the study of peace, justice and human rights, surveying philosophies of rights in relation to justice; historic and contemporary approaches to (and reasons for) peace, war, and nonviolence; clashes between human rights and conflict resolution approaches; the role of human rights prior to, during and after violent conflict; domestic and international problems and challenges to peace, justice and human rights; and why the study of human rights is necessarily interdisciplinary.

**PEAC H202 Forgiveness, Mourning and Mercy in Law and Politics**
*J. Stauffer*
Examination of the possibilities and limits of forgiveness, apology and mercy in politics, and the role mourning plays in recovery from violence, focusing on historic and contemporary instances of forgiveness, mercy and apology, and philosophical approaches to recovery from violence.

**PEAC H201 Ethics and Justice: Applied Ethics of Peace, Justice and Human Rights**
*J. Stauffer*
This is a course in applied ethics geared toward 1) introducing students to major schools of ethical thought in the western tradition, 2) helping students understand ethical arguments about peace, justice and human rights, and 3) preparing students to formulate their own creative approaches to ethical problems, and 4) facilitating an approach to argument that emphasizes diplomacy, perspective-taking and empathy over the search for the one right answer or the infallible argument. It will also consider some critiques and alternative approaches. In addition, the course introduces students to the philosophy of law, which is intertwined in a complex way with the western tradition of ethical thinking.
PEACE, CONFLICT AND SOCIAL JUSTICE STUDIES

The Peace, Conflict and Social Justice Studies at Bryn Mawr College program reflects BiCo interest in the study of war and other conflicts, peacemaking, and social justice, and enables students to explore these questions through courses in anthropology, economics, education, history, political science, social psychology, sociology and disciplines in the humanities in which these are important questions as well. The concentration offers students the opportunity to sustain a thematic focus across disciplinary boundaries and to enrich their major program in the process.

Students in the concentration can pursue a wide range of theoretical and substantive interests concerning questions such as: intra-state and international causes of conflict; cooperative and competitive strategies of negotiation and bargaining; intergroup relations and the role of culturally constituted institutions and practices in conflict management; social movements; protests and revolutions; the role of religion in social conflict and its mitigation; human rights and transitional justice in post-conflict societies; and social justice and identity questions arising from ethnic, religious and cultural diversity and the implications of these constructions for the distribution of material and symbolic resources in society as well as the practical capacities to engage individuals and groups across constructions of difference by linking practice and theory.

Students in the concentration are encouraged to explore alternative conceptions of peace and social justice in different cultural contexts and historical moments by emphasizing the connections between the intellectual scaffolding needed to analyze the construction of social identities and the social, political and economic implications of these constructions for the distribution of material and symbolic resources within and between societies and the challenges and opportunities to engage individuals and groups to move their communities and societies towards peace and social justice.

ADVISORY FACULTY
Michael Allen, Political Science (on leave semester II)
Allison Cook-Sather, Education
Deborah Harrold, Political Science
Tamara Neuman, Political Science
Clark B. McCauley, Jr., Psychology
Mary J. Osirim, Sociology (on leave semester I)
Michael T.Rock, Economics (on leave semester II)
Marc Howard Ross, Political Science (on leave semester I and II)

CONCENTRATION REQUIREMENTS
Students who wish to take the concentration meet with a faculty advisor by the spring of their sophomore year to develop a plan of study. All concentrators are required to take three core courses: the introductory course, Introduction to Peace and Conflict Studies at Bryn Mawr or Introduction to Peace, Social Justice and Human Rights at Haverford, 200 level course (Conflict and Conflict Management, International Law, Politics of Humanitarianism, or Forgiveness, Mourning, and Mercy in Law and Politics), and either Advanced Issues in Peace, and Conflict Studies or complete a project involving community participation and reflection by participation in bi-semester meetings, attendance at lectures/workshops, and development of a portfolio in their junior and senior years. This constellation of this second option earns students a single credit that is awarded upon the successful completion of all components.

In addition, students are required to take three additional courses chosen in consultation with their advisor, 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; social justice, diversity and identity, ethnic conflict in general or in a specific region of the world (e.g. Southern Africa, the Middle East, Northern Ireland); a theoretical approach to the field, such as nonviolence, social justice movements, bargaining or game theory; an applied approach, such as reducing violence among youth, the arts and peacemaking, community mediation or a particular policy question such as immigration or bilingual education.

PEACE, CONFLICT AND SOCIAL JUSTICE STUDIES COURSES

Peace, Conflict and Social Justice courses currently available at Bryn Mawr include:

Fall 2010
ANTH B200 The Atlantic World 1492-1800: Indians, Europeans, and Africans
ANTH B275 Cultures and Societies of the Middle East
ANTH B337 Colonial Formations
HIST B200 The Atlantic World 1492-1800: Indians, Europeans, and Africans
POLS B141 International Politics
POLS B211 Politics of Humanitarianism

Spring 2011
ANTH B111 Introduction to Peace and Conflict Studies
ANTH B347 Advanced Issues in Peace and Conflict Studies
POLS B206 Conflict Management: A Cross-Cultural Approach
POLS B379 The United Nations and World Order
PSYC B358 Political Psychology of Ethnic Conflict

Peace, Conflict and Social Justice courses currently available at Haverford include:

Fall 2010
ICPR H301 Human Rights: Development and International Activism
PEAC H101 Introduction to Peace, Justice, and Human Rights
PEAC H202 Forgiveness, Mourning, and Mercy in Law and Politics
POLS H151 International Politics
POLS H235 African Politics
POLS H334 Politics of Violence

Spring 2011
HIST H208 Colonial Latin America
HIST H240 History and Principles of Quakerism
ICPR H281 Violence and Public Health
PEAC H201 Applied Ethics of Peace, Justice, and Human Rights
SOCL H235 Class, Race, and Education
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.

PHILOSOPHY FACULTY

T. Wistar Brown Professor Danielle Macbeth, Chair
Professor Ashok Gangadean
Professor Kathleen Wright
Associate Professor Jerry Miller
Assistant Professor Joel Yurdin
Assistant Professor Jill Stauffer, Director of the Peace, Justice and Human Rights Concentration

PHILOSOPHY MAJOR REQUIREMENTS

(1) One philosophy course at the 100 level, or Bryn Mawr Philosophy 101, 102, or 104, 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.

PHILOSOPHY MINOR REQUIREMENTS

(1) One philosophy course at the 100 level, or Bryn Mawr Philosophy 101, 102, or 104, or the equivalent elsewhere.

(2) Three philosophy courses at the 200 level and two philosophy courses at the 300 level. Among the 200 and 300 level courses, one must be in value theory (broadly conceived to include ethics, social and political philosophy, aesthetics, and legal philosophy), one must be in metaphysics and epistemology (including ontology, philosophy of mind, and philosophy of action); and one must be concerned with philosophical texts written before the twentieth century. This third requirement can be satisfied concurrently with either of the other two (e.g., by taking a course in ancient Greek ethics or in Descartes’ metaphysics), or can be satisfied separately from the other two.

PHILOSOPHY 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.

INTRODUCTORY LEVEL PHILOSOPHY COURSES

A maximum of two introductory level courses may be taken for credit, one even-numbered course and one odd-numbered course.

102 Rational Animals HU
J. Yurdin
An examination of philosophical conceptions of reason and reason’s relations with other psychological capacities. In what sense are human beings rational? And what difference does rationality make to human life? Readings from classic sources, including Plato,
Aristotle, Hume, and Kant. Typically offered in alternate years.

103 Global Ethics HU
A.Gangadean
An exploration of selected texts on ethics in a global context. This course seeks to develop a global perspective on human values through a critical exploration of vital texts on ethics across diverse philosophical traditions. A central focus is on the challenge of articulating global ethics and global values across cultures, worldviews, and traditions. Readings include Aristotle’s *Nichomachean Ethics*, Bhagavad-Gita, the *Analects* of Confucius, and Kant’s *Fundamental Principles*. Typically offered in alternate years.

104 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*. Typically offered in alternate years.

105 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 *Nichomachean 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*). Typically offered in alternate years.

106 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 Meditations* and Spinoza’s *Ethics*), and contemporary postmodern and feminist philosophy (Foucault’s *The History of Sexuality* and Irigaray’s *Speculum of the Other Women*). Typically offered in alternate years.

107 Happiness, Virtue, and the Good Life HU
J.Delpech-Ramey
Happiness is something that we all want, but what exactly is it? This course considers the nature of the virtues and their roles in a happy life, the relations between happiness and morality, and the meaning (or meaninglessness) of life. Readings from classic and contemporary sources, including Plato, Aristotle, Kant, Nagel, and Wolf. Typically offered in alternate years.

109 Philosophy and the Good Life HU
D.Macbeth
An exploration of the question of the nature of a good human life. Readings include Plato’s *Euthyphro*, *Apology*, and selections from *Republic*, selected books of Aristotle’s *Nichomachean Ethics*, Kant’s *Groundwork for the Metaphysics of Morals*, and Nietzsche’s *Genealogy of Morality*. Typically offered in alternate years.

110 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. Typically offered in alternate years.

111 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*. Typically offered in alternate years.

112 Mind, Myth, and Memory HU
J.Miller
Theories of the relationship between the self and knowledge. Of particular importance will be the roles played by myth, dreams, and memory in that relationship. Readings include works by Plato, Descartes, Kant, and Freud. Typically offered in alternate years.
INTERMEDIATE LEVEL PHILOSOPHY COURSES

210 Plato HU  
J. Yurdin  
A close reading of Plato's Meno, Phaedo, Republic, Symposium, and Theaetetus, with a focus on issues in philosophical psychology, metaphysics, and the theory of knowledge. Emphasis is on a philosophical understanding of the views and arguments suggested by the texts, and special attention is paid to the roles of literary aspects of the texts in the presentation of philosophical content. Prerequisite: One 100 level course or its equivalent, or consent. Typically offered in alternate years.

212 Aristotle HU  
J. Yurdin  
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. Prerequisite: One 100 level course or its equivalent, or consent. Typically offered in alternate years.

221 Early Modern Continental Philosophy HU  
Staff  
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. Prerequisite: One 100 level course or its equivalent, or consent.

222 Early Modern British Philosophy HU  
J. Yurdin  
How can we think all that we act? This course examines these and related questions in the philosophical writings of Locke, Berkeley, Hume, and Reid. Emphasis is on a philosophical understanding of the theories of cognition and reality developed in these texts. Prerequisite: One 100 level course or its equivalent, or consent. Typically offered in alternate years.

225 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 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. Prerequisite: One 100 level course or its equivalent, or consent. Typically offered in alternate years.

226 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. Prerequisite: One 100 level course or its equivalent, or consent. Typically offered in alternate years.

233 Philosophy and Race HU (Cross-listed in African and Africana Studies)  
J. Miller  
This course meditates on the curious relation of race to modern 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. Prerequisite: One 100 level course or its equivalent, or consent. Typically offered in alternate years.

235 Early Chinese Philosophy HU (Cross-listed in East Asian Studies)  
K. Wright  
An introduction to the lively and sharp disputes between competing schools of philosophy in ancient Chinese philosophy, that is, philosophy in the pre-Han period prior to the syncretism that marks Neo-Confucianism, Neo-Confucianism, and most recently New Confucianism. Prerequisite: One 100 level course in philosophy or EAST 131 Chinese Civilization or by permission of the instructor. Typically offered in alternate years.

241 Hindu Philosophy HU  
A. Gangadeen  
A critical exploration of classical Hindu thought (Vedanta) in a global and comparative context. Special focus on selected Principal Upanisads, a close meditative reading of the Bhagavad Gita and an in depth exploration of Shankara's Brhamasutra Commentary. Prerequisite: One 100 level course or its equivalent, or consent. Typically offered in alternate years.

242 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 Dhammapada* and proceeds to an in-depth critical exploration of the teachings of Nagarjuna, the great dialectician who founded the Madhyamika School. 

Prerequisite: One 100 level course in Phil or consent. Typically offered in alternate years.

243 Twentieth-Century Continental Philosophy HU

Staff

This course will focus on the topic of language and its subject in phenomenology (Husserl, Heidegger, Merleau-Ponty), existentialism (Heidegger and Sartre), structuralism (Saussure), post-structuralism (Derrida and Foucault), and French Feminism (Irigaray, Kristeva, and Cixous). 

Prerequisite: One 100 level course or its equivalent, or consent. Typically offered in alternate years.

251 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 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. 

Prerequisite: One 100 level course or its equivalent, or consent. Typically offered in alternate years.

252 Philosophy of Logic and Language HU

A. Gangadean

A comparative exploration of alternative paradigms of logic, 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. 

Prerequisite: One 100 level course or its equivalent, or consent. Typically offered in alternate years.

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 course or its equivalent, or consent. Typically offered in alternate years.

254 Metaphysics: Global Ontology HU

A. Gangadean

A critical examination of philosophical accounts of reality and being. Special attention is given to how world views are formed and transformed: an ontological exploration of diverse alternative categorical frameworks for experience. Metaphysical narratives of diverse thinkers in the evolution of the European tradition are explored in global context.

Prerequisite: One 100 level course or its equivalent, or consent. Typically offered in alternate years.

255 Virtue Epistemology HU

D. Macbeth

An introduction to various issues in the theory of knowledge through a critical examination of recent work aiming to understand what it is good to believe by appeal to the virtues of an intellectually good person. 

Prerequisite: One 100 level course or its equivalent, or consent. Typically offered in alternate years.

257 Critical Approaches to Ethical Theory HU

J. Miller

This course examines efforts over the last century to engage the ethical without recourse to formal systems or foundational principles. How, these approaches ask, can we talk about good and evil, morality and immorality, while believing “truth” to be historically, linguistically, and culturally contingent? In the process of drafting possible answers, we shall think deeply about concepts such as violence, justice, and social responsibility. 

Prerequisite: One 100 level course or its equivalent, or consent. Typically offered in alternate years.

259 Structuralism and Post-Structuralism HU

J. Delpech, Ramey

An introduction to key readings in 20th century continental philosophy in the areas of semiotics, critical theory, and deconstruction. Of primary importance will be issues of mimesis and alterity, authority, and value. Readings include Barthes, Althusser, Foucault, Derrida, Kristeva, and Jameson.

Prerequisite: One 100 level course in Phil or consent.

Typically offered in alternate years.

260 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 Aristotelian 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.

Typically offered in alternate years.

281 Modern Jewish Thought [C] HU (Cross-listed in Religion)

K. Koltsou-Fromm
ADVANCED PHILOSOPHY 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.

301 Topics in Philosophy of Literature HU
Staff

302 Topics in Philosophy of Law HU (Cross-listed in Peace, Justice, & Human Rights - Dept and Peace, Justice, Human Rights - New Conc)
J. Stauffer
Topic for 2010/11: The Rule of Law in Political Reconciliation

310 Topics in Ancient Greek and Roman Philosophy HU
J. Yurdin

311 Topics in Greek Philosophy HU
J. Yurdin

312 Topics in Early Modern Philosophy HU
Staff

313 Topics in Nineteenth-Century Philosophy HU
Staff

314 Topics in Recent Anglo-American Philosophy HU
Staff
Prerequisite: One 200 level course in Phil and Junior standing or consent.

321 Topics in 20th-Century Continental Philosophy HU (Cross-listed in Comparative Literature)
J. Delpech-Ramey
Topic for 2010/11: Deleuze and Guattari.
Prerequisite: One 200 level Phil course and Junior standing or consent.

323 Topics in Modern European Philosophy HU
Staff

324 Topics in Post-Kantian Philosophy: Hegel and the Problem of Modernity HU
K. Wright

325 Zen Thought in a Global Context HU (Cross-listed in East Asian Studies)
A. Gangadean
Typically offered in alternate years.

331 Topics in the Philosophy of the Mind HU
J. Yurdin
Topic for 2010/11: Disjunctivism

332 Topics in the Philosophy of Language: Metaphor, Meaning and the Dialogical Mind HU
A. Gangadean
Typically offered in alternate years.

334 Topics in Metaphysics HU
D. Macbeth
Typically offered in alternate years.

335 Topics in Epistemology HU
D. Macbeth

336 Topics in 20th-Century Continental Philosophy HU (Cross-listed in Comparative Literature)
J. Delpech-Ramey
Topic for 2010/11: Deleuze and Guattari.
Prerequisite: One 200 level Phil course and Junior standing or consent.

337 Topics in Aesthetics HU
Staff

351 Topics in the Philosophy of the Mind HU
J. Yurdin
Topic for 2010/11: Disjunctivism

352 Topics in the Philosophy of Language: Metaphor, Meaning and the Dialogical Mind HU
A. Gangadean
Typically offered in alternate years.

353 Topics in Metaphysics HU
D. Macbeth
Typically offered in alternate years.

354 Topics in Epistemology HU
D. Macbeth

355 Topics in Aesthetics HU
Staff

399 Senior Seminar HU
D. Macbeth/K. Wright/A. Gangadean/J. Yurdin
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. Prerequisite: Open to senior majors only.

4xx Discussion Leaders HU
Staff
Associated with each 100 level course is a correspondingly numbered 400 level course (e.g., corresponding to 102 is 402), which is open to qualified major and non-major seniors. Students receive one-half credit for supervised leadership of weekly discussion groups with students in the introductory courses. A student must have consent of the instructor of the relevant introductory course to enroll as a discussion leader for that course.

PHILOSOPHY COURSES AT BRYN MAWR COLLEGE

101 Happiness and Reality in Ancient Thought HU
102 Science and Morality in Modernity HU
103 Introduction to Logic HU
104 Introduction to Problems in Philosophy HU
202 Culture and Interpretation HU
204 Readings in German Intellectual History HU
209 Introduction to Literary Analysis: Philosophical Approaches to Criticism HU
211 Theory of Knowledge HU
212 Metaphysics HU
221 Ethics HU
222 Aesthetics Nature and Experience of Art HU
225 Global Ethical Issues HU
228 Introduction to Political Philosophy: Ancient and Early Modern HU
229 Concepts of the Self HU
231 Introduction to Political Philosophy: Modern HU
238 Science, Technology, and the Good Life HU
240 Environmental Ethics HU
243 Twentieth-Century Continental Philosophy HU
244 Philosophy and Cognitive Science HU
245 Philosophy of Law HU
252 Feminist Theory HU
253 Theory in Practice: Humanities HU
254 Philosophy of Religion HU
257 Philosophy of Action HU
259 Philosophy, Modern Physics, and Ideals of Interpretation HU
263 Theory and Global Politics HU
293 The Play of Interpretation HU
300 Nietzsche, Kant, Plato: Modes of Practical Philosophy HU
310 Philosophy of Science HU
314 Existentialism HU
317 Philosophy of Creativity HU
318 Philosophy of Language: Early Analytic HU
319 Topics in Mind HU
321 Greek Political Philosophy: Aristotle: Ethics and Politics HU
323 Culture and Interpretation HU
326 Relativism: Cognitive and Moral HU
327 Political Philosophy in the Twentieth Century HU
330 Kant HU
338 Phenomenology: Heidegger and Husserl HU
344 Developmental Ethics HU
347 Philosophy of Perception HU
349 Social and Political Theory HU
352 Feminism and Philosophy HU
364 Political Philosophy: Irony and Commitment HU
371 Topics in Legal and Political Philosophy HU
372 Introduction to Artificial Intelligence HU
373 Spinoza HU
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.

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 101 and 102 constitute a year-long, self-contained treatment of all of physics, with particular attention to applications in the life sciences. Physics 105 and 106 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 152, intended for first year students who are considering a physical science major and who would like an opportunity to study recent developments in astrophysics.

The department offers several courses that can be taken with no prerequisites or prior experience in physics. Currently, there are two courses that fall into this category: Physics 111 considers the science behind various sustainable energy options, including solar heat and electricity, wind and tidal power, and examines the process by which scientists influence policy; and Physics 108 covers applications of the physical sciences to modern medicine.

A typical sequence introducing both the major and the minor consists of 105, 106, 213, 214, and the 211 and 212 laboratories. However, students beginning their study in 101 and 102 may continue with 213 and join the major or minor as well. Physics 105, 106, 213 and 214 are also prerequisites for the astronomy and astrophysics majors; Astronomy/Physics 152 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, we have active research programs in quantum gravity and theoretical cosmology, quantum computing, observational cosmology, nonlinear physics and fluid dynamics, extragalactic astronomy, biophysics, and nanoscience. Courses numbered 412 to 417 provide majors with opportunities to participate in these research efforts for academic credit during their senior year. Paid summer research assistantship positions are often available.

In the Senior Seminar (399), majors learn about the wide range of careers related to physics, and prepare a colloquium and senior paper based on independent work. Advanced students interested in teaching may participate in the instructional program by registering for Physics 459 or 460. Physics majors may also take an area of concentration in education; see the section on Education and Educational Studies. (Students interested in physics or science education in physics or science education at the secondary level should also consult the teaching certification information in the section on Education and Educational Studies.)

Concentrations in both computer science and scientific computing are available for physics majors. Both of these programs are described under the Computer Science program. The department coordinator for both of these concentrations is Peter Love. Physics majors with biological interests may also qualify for the biophysics concentration, described under Biochemistry and Biophysics.

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. Students interested in materials science should also consult the related offerings in materials chemistry through Haverford’s chemistry department.

**PHYSICS FACULTY**

Associate Professor Stephen H.S. Alexander

John Farnham Professor of Astronomy Stephen P. Boughn (on leave 2010-11)

John and Barbara Bush Professor in the Natural Sciences Jerry P. Gollub

Associate Professor Suzanne Amador Kane

Assistant Professor Peter J. Love

Physics Laboratory Instructor Scott E. Shelley

Professor Walter F. Smith

Assistant Professor of Astronomy Beth Willman

Bette and Howard Marshall Professor of Natural Sciences R. Bruce Partridge, Emeritus

**PHYSICS MAJOR REQUIREMENTS**

1. Physics 105 (or 101), 106 (or 102), 213, 214, 211, and 212 (or Bryn Mawr equivalents). The last two may be taken concurrently with 213 and 214.
2. Mathematics 121 and 204 or Bryn Mawr equivalent. For students who are contemplating advanced work in mathematics, 216 can replace 121, and 215 can replace 204.

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 the approval of 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 astronomy, biology, computer science, chemistry, or engineering (at Penn or Swarthmore). (This requirement is waived for double majors.)

5. Physics 399, including a paper and colloquium based on independent work, and attendance at senior colloquia and distinguished lectures hosted by the department.

PHYSICS MINOR REQUIREMENTS

1. Physics 105 (or 101 and 106 (or 102); 213, 214, 211 and 212 labs (or Bryn Mawr equivalents).

2. Mathematics 121 and 204 or Bryn Mawr equivalent. For students who are contemplating advanced work in mathematics, 216 can replace 121 and 215 can replace 204.

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.

PHYSICS 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.

PHYSICS COURSES

101 Classical and Modern Physics I NA/QU
S.Amador Kane/P.Love/S.Shelley
Three class hours and one laboratory period. Newtonian mechanics, thermodynamics, fluid motion, and relativity. Applications to other fields, especially the life sciences, will be included. The combination of this course with Physics 102 constitutes a comprehensive, one-year introduction to physics, with particular attention to applications in the life sciences. Prerequisite: Calculus at the level of Mathematics 113A or equivalent should be taken prior to or concurrently with this course. Typically offered every Fall.

102 Classical and Modern Physics II NA/QU
S.Amador Kane/P.Love/S.Shelley
Three class hours and one laboratory period. A continuation of Physics 101, covering electricity and magnetism, optics, waves, sound, quantum physics, 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 114a or equivalent should be taken prior to or concurrently with this course. Typically offered every Spring.

105 Fundamental Physics I NA/QU
S.Alexander/P.Love/S.Shelley
Three class hours and one laboratory period. Newtonian mechanics and thermodynamics. Applications are drawn primarily from the physical sciences. This sequence (105/106) is meant as a one-year introduction suitable for students interested in the physical sciences. Prerequisite: Mathematics 113a or equivalent. Typically offered every Fall.

106 Fundamental Physics II NA/QU
W.Smith/P.Love/S.Shelley
Three class hours and one laboratory period. A continuation of Physics 105, covering electricity and magnetism, optics, and special relativity. Prerequisite: Mathematics 114 or equivalent. Typically offered every Spring.

108 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.
11 Energy Options, and Science Policy NA
J. Gollub
Examination of the process by which scientists influence policy, seen through the lens of energy issues. The course considers the science behind various sustainable energy options, including solar heat and electricity, wind and tidal power, and efficient methods of heating and refrigeration. It also examines the efforts of the National Academies to provide objective policy advice on the complex decisions involving energy alternatives. **Prerequisite:** A college level mathematics course is recommended. Willingness to engage in quantitative reasoning on a regular basis is required. **Does not count toward the major. Typically offered in alternate years.**

152 Freshman Seminar in Astrophysics NA (Cross-listed in Astronomy)
B. Willman
**Prerequisite:** Physics 101a or 105a and concurrent enrollment in Physics 102b or 106b (or Bryn Mawr equivalents).

211 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 213. **Prerequisite:** Physics 102 or 106. **Typically offered every Fall.**

212 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 amplification. Normally taken concurrently with Physics 214. **Prerequisite:** Phys 211f; co-requisite: Phys 214b or equiv. **Typically offered every Spring.**

213 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. Physics 211f, a related laboratory half-course, is normally taken concurrently and is required for majors. **Prerequisite:** Phys 102 or 106 and Math 114 or 120 or equiv. **Typically offered every Fall.**

214 Introductory Quantum Mechanics NA/QU
S. Alexander
Introduction to the principles governing systems at the atomic scale. Topics include the experimental basis of quantum mechanics, wave-particle duality, Schrödinger’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 212, a related laboratory half-course, is required for majors, and may be taken concurrently. **Prerequisite:** Phys 213a or consent. **Typically offered every Spring.**

302 Advanced Quantum Mechanics NA
P. Love
A continuation of the study of quantum mechanics begun in 214. Topics include matrix mechanics and spin, many-particle systems, perturbation theory and scattering theory. A variety of physical systems will be treated as examples, including simple atoms and solids. **Prerequisite:** Physics 214. **Typically offered yearly in alternation with Bryn Mawr.**

303 Statistical Physics NA
J. Gollub
Treatment of many particle systems using statistical and quantum statistical 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. **Prerequisite:** Physics 214b or consent. **Typically offered yearly in alternation with Bryn Mawr.**

304 Computational Physics NA/QU (Cross-listed in Computer Science)
P. Love
An introduction to the methods and problems of computational physics. The course explores areas of physics which require computation for their study including: effects of air resistance and rotation in Newtonian mechanics; fields and potentials in electromagnetism; simulation of nonlinear systems and chaos; stochastic algorithms and statistical mechanics. **Prerequisite:** Jr. standing, Physics 213 and either CMSC 105 or extensive experience with a programming language or consent. **Typically offered in alternate years.**

308 Mechanics of Discrete and Continuous Systems NA
J. Gollub
Classical mechanics of systems of particles, and also continua such as fluids, including oscillations and chaos, Lagrangian mechanics, dynamics of systems of particles, the Navier-Stokes equations of fluids, and applications to diverse physical phenomena that may vary from year to year, e.g. waves, vortices,
rotating fluids, flight, instabilities, turbulence, and biological flows. Prerequisite: Physics 106 or Physics 213. Typically offered yearly in alternation with Bryn Mawr.

309 Advanced Electromagnetism 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: Phys 106b or 213a or BMC equiv. Typically offered yearly in alternation with Bryn Mawr.

320 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 214 or Chemistry 304, or the Bryn Mawr equivalents, or permission of the instructor. Typically offered in alternate years.

322 Solid State Physics NA
S.Alexander
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. Typically offered yearly in alternation with Bryn Mawr.

326 Advanced Physics Laboratory NA
W.Smith
Design, execution, and analysis of significant experiments, which change from year to year. Those presently available include studies of microfluidics, atomic spectroscopy, cosmic ray physics, laser tweezers, x-ray diffraction and materials synthesis, superconductivity, sense 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 212 or consent.

335 Advanced Topics in Theoretical Physics NA/QU
S.Alexander
An introduction to advanced theoretical physics. The central ideas covered will include: the use of symmetry in physics, non-euclidean geometry and curved spaces, advanced concepts of quantum theory. The course will address these topics by providing an introduction to one of the following areas of advanced theoretical physics: general relativity, quantum information theory, quantum field theory, particle physics. The specific topic will be determined by the instructor and will vary from year to year. Prerequisite: Jr. standing, Phys 213 and 214 or consent. Typically offered in alternate years.

399 Senior Seminar NA
S.Amador Kane
A capstone experience for seniors in physics meeting biweekly throughout the year. An introduction to scientific writing and talks; scientific ethics; graduate study in physics and astronomy; different possible careers for physics and astronomy majors, both within the field and outside science; 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.

412 Research in Theoretical and Computational Physics NA
P.Love
Independent research on current problems in theoretical physics, with emphasis on the physics of condensed matter systems; extensive use is made of computer-based methods. Prerequisite: Consent of instructor.

413 Research in Biophysics NA
S.Amador Kane
Experimental research on the statistical mechanics of biophysical systems and soft matter physics. Topics include empirical and computational studies of flocking and biological physics approaches to studying problems in evolution. Prerequisite: Consent of instructor. Lab experience at the level of Physics 211 and 212 preferred.

414 Research in Theoretical Physics NA
S.Alexander
Independent research on current problems in theoretical physics, with emphasis on particle physics and theoretical cosmology. Prerequisite: Consent of instructor.

415 Research in Nanoscale Physics NA
W.Smith
Prerequisite: Consent of instructor. Advanced lab experience preferred.

417 Research in Nonlinear Physics and Fluid Dynamics NA
Experimental research on problems involving nonlinear phenomena, fluid dynamics, granular materials, and swimming microorganisms. 

*Prerequisite:* Consent of instructor. Advanced lab experience preferred.

**459 Teaching Laboratory Physics NA**

*Staff*

Study of the principles and practices of laboratory instruction in physics through association with staff in the Physics 102 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 Jr. & Sr. Physics and Astronomy Majors only.

**460 Association in Teaching Basic Physics NA**

*Staff*

Study of the principles and practices of lecture instruction in physics through association with staff in Physics 101. 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.

**480 Independent Study NA**

*Staff*

*Prerequisite:* Consent of the instructor.

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

**493 Interdisciplinary Examinations of Biologically Significant Research NA** (Cross-listed in Biology and Chemistry and Psychology)

*P.Meneely*

*Prerequisite:* Consent of 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.
POLITICAL SCIENCE

The political science curriculum seeks to address issues of power, citizenship, and justice in the United States and throughout the world. Our courses explore political processes and governmental institutions from multiple vantage points—at the grassroots, the nation-state, and the global community—and from a variety of theoretical, conceptual, historical, and experiential perspectives. Our goal is to provide students with a deep understanding of the core concepts and practices of politics and government while developing the analytical, research, and writing skills that will enable them to think critically and creatively about existing structures of power and privilege. In doing so, we hope to nurture a life-long fascination and engagement with the political realm.

POLITICAL SCIENCE FACULTY
Professor Harvey Glickman, Emeritus
Professor Sidney R. Waldman
Associate Professor Anita Isaacs
Associate Professor Steve McGovern
Associate Professor Cristina Beltrán, Chair
Assistant Professor Craig Borowiak
Assistant Professor Susanna Wing
Assistant Professor Barak Mendelsohn
Assistant Professor Zachary Oberfield
Visiting Assistant Professor Philip Streich

POLITICAL SCIENCE MAJOR REQUIREMENTS
Courses fall into five subfields of the discipline of political science: American politics (A); comparative politics (C); international politics (I); global governance (G); and political theory (T). The following is required of all majors:

1. Two one-semester courses are required to enter the major: 121, 123, 131, 151, 161, and 171 at Haverford; 121, 131, 141, 151 at Bryn Mawr College. These courses must represent two different subfields.

2. Seven elective courses above the 100 level, including at least two 300 level research seminars. The 300 level research seminars must be taken with at least two different faculty members and are open to seniors and juniors, and sophomores with the consent of the instructor. One of the 300 level research seminars must be taken during the fall semester of the senior year. 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. Some courses may count in either of the two subfields but not in both. With the consent of a member of the department, students may substitute two or three intermediate- or advanced-level courses from another department for those in the student’s third subfield, where this serves to complement and strengthen the student’s work within the political science department. For example, a student concentrating in international politics might offer international economics courses as a subfield; or a student in political theory social and political philosophy courses; or a student in comparative politics courses in an area study; or a student in American politics social policy courses, and so forth.

3. All senior majors write a thesis and complete an oral defense of the thesis through enrollment in 400.

4. 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.

POLITICAL SCIENCE REQUIREMENTS FOR HONORS
Honors will be awarded to senior majors who, in the Department’s judgment, have demonstrated excellence in their course work in political science and senior thesis. High honors may be granted to a very select number of senior majors who have attained an outstanding level of distinction in their political science courses and senior thesis.

POLITICAL SCIENCE COURSES

21 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.

123 American Politics: Difference and Discrimination (A) SO (Cross-listed in African and Africana Studies and Gender and Sexuality Studies) Z. Oberfield
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.

131 Comparative Government and Politics (C) SO
151 International Politics (I) SO (Cross-listed in Peace and Conflict Studies-Bi Co Conc and Peace, Justice, Human Rights - New Conc)

P. Streich
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.

161 The Politics of Globalization (G) 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.

171 Introduction to Political Theory: Democratic Authority (T) SO

C. Beltran
An introduction to central concepts of political life through exploring the questions and problems surrounding democratic freedom, power, authority and citizenship. Reading from ancient, modern, and contemporary sources, literary as well as philosophical, American as well as European, will be included.

223 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.

224 The American Presidency (A) SO

S. Waldman
The institution of the Presidency in the past few decades; how the President relates to 1) Congress, 2) others in the executive branch, 3) his party, and 4) the public. Prerequisite: Pols 121 or 123 or consent.

225 Mobilization Politics (A) SO

S. McGovern
Explores how ordinary citizens in the U.S. seek to advance their interests, both inside and outside of the conventional political system. Evaluation of theories of contentious politics with an emphasis on social movements, public interest groups, direct democracy, and community organizing. Prerequisite: Political Science 121 or 123 or consent of instructor.

226 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.

227 Urban Politics (A) SO

S. McGovern
Examines who wields power in American cities amidst broad social and economic change. Includes both historical and contemporary analysis of urban politics, with close attention to the influence of race, ethnicity, and class. Prerequisite: Pols 121 or 123 or consent.

228 Urban Policy (A) SO

S. McGovern
Assessment 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.

229 Latino Politics in the U.S. (A,T) SO (Cross-listed in Peace, Justice, & Human Rights - Department and Gender and Sexuality Studies and Latin American and Iberian Studies)

C. Beltran
Examines how ordinary citizens in the U.S. seek to advance their interests, both inside and outside of the conventional political system. Evaluation of theories of contentious politics with an emphasis on social movements, public interest groups, direct democracy, and community organizing. Prerequisite: One Political Science course or consent.

230 Topics in Comparative Politics (C) SO

232 Peace Building: Reintegration, Reconciliation, and Reconstruction (C,I) SO (Cross-listed in Latin American and Iberian Studies)

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.

233 Perspectives on Civil War and Revolution: Southern Europe and Central America (C) SO
(Cross-listed in History)
A.Isaacs/A.Kitroeff
An examination of the history and politics of civil war and revolution. A central concern is theories of revolution, guerrilla warfare and counterinsurgency, in light of Southern European (Greece and Spain) and Central American (El Salvador, Guatemala, and Nicaragua) experiences. Prerequisite: One course in history or one course in political science.

235 African Politics (C) SO (Cross-listed in African and Africana Studies and Peace and Conflict Studies-Bi Co Conc)
H.Glickman
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: A course in political science or consent of instructor.

237 Latin American Politics (C) SO (Cross-listed in Latin American and Iberian Studies)
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 Political Science course or consent.

239 The United States and Latin America (C) SO
(Cross-listed in Latin American and Iberian Studies)
A.Isaacs
Prerequisite: One course in Pols or consent.

240 Inter-American Dialogue (I) SO (Cross-listed in Latin American and Iberian Studies)
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 Latin American studies or consent of instructor.

242 Women in War and Peace (C) SO
(Cross-listed in Gender and Sexuality Studies and Peace and Conflict Studies-Bi Co Conc)
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.

247 Political Economy of Developing Countries
(C) SO (Cross-listed in African and Africana Studies)
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 Comp Politics or Intl Relations or consent.

249 The Soviet System and Its Demise SO
(Cross-listed in Economics and Russian)
V.Kontorovich
Prerequisite: Two one-semester courses in Econ, Pols, or Hist.

252 International Politics of the Middle East (I)
SO
B.Mendelsohn

253 Introduction to Terrorism Studies SO
B.Mendelsohn
After being marginalized in international relations scholarship, for years, in the aftermath of 9/11 terrorism has moved to the forefront of scholarly interest. The purpose of this course is to survey the various theories concerning terrorism from diverse perspectives employing rationalist and psychological theories to explain terrorism-related phenomena.

256 The Evolution of the Jihadi Movement (I)
SO
B.Mendelsohn
This course explores the evolution of the jihadi movement, focusing on its ideological development throughout the twentieth century, and the structural changes it has gone through since the jihad to drive the Soviets out of Afghanistan during the 1980s. Prerequisite: Political Science 131, 151, or 161 or consent of instructor.

257 The State System (I) SO
(Cross-listed in Peace and Conflict Studies-Bi Co Conc)
B.Mendelsohn
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 Pols or consent.

258 The Politics of International Institutions (I) SO (Cross-listed in Peace and Conflict Studies-Bi Co Conc)
B.Mendelsohn
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.

259 American Foreign Policy (I) SO
H.Glickman
Prerequisite: One course in international relations or comparative government. Sophomore standing or above.

261 Global Civil Society (G) 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.

262 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. Prerequisite: One political science course or consent of instructor.

265 Politics, Markets and Theories of Capitalism (G) 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.

266 Sovereignty SO
C.Borowiak
An examination of the concept of sovereignty as it figures within international politics and democratic theory. Explores the theoretical and historical origins of the concept as well as contemporary adaptations, challenges and critiques. Topics include the state system and international intervention, democratic authority and globalization, indigenous and food sovereignty, and proposals for post-sovereign forms of polity. Prerequisite: One 100 level course in Pols or consent.

272 Democratic Theory: Membership, Citizenship and Community (T) SO
C.Beltran
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.

276 American Political Thought from Founding to Civil War (A,T) SO
C.Beltran
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 constitutional democracy, the meaning of citizenship and national identity, and the character of American political culture. Prerequisite: Political Science 121, 123 or 171 or consent of instructor.

277 American Political Thought: Post Civil War (A,T) SO
C.Beltran
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, 123, 171, or 276, or consent of instructor.
281 Developing Questions, Finding Answers: Political Science and the Conduct of Inquiry SO
Staff
This class provides an introduction into the techniques of social science research. Useful for anyone preparing to write a senior thesis, the course will provide an opportunity for the students to create an original research design and gain experience in a range of qualitative methods. Prerequisite: One political science course or consent of instructor.

285 Religion and the Limits of Liberalism HU
(Cross-listed in Religion)
T. Johnson

286 Religion and American Public Life [A] HU
(Cross-listed in Religion)
Staff

314 Strategic Advocacy: Lobbying & Interest Group Politics in Washington, D.C. SO
R. Christie

315 Public Policy Analysis (A) SO
Z. Oferfield
Each student will select a public policy to analyze, looking at the nature of the problem being addressed as well as benefits, costs, and risks. Alternative policy solutions to the problem will be examined and a final proposal put forward. Prerequisite: Jr. or Sr. standing or consent.

320 Democracy in America (A) SO
S. McGovern
This seminar assesses the condition of participatory and representative democracy in the United States today. Prerequisite: Jr. or Sr. standing or consent.

325 Grassroots Politics in Philadelphia (A) SO
S. McGovern
Advanced seminar on city politics, public policy, and grassroots activism. Traditional seminar format combined with an experiential learning component featuring 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.

330 Topics in Comparative Politics (C) SO (Cross-listed in Latin American and Iberian Studies)
Prerequisite: One course in comparative politics or consent of instructor.

334 Politics of Violence (C) SO (Cross-listed in Peace, Justice, & Human Rights - Deparmt and Peace and Conflict Studies-Bi Co Conc and Peace,
Justice, Human Rights - New Conc)
A. Isaacs
Examines the evolution, the nature and the causes of violent, intra-state conflict. It pays attention to assessing alternative explanations that include the fear and insecurity provoked by failing states, resource scarcity and the spread of infectious disease and/or a manipulative and self-serving leadership. It places these conflicts in the context of writings about collective violence, revolutions and genocide and asks about the contribution and the responsibility of the international community to resolving civil strife. Prerequisite: Junior or senior standing or consent of instructor.

336 Democracy and Democratization (C) SO
A. Isaacs
The processes of democratization in historical and comparative perspective. It investigates the meaning of democracy and assesses factors that facilitate or impede democratic transition and durability, including strategies of elites, civil society and external actors, civil-military relations, institutional design and the relationship between democratization and economic transformation. Prerequisite: Jr. or Sr. standing or consent.

339 Transitional Justice (C) SO
A. Isaacs
Challenges of transitional justice -- confronting human rights violations in the aftermath of violent conflict and repressive dictatorship. We will address questions raised in transitional justice studies, focusing on purpose, goals and implications, and assessing practical experiences with key transitional justice mechanisms, including truth commissions, trials and reparations. Prerequisite: Jr. or Sr. standing or consent.

340 Postcolonialism and the Politics of Nation-building (C) SO (Cross-listed in African and Africana Studies)
S. Wing
An examination of the challenges of nation-building in postcolonial states. Explores ethnicity, democracy, citizenship and legal reform. Theoretical approaches are combined with case studies from Africa, Southeast Asia and other regions of the world. Prerequisite: Junior or senior standing or consent of instructor.

345 Islam, Democracy and Development (C) SO (Cross-listed in African and Africana Studies)
S. Wing
An examination of political dynamics of Islam. Islam is analyzed with respect to democracy, human rights, cultural pluralism, and development. Case studies from Africa, Europe and other regions of the world will be explored. Prerequisite: Jr. or Sr. standing or consent.

350 Topics in International Politics (I) SO
P. Streich
Prerequisite: A course in international or comparative politics or consent of instructor.

357 International Relations Theory: Conflict and the Middle East (I) SO
B. Mendelsohn
Conflicts in the Middle East since World War I. Cleavages are discussed that have contributed to the emergence of violent conflicts in the region and discusses particular conflicts. Prerequisite: Jr. or Sr. standing or consent.

358 The War on Terrorism (I) SO
B. Mendelsohn
Exposes students to the broad range of activities undertaken within the framework of the global war on terrorism and to enhance understanding of the diverse military and political challenges comprising this confrontation. The seminar surveys the multiple components of the war on terrorism and examines them through several relevant analytical prisms. The course also discusses the implications of the war on terrorism for foreign policy and international relations theory. Prerequisite: Junior or Senior standing, or consent of instructor.

361 Democracy and Global Governance (G) SO
C. Borowiak
Examination of contemporary theoretical and practical debates about the extension of democratic principles beyond the nation-state. This course will explore sources of legitimacy in world politics and consider innovative ways to cope with global power asymmetries and democratic deficits caused by globalization. Prerequisite: Junior or senior standing, or consent of instructor.

362 Global Justice SO
C. Borowiak
An examination of issues of justice that cross national borders, including world poverty and global distributive justice, corporate accountability, humanitarian intervention, and global environmental justice. Readings chosen from recent works in political philosophy and globalization studies. Prerequisite: At least one 100 level & one 200 level Pols course or consent.

365 Solidarity Economy Movements SO
C. Borowiak
An intensive research seminar critically examining the politics, theory and social networks behind solidarity economy movements that seek to create solidarity-based alternatives to capitalism. Includes study of the fair trade movement, eco-villages, cooperative movements, and participatory budgeting, among other initiatives. Prerequisite: One 200 level political science course.

370 Becoming a People: Power, Justice, and the Political (T) SO (Cross-listed in Peace, Justice, & Human Rights - Deparment and Peace, Justice, Human Rights - New Conc)
C. Beltran
Prerequisite: Jr. or Sr. standing or consent.

379 Feminist Political Theory (T) SO
C. Beltran
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.

400 Senior Thesis SO
C. Beltran
This course consists of tutorials and intensive research, culminating in a senior thesis. Prerequisite: Limited to political science senior majors.

460 Teaching Assistant SO
B. Mendelsohn

480 Independent Study SO
S. McGovern

COURSES OFFERED AT BRYN MAWR COLLEGE

121 American Politics
131 Comparative Politics
141 International Politics
205 European Politics
206 Conflict & Conflict Management
220 Constitutional Law
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
245 Philosophy of Law
251 Politics and the Mass Media
253 Feminist Theory
254 Bureaucracy and Democracy
279 State/Transformation/Conflict
283 Modern Middle East/North Africa
284 Modernity and its Discontents
310 Comparative Public Policy
316 Ethnic Group Politics
320 Greek Political Philosophy
321 Technology and Politics
327 Political Philosophy: 1950-Present
333 The Policy Making Process
347 Advanced Issues in Peace and Conflict
348 Culture and Ethnic Conflict
358 Political Psychology and Ethnic Conflict
362 Environmental Policy in Comparative Perspective
383 Islamic Reform and Radicalism
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.

PSYCHOLOGY FACULTY
Professor Douglas A. Davis, Emeritus
Professor Sidney I. Perloe, Emeritus
Professor Marilyn G. Boltz
Professor Wendy F. Sternberg
Associate Professor Rebecca J. Compton, Chair
Associate Professor Benjamin Le (on leave 2010-2011)
Assistant Professor Jennifer Lilgendahl
Visiting Assistant Professor Amy Neeren
Visiting Associate Professor Debra Zeifman

PSYCHOLOGY MAJOR
REQUIREMENTS
One semester of introductory psychology: Psyc 100 Foundations of Psychology; Psyc 200 Experimental Methods and Statistics, or Bryn Mawr Psyc 205. Six additional psychology courses beyond the introductory level, with at least one taken from each of the following groups: a) Social and Personality Psychology – 215, 221, 224, 225, 250, 309, 325; b) Biological Psychology – 217, 221, 240, 250, 260, 370; c) Cognition – 213, 220, 238, 260. Two of these six courses must be taken with their associated 1/2 credit laboratory course. 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 non-empirical senior thesis and an additional psychology course beyond the introductory level. Students expecting to go on to graduate study in any area of psychology are strongly advised to choose the empirical research option. Equivalent courses at Bryn Mawr or other institutions (with permission of the department) are accepted as fulfilling major requirements.

PSYCHOLOGY MINOR
REQUIREMENTS
The Haverford minor in psychology consists of six credits in psychology including: Psyc 100: Foundations of Psychology, and five additional psychology courses beyond the introductory level, with at least one taken from two of the following groups: a) Social and Personality Psychology – 215, 224, 225, 250, 325; b) Biological Psychology – 217, 240, 250, 260, 350, 370; c) Cognition – 213, 220, 238, 260.

NEURAL AND BEHAVIORAL SCIENCE CONCENTRATION
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.

PSYCHOLOGY 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.

PSYCHOLOGY COURSES
100 Foundations of Psychology SO
A. Neeren
An introduction to the study of mind and behavior. Topics include biological, cognitive, personality, abnormal, and social psychology, as well as a general consideration of the empirical approach to the study of behavior. Typically offered every Semester.

200 Experimental Methods and Statistics SO/QU
R. Compton
Three hours lecture, one 90-minute lab/week plus time spent collecting data outside of scheduled lab hours. A general overview of the experimental method and its use in the psychological study of behavior, coupled with an in-depth treatment of statistics as applied to psychology research. Lab exercises focus on designing experiments, collecting data, applying statistical methods (using a commercial data analysis software package), and presenting data through written assignments. Lottery preference to Psych Majors, Minors, NBS Concentrators and then by Class. 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: Psyc 100 or consent. Typically offered in alternate years.

215 Introduction to Personality Psychology SO
J. Lilgendahl

205
An examination of the fundamental issues and questions addressed by personality psychology, including: What is personality? What are its underlying processes and mechanisms? How does personality develop and change over time? What constitutes a healthy personality? This course will explore these questions by considering evidence from several major approaches to personality (trait, psychodynamic, humanistic, and social-cognitive), and it will encourage students to develop a dynamic understanding of human personality that is situated within biological, social, and cultural contexts. Lottery preference to Psych Majors, Minors, NBS Concentrators and then by Class. Prerequisite: Psyc 100 or 105 or consent.

225 Self and Identity SO
J. Lilgendahl
Who am I? How do I feel about myself? What is the story of my life? How do people answer such questions and the implications of their answers, both over time and across situations in their lives, are the issues that are at the heart of this course on self and identity. Through a combination of lecture and discussion, we will examine the literature on self and identity from multiple disciplinary perspectives (biological, developmental, personality, social, and clinical) and apply scientific concepts to the analysis of socially important issues, current events, popular culture, and our own life experiences. Specific topics to be addressed include self and identity development in childhood and adolescence, self-esteem and its consequences, gender and self, culture and ethnic identity development, stigmatized selves and prejudice, and the connection between self/identity and mental health. Prerequisite: Psyc 100 or consent.

227 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 intro course in Psyc or Biol or consent.

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. Lottery preference to Psych Majors, Minors, NBS Concentrators and then by class. Prerequisite: Psychology 100 or consent of the instructor. Typically offered in alternate years.

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. Lottery preference to Psych Majors, Minors, NBS Concentrators, and then by Class. Prerequisite: An intro course in one of the following: Anch, Biol, Psyc, or Socl or consent.

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: Psyc 100 or consent.

228 Psychology of Language SO (Cross-listed in Linguistics)
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 100 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 100 or consent of instructor.

250 Biopsychology of Emotion 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: Psyc 100 or consent of 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. Lottery preference to Psych Majors, Minors, NBS Concentrators and then by class. Prerequisite: Psychology 100.

309 Abnormal Psychology SO
A.Neeren
A review of major clinical and theoretical literature pertaining to the definition, etiology, and treatment of important forms of psychopathology. Lottery preference to Psych Majors, Minors, NBS Concentrators and then by class. Prerequisite: Psychology 100 or consent. Offered occasionally.

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 in the study of memory, and other cognitive behaviors. These various methodologies will be employed within a set of empirical studies designed to investigate particular topics within the field of cognition. Prerequisite: Psyc 100; Psyc 200; and either prior or concurrent enrollment in Psyc 213. Typically offered in alternate years.

315 Laboratory in Personality Psychology SO
J.Lilgendahl, A.Neeren
An overview of methods used to conduct research on personality. Through lab activities and class projects, students will learn about important methodological topics within the study of personality, including measurement, reliability and validity, different modes of data collection (self-report questionnaires, interviews and narratives, observational and experimental approaches), and how to analyze and interpret personality data. Lottery preference to Psych Majors, Minors, NBS Concentrators and then by class. Prerequisite: Psyc 200 & prior or concurrent enrollment in Psyc 215.

317 Biological Psychology Laboratory NA
W.Sternberg
An overview of the methodologies used in biological psychology research. Lab exercises include detailed brain anatomy, and conducting experiments on human sensory processing and animal learning. Prerequisite: Psyc 100; Psyc 200; and prior or concurrent enrollment in Psyc 217.

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. Lottery preference to Psych Majors, Minors, NBS Concentrators and then by class. Prerequisite: Psyc 100; Psyc 200; and prior or concurrent enrollment in Psyc 220. Typically offered in alternate years.

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. Prerequisite: Psyc 200 and prior or concurrent enrollment in Psyc 224.

325 The Psychology of Close Relationships SO
D.Zeifman
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. Lottery preference to Psych Majors, Minors, NBS Concentrators and then by Class. Prerequisite: Psyc 100 or consent of instructor.

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: Psyc 100; Psyc 217 preferred but not required. Offered occasionally.

341 Laboratory in the Psychology of Pain NA
W.Sternberg
A laboratory course offered concurrently with Psychology 240. This laboratory course covers basic scientific approaches to the study of pain and its inhibition in laboratory rodents and human subjects. Pain assessment, analgesia, pain modulation and development of nociceptive circuits will be covered. Students will carry out experiments, analyze data, and gain proficiency in scientific writing style. Prerequisite:
Psychology 200 and prior or concurrent enrollment in Psychology 240.

351 Experimental Research and Fieldwork Projects in Psychology NA
W. Sternberg
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. Lottery preference to Psych Majors, Minors, NBS Concentrators and then by class. Prerequisite: Psy 100; Psy 200; and prior or concurrent enrollment in Psy 260.

370 Neuroscience of Mental Illness NA
S. Gibbs
Examines neuroscientific approaches to psychological disorders such as depression, anxiety disorders, and schizophrenia. This seminar will draw upon primary scientific research literature investigating neurophysiological and cognitive neuroscience correlates of psychopathology. Both promises and limitations of current knowledge will be evaluated. Prerequisite: One 200 level course in biological psychology, such as HC Psy 217, 250, or 260, or BMC Psy 218.

390 Senior Thesis SO
Staff
Open to senior psychology majors doing a one semester thesis in current semester. Typically offered every Semester.

391 Senior Research Tutorial in Cognition SO
M. Boltz
Open to senior psychology majors. Typically offered every Semester.

392 Senior Research Tutorial in Personality SO
J. Eichenlaub
Open to senior psychology majors. Typically offered every Semester.

393 Senior Research Tutorial in Social Psychology SO
B. Le
Open to senior psychology majors. Typically offered every Semester.

394 Senior Research Tutorial in Biological Psychology NA
W. Sternberg
Open to senior psychology majors. Preference given to Neural and Behavioral Science concentrators.

395 Senior Research Tutorial in Cognitive Neuroscience SO
R. Compton
Open to senior Psychology majors. Typically offered every Semester.

397 Senior Research Tutorial in Developmental Psychology SO
D. Zeffman
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
M. Boltz
Students should normally plan to take this course for half-credit.

SENIOR RESEARCH, INDEPENDENT STUDY AND SENIOR DEPARTMENTAL STUDIES

493 Interdisciplinary Examinations of Biologically Significant Research NA (Cross-listed in Biology and Chemistry and Physics)
P. Meneely
Prerequisite: Consent of instructor.

COURSES OFFERED AT BRYN MAWR COLLEGE

All Bryn Mawr Psychology courses count toward the major at Haverford, with the following designations (Bryn Mawr courses not listed count toward the major, but may not count toward core area requirements within the major):

Social and Personality Psychology 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
RELIGION

The Department of Religion at Haverford views religion as a central aspect of human culture and social life. 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 religion 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.

A central goal of the department is to enable students to become critically informed, independent, and creative interpreters of some of the religious movements, sacred texts, ideas and practices that have decisively shaped human experience. They are encouraged to engage in the breadth of scholarship in the study of religion as well as to develop skills in the critical analysis of the texts, images, beliefs, and performances of various religious traditions, including Judaism, Christianity, Islam and Buddhism. Students especially interested in Asian religions may work out a program of study in conjunction with the East Asian Studies department at Haverford and Bryn Mawr and with the Religion department at Swarthmore. 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).

RELIGION FACULTY
Constance and Robert MacCrone Professor in Social Responsibility J. David Dawson
Kier Family Associate Professor in the Humanities Anne M. McGuire
Associate Professor Tracey Hucks
Professor Kenneth Kolun-Fromm
Associate Professor Naomi Kolun-Fromm
Assistant Professor Travis Zadeh

RELIGION MAJOR 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. Where appropriate and relevant to the major’s program, up to three courses for the major may be drawn from outside the field of religion, subject to departmental approval.

b. Junior Colloquium: An informal required gathering of the Junior majors once each semester. Students should complete a worksheet in advance in consultation with their major advisor and bring copies of the completed worksheet to the meeting.


d. At least four additional half-year courses drawn from outside the major’s area of concentration.

e. 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. Students seeking religion credit for abroad courses should write a formal petition to the department upon their return and submit all relevant course materials. Petitioned courses should be included within the student’s designated area of concentration.

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.
**RELIGION 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).

**INTRODUCTORY RELIGION COURSES**

101 Introduction to the Study of Religion [A,B,C] 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. Typically offered in alternate years.

108 Vocabularies of Islam [A] HU
J.Veis
Introduction to the foundational concepts of Islam and the diverse ways in which Muslims understand and practice their religion. Topics include scripture, prophethood, law, ritual, theology, mysticism, and art.

110 Sacred Texts and Religious Traditions [A] HU
T.Zadeh
An introduction to Religion through the close reading of selected sacred texts of various religious traditions in their historical, literary, philosophical, and religious contexts.

118 Hebrew Bible: Literary Text and Historical Context 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.

120 Jewish Thought and Identity [A] HU
K.Koltun-Fromm
An introduction to selected thinkers in Jewish history who are both critical and constructive in their interpretations of Jewish texts and traditions. The course examines how readings of the Hebrew Bible generate normative claims about belief, commandment, tradition and identity. Readings may include the Hebrew Bible, Rashi, Maimonides, Spinoza, Heschel, and Plaskow. Offered occasionally.

121 Varieties of Judaism in the Ancient World [A,B] HU
N.Koltun-Fromm

From Abraham to Rabbi Judah the Prince, Judaism has been transformed from a local ethnic religious cult to a broad-based, diverse religion. Many outside cultures and civilizations, from the ancient Persians to the Imperial Romans, influenced the Jews and Judaism through language, culture and political contacts. Absorbing and adapting these various and often opposing influences, the Israelites, 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. Typically offered in alternate years.

122 Introduction to the New Testament HU
A.McGuire
An introduction to the New Testament and early Christian literature. Special attention will be given to the Jewish origins of the Jesus movement, the development of traditions about Jesus in the earliest Christian communities, and the social contexts and functions of various texts. Readings will include non-canonical writings, in addition to the writings of the New Testament canon.

124 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.

128 Reading Sacred Texts: In Quest of the Human [B,C] HU (Cross-listed in Writing Program)
D.Dawson
Religions propose various ways of becoming "fully," "authentically," or "actually" human. Non-religious humanists often counter that religions are not needed to achieve one’s humanity, or—in the worst case—positively undermine or destroy it. Taking Christianity as our test case, we’ll examine this clash of perspectives and contemplate its implications through reading, discussing, and writing in response to four texts: Augustine’s *Confessions*, Feuerbach’s *The Essence of Christianity*, Kierkegaard’s *Philosophical Fragments*, and Nietzsche’s *On the Genealogy of Morals*. Small group writing tutorials will be an important component of the course. (Satisfies the first year writing requirement.)

129 The Lotus Sutra: Text, Image, and Practice HU (Cross-listed in East Asian Studies and Writing Program)
Prerequisite: Open only to first-year students as assigned by the Director of College Writing. (Satisfies the first year writing requirement.)
130 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. 
Typically offered in alternate years.

132 Varieties of African American Religious Experience HU (Cross-listed in African and Africana Studies)  
T.Hucks  
This course will examine the history of religion in America as it spans several countries. 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.

137 Black Religion and Liberation Theology [A] HU (Cross-listed in African and Africana Studies)  
Staff  
An introduction to the theological & philosophical claims raised in Black Religion & Liberation Thought in 20th Century America. In particular, the course will examine the multiple meanings of liberation within black religion, the place of religion in African American struggles against racism, sexism and class exploitation and the role of religion in shaping the moral and political imaginations of African Americans.

155 Themes in the Anthropology of Religion SO  
(Cross-listed in Anthropology and African and Africana Studies)  
Z.Ngwane  
INTERMEDIATE RELIGION COURSES

200 Religion and Liberalism [A] HU (Cross-listed in Political Science)  
T.Johnson  
An examination of political liberalism in debates on religion, democracy and tradition. Particular attention is given to the relationship between liberal and theological responses to debates on individual rights and the common good.

201 Introduction to Buddhism HU (Cross-listed in East Asian Studies)  
H.Glassman  
202 The End of the World as We Know It [A] HU  
J.Velji  
Why are people always predicting the coming endtime? This course will explore the genre of apocalypse, looking for common themes that characterize this form of literature. Our primary source readings will be drawn from the Bible and non-canonical documents from the early Jewish and Christian traditions. We will use an analytical perspective to explore the social functions of apocalyptic, and ask why this form has been so persistent and influential.

203 The Hebrew Bible and its Interpretations [A,B] HU  
N.Koltun-Fromm  
This course will critically study select Hebrew Biblical passages (in translation) as well as Jewish and Christian Biblical commentaries in order to better understand how Hebrew Biblical texts have been read, interpreted and explained by ancient and modern readers alike. Students will also learn to read the texts critically and begin to form their own understandings of them. 
Typically offered in alternate years.

206 History and Literature of Early Christianity [A,B] HU  
A.McGuire  
The history, literature and theology of Christianity from the end of the New Testament period to the time of Constantine. 
Typically offered in alternate years.

212 Jerusalem: City, History and Representation [A] HU  
N.Koltun-Fromm  
An examination of the history of Jerusalem as well as a study of Jerusalem as a religious symbol and how the two interact over the centuries. Readings from ancient, medieval, modern and contemporary sources as well as material culture and art.

214 Prophetic Imaginations in the American Tradition HU (Cross-listed in African and Africana Studies)  
Staff  
An examination of prophecy as a form of social criticism in colonial and contemporary America. The course identifies the prophetic tradition as an extension of the American Jeremiad. Particular attention is given to Reinhold Niebuhr and Martin Luther King Jr.

215 The Letters of Paul [A,B] HU  
A.McGuire  
Close reading of the thirteen letters attributed to the apostle Paul and critical examination of the place of Paul in the development of early Christianity.

216 Images of Jesus HU  
A.McGuire  
212
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.

218 The Divine Guide: An Introduction to Shi'ism [A] HU
T.Zadeh
An exploration of the religious, social, and political dimensions of Shi'i Islam, from its early formation until the modern period. Topics include: authority and guidance; theology and jurisprudence; messianism and eschatology; scriptural exegesis; ritual and performance; gender; intersections between religion and politics.

221 Women and Gender in Early Christianity [A,C] HU (Cross-listed in Gender and Sexuality Studies)
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. Typically offered in alternate years.

222 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. Typically offered in alternate years.

231 Religious Themes in African American Literature [B] HU (Cross-listed in African and Africana Studies)
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.

236 Race, Culture, Representation: Blacks and Jews in America [A] HU
T.Hucks/K.Koltun-Fromm/T.Johnson
This course offers a constructive, interdisciplinary vision of the ways American Blacks and Jews represent, articulate, enact, and perform their religious and cultural identities. Using primary, secondary, visual, and material resources, the course will explore an array of themes that speak to the religious and social inter-sectionality of the Black and Jewish experience in America.

240 History and Principles of Quakerism SO
(Cross-listed in History and Peace and Conflict Studies-Bi Co Conc)
E.Lapsansky

242 Topics in Religion and Intellectual History: The Religious Writings of James Baldwin [A] HU
(Cross-listed in African and Africana Studies)
T.Hucks
Typically offered in alternate years.

245 Slavery, Catechism, and Plantation Missions in Antebellum America HU (Cross-listed in African and Africana Studies)
T.Hucks
This course will examine the influence of forms of Islam on the African American community throughout its history. Though the course will begin with the intra-African slave trade and the antebellum period, the bulk of the course will focus on 20th Century persons and events, particularly the Nation of Islam, its predecessors and successors.

247 Death and the Afterlife in East Asia HU
(Cross-listed in East Asian Studies)
H.Glassman
Prerequisite: One 100 level course in Religion, History, Anthropology, or East Asian Studies.

248 The Qur' an HU (Cross-listed in Comparative Literature)
T.Zadeh
Overview of the Qur'an, the scripture of Islam. Major themes include: orality/textuality; sanctity and material culture; revelation, translation, and inimitability; calligraphy, bookmaking and architecture; along with modes of scriptural exegesis as practiced over time by both Muslims and non-Muslims alike.

250 Jewish Images, Imagining Jews HU
K.Koltun-Fromm

251 Comparative Mystical Literature [B] HU
T.Zadeh
Readings in medieval Jewish, Christian and Islamic mystical thought, with a focus on the Zohar, Meister Eckhart, the Beguine mystics Hadewijch of Antwerp and Marguerite Porete, and the Sufi Master Ibn 'Arabi. The texts are a basis for discussions of comparative mysticism and of the relationship of mysticism to modern critical theories.
256 Zen Thought, Zen Culture, Zen History HU (Cross-listed in East Asian Studies and History)
H. Glassman

T. Zadeh
Explores literary and philosophical exchanges, alongside religious violence and persecution, amongst Jews, Christians, and Muslims in late Antiquity and the Middle Ages.

264 Religion and Violence [A] HU
T. Johnson
Drawing on rich anthropological and theological traditions, this course will explore the logic, function and rhetoric of phenomena such as sacrifice, martyrdom, and scapegoating. Our efforts to understand touchstone works of modern philosophy and anthropology will be aided by the screening of thematically related movies.

277 Modern Christian Thought [C] HU
D. Dawson
The impact of modernity on traditional Christian thought in the nineteenth-century West. Readings may include Hume, Kant, Schleiermacher, Hegel, Feuerbach, Nietzsche, Kierkegaard, and others.

278 Christian Thought from Modernity to Post-Modernity [A,B] HU (Cross-listed in Comparative Literature)
D. Dawson
Twentieth-century and Twenty-first-century Christian thought in the West. Readings may include Barth, Bultmann, Reinhild Nielsbuhr, Rahner, von Balthasar, Segundo, Tracey, Frei, McGaughe, Ignatius, Cone, Lindbeck, Marion, and others. Offered occasionally.

281 Modern Jewish Thought [C] HU (Cross-listed in Philosophy)
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, Mendelsohn, Cohen, Rosenzweig, Heschel, Buber, and Adler.

284 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.

286 Religion and American Public Life [A] HU (Cross-listed in Political Science)
T. Johnson
This course examines the role of Christianity in shaping America’s religious identity(ies) and democratic imagination(s). The course will also examine whether, if at all, citizens are justified in retrieving their religious commitments in public debates.

299 Theoretical Perspectives in the Study of Religion [A,B,C] HU
D. Dawson
An introduction to theories of the nature and function of religion from theological, philosophical, psychological, anthropological, and sociological perspectives. Readings may include: Schleiermacher, Marx, Nietzsche, Freud, Tylor, Durkheim, Weber, James, Otto, Benjamin, Eliade, Geertz, Foucault, Douglas, Smith, Berger, Haraway.

RELIGION SEMINARS AND INDEPENDENT STUDY
All religion department seminars may be repeated for credit with change of content.

282 The Allegorical Imagination HU (Cross-listed in Comparative Literature)
D. Dawson
An exploration of allegory as a recurring literary, philosophical, and religious phenomenon in Western literature and culture. Readings may include Philo, Origen, Augustine, Prudentius, Dante, Bunyan, Coleridge, Emerson, Auerbach, Bloom, Fletcher, DeMan.

301 Concentration Seminar A: Religious Traditions in Cultural Context [A] HU (Cross-listed in Gender and Sexuality Studies)
N. Koltun-Fromm
Typically offered every Fall.

302 Christians, Muslims, and Jews: Religion and Literature in Medieval Spain [A] HU
T. Zadeh
An exploration of literary and cultural exchanges between Jews, Christians and Muslims in Medieval Spain. Topics include: literary traditions, translation movements, philosophy, martyrdom, pilgrimage, the Reconquista, the Inquisition, orthodoxy/heterodoxy, religious persecution and intolerance.
303 Concentration Seminar B: Religion, Literature and Representation [B] HU
T. Hucks
Typically offered every Fall.

305 Concentrations Seminar C: Religion, Ethics and Society [C] HU
K. Koltun-Fromm
Typically offered every Fall.

306 Of Monsters and Marvels: Wonder in Islamic Traditions HU (Cross-listed in Comparative Literature)
T. Zadeh
From contemplating the cosmos to encountering the monstrous, this course explores the place of wonder in Islamic traditions through readings from the Qur’an, exegetics, prophetic traditions, popular literature, travel narratives, descriptive geography, philosophy and theology. Prerequisite: Consent.

307 Imagining Islam: Icon, Object, and Image HU
T. Zadeh
Explores the place of material and visual culture in Islam, examining how Muslims have conceptualized and deployed material and visual forms of religious expressions in a number of historical contexts.

308 Mystical Literatures of Islam HU (Cross-listed in Comparative Literature and Gender and Sexuality Studies)
T. Zadeh
Overview of the literary expressions of Islamic mysticism through the study of poetry, philosophy, hagiographies, and anecdotes. Topics include: unio mystica; symbol and structure; love and the erotic; body/gender; language and experience.

310 Sex and Gender in Japanese Buddhism HU (Cross-listed in East Asian Studies)
H. Glassman

332 Seminar: Theoretical Approaches to the Study of Black Religion [A, C] HU (Cross-listed in African and Africana Studies)
T. Hucks
This course will explore various theoretical approaches pertaining to the academic study of black religion. Major issues and debates addressed within the course include: syncretism, origins and retentions, accommodation vs. resistance, womanist challenges to black theology, and black church vs. extra-church orientations.

338 Seminar in American Civil Religion [A, C] HU
Staff

343 Seminar in Religions of Antiquity and Biblical Literature [A, B] HU
A. McGuire

345 Seminar in the History of Christianity: Unmaking and Remaking the World [A] HU
D. Dawson

349 Seminar in Modern Jewish Thought [C] HU
K. Koltun-Fromm
Advanced study of a specific topic in the field. May be repeated for credit with change of content. Prerequisite: Consent.

353 Seminar in Islamic Philosophy and Theology [B] HU
Staff
Selected topics and figures in Islamic philosophy, scholastic theology (kalam) or mystical philosophy. The relation of Islamic philosophy to Greek, Jewish and Indian thought are also discussed. Prerequisite: Consent.

D. Dawson

370 Topics in Buddhist Studies HU (Cross-listed in East Asian Studies)
H. Glassman
Prerequisite: EAST 201 or PHIL 242 or permission.

399 Senior Seminar and Thesis [A] HU
Prerequisite: Religion 301, 303, or 305 and the approval of the Department of Religion.

460 Teaching Assistant [A] HU
T. Hucks/K. Koltun-Fromm/T. Johnson
Prerequisite: Religion majors by consent.
480 Independent Study [A] HU
T. Johnson
Conducted through individual tutorial as an independent reading and research project.
Students may complete a major in Romance Languages.

The Departments of French and Francophone Studies, 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.

**ROMANCE LANGUAGES COORDINATORS**
Grace M. Armstrong, French and Francophone Studies
David Cast, Italian
Maria Cristina Quintero, Spanish

**ROMANCE LANGUAGES 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 and six courses in the second language and literature, including the Senior Conference in French. Students should consult with their advisers no later than their sophomore year in order to select courses in the various departments that complement each other.

The following sequence of courses is recommended when the various languages are chosen for primary and secondary concentration, respectively (see the departmental listings for course descriptions).

**FIRST LANGUAGE AND LITERATURE**

**French**
FREN 101-102 or 101-105; or 005-102 or 005-105.
Four literature courses at the 200 level.
FREN 260 (BMC) or 212 (HC).
Two courses at the 300 level.

**Italian**
ITAL 101, 102, or 105.
Two literature courses at the 200 level.
Two literature courses at the 300 level.

**Spanish**
SPAN 200.
SPAN 202.
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 SPAN 398 (Senior Seminar).* When French is chosen as either the first or second language, students must take the first semester Senior Conference in French (FREN 398) in addition to the coursework described above.** When Italian is chosen, students must take ITAL 399, offered in consultation with the department, in addition to the coursework described above in order to receive honors.*** 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.

Please note that 398 does not count as one of the two required 300 level courses.

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.

* In order to receive honors, students whose first language is Spanish are required to write a senior essay (SPAN 399).
** For students whose first language is French, honors are awarded on the basis of performance in Senior Conference and on a successfully completed thesis or senior essay.
*** In order to receive honors, students whose first language is Italian are required to write a senior essay (ITAL 399).
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.

RUSSIAN FACULTY
At Haverford College
Professor Linda G. Gerstsein
Professor Vladimir Kontorovich

At Bryn Mawr College
Professor Elizabeth C. Allen
Lecturer Sharon Bain, Director of the Russian Flagship Program
Professor Dan E. Davidson, Director of Russian Language Institute
Associate Professor Timothy C. Harte, Chair and Major Advisor
Instructor Olga Prokopenko
Department Assistant Billie Jo Stiner, Assistant Director of Russian Language Institute
Instructional Assistant Ekaterina Tarkhanova

RUSSIAN MAJOR REQUIREMENTS
A total of 10 courses is 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 RUSS 398, Senior Essay, or RUSS 399, Senior Conference.

Majors are encouraged to pursue advanced language study in Russia in 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. As part of the requirement for RUSS 398/399, all Russian majors take senior comprehensive examinations that cover the area of concentration and Russian language competence.

RUSSIAN MINOR REQUIREMENTS
Students wishing to minor in Russian must complete six units at the 100 level or above, two of which must be in the Russian language.

RUSSIAN 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.

RUSSIAN COURSES
RUSS B001, B002 Elementary Russian Intensive
D. Davidson
Study of basic grammar and syntax. Fundamental skills in speaking, reading, writing and oral comprehension are developed. Eight hours a week including conversation sections and language laboratory work.

RUSS B101, B102 Intermediate Russian
S. Bain
Continuing development of fundamental skills with emphasis on vocabulary expansion in speaking and writing. Readings in Russian classics and contemporary works. Seven hours a week.

RUSS B112 The Great Questions of Russian Literature
E. Allen
This course examines profound questions about the nature and purpose of human existence raised by preeminent 19th- and 20th-century Russian authors in major literary works, including Bulgakov’s The Master and Margarita, Chekhov’s The Seagull and The Cherry Orchard, Dostoevsky’s The Brothers Karamazov, Solzhenitsyn’s One Day in the Life of Ivan Denisovich, Tolstoy’s War and Peace and Turgenev’s Sketches from a Hunter’s Album. Discussions address the definition of good and evil, the meaning of freedom, the role of rationality and the irrational in human behavior, and the relationship of art to life. No knowledge of Russian is required.

RUSS B115 The Golden Age of Russian Literature
E. Allen
Introduces seminal works that formed the foundation of modern Russian literature. Examining texts in a wide range of genres, students read influential fictional works that illuminate not only Russian character, history and society but also European culture in the early nineteenth century. Considers themes like the nature of freedom, the idea of irrationality, and the complexities of moral judgment. Particular attention is paid to "play" in various forms that Dostoevsky, Gogol, Lermontov, Pushkin, Tolstoy, and Turgenev incorporated in their rapid creation of a modern literary tradition. All readings, lectures, and discussions are conducted in English. Not offered in 2010-11.
RUSS B201, B202 Advanced Russian
T.Harte
Intensive practice in speaking and writing skills using a variety of modern texts and contemporary films and television. Emphasis on self-expression and a deeper understanding of grammar and syntax. Five hours a week.

RUSS B212 Russian Modernism—Silver Age
E.Allen
This course surveys novels, short stories, plays, and poetry associated with Russia’s turn into the 20th century and the rise of modernism. Contemporary works of music and painting are also considered.

RUSS B221 The Serious Play of Pushkin and Gogol
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. No knowledge of Russian is required. Not offered in 2010-11.

RUSS B223 Russian and East European Folklore
S.Bain
This interdisciplinary course introduces students to major issues in Russian and East 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 of folklore on literature, music and art. No knowledge of Russian is required. Not offered in 2010-11.

RUSS H225 Dostoevsky: Daydreams and Nightmares HU
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 Brothers Karamazov, The Idiot, Notes from Underground, and "White Nights." Not offered in 2010-11.

RUSS B235 The Social Dynamics of Russian
D.Davidson
An examination of the social factors that influence the language of Russian conversational speech, including contemporary Russian media (films, television and the Internet). Basic social strategies that structure a conversation are studied, as well as the implications of gender and education on the form and style of discourse. Prerequisite: RUSS 201, 202, may be taken concurrently.

RUSS B238 History of Cinema 1895 to 1945-
Silent Film: U.S.-Soviet Russia
T.Harte
RUSS H244 Russia from 1800-1917 SO (Cross-listed in History)
L.Gerstein
Topics considered include the culture of serfdom, Westernization, reforms, modernization, national identities, and Revolution.

RUSS H245 Russia in the 20th Century SO (Cross-listed in History)
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 2010-11.

RUSS H249 The Soviet System and Its Demise SO (Cross-listed in Economics and Political Science)
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 Econ, Pols, or Hist.

RUSS B252 The Masterpieces of Russian and Soviet Cinema
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 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 2010-11.

RUSS B254 Russian Culture & Civilization
S.Bain
A history of Russian culture—its ideas, its value and belief systems—from the origins to the present that
integrates the examination of works of literature, art, and music.

RUSS B258 Soviet and East European Cinema of the 1960s: War, Politics and Gender Conflicts
T.Harte
This course examines Soviet and Eastern European "New Wave" cinema of the 1960s, which broke new ground in world cinema through its treatment of war, politics, and aesthetics. Films from the Czechoslovakia, Poland, Soviet Union, and Yugoslavia to be viewed and analyzed include Milos Foreman's Love of a Blonde, Dushn Makavejev's W.R. Mysteries of the Organism, Andrej Tarkovsky's Andrei Rublev, and Andrzej Wajda's Ashes and Diamonds. Readings on introductory film theory, film history, and the biographies of individual directors will also be discussed. All films will be shown with subtitles; no knowledge of Russian or previous study of film required. Not offered in 2010-11.

RUSS B261 The Russian Anti-Novel (Cross-listed as COML B261)
E.Allen
A study of 19th- and 20th-century Russian novels focusing on their strategies of opposing or circumventing European literary conventions. Works by Bulgakov, Dostoevsky, Nabokov, Pushkin and Tolstoy, 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 2010-11.

RUSS B271 Chekhov: Stories & Plays in Trans
T.Harte
A study of the themes, structure and style of Chekhov's major short stories and plays. The course will also explore the significance of Chekhov's prose and drama in the English-speaking world, where the Russian is the most staged playwright after Shakespeare. All readings and lectures in English.

RUSS B277 Nabokov in Translation (Cross-listed as ENGL B277)
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 2010-11.

RUSS B305, B306 Advanced Russian: Syntax and Style
T.Harte
This course focuses on stylistic variations in oral and written Russian. Examples are drawn from contemporary film, television, journalism, fiction and nonfiction. Emphasis is on expansion and refinement of speaking and writing skills. Not offered in 2010-11.

RUSS B310 Old Russian
D.Davidson
This advanced undergraduate 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, and others. The political and cultural background of the period will be addressed. Conducted in Russian and English. Not offered in 2010-11.

RUSS B330 The Structure of Modern Russian I: Phonetics, Phonology and Morphology
D.Davidson
This seminar introduces advanced undergraduate and graduate students to the linguistic structure of contemporary standard Russian. Topics to be discussed include theoretical and practical issues in the description of Russian phonology, phonetics and intonation; verbal and nominal morphology; and accentuation. Conducted primarily in Russian. Followed by RUSS 331. Not offered in 2010-11.

RUSS B331 The Structure of Modern Russian II: Syntax, Semantics, Pragmatics
D.Davidson
This seminar introduces advanced undergraduate 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 2010-11.

RUSS B335 Intercultural Pragmatics in Second Language Acquisition
S.Bain
Examines language use in cross-cultural contexts and the acquisition of conversational Russian. Compares the linguistic structure of speech acts in Russian and English, such as requests, commands, apologies, complaints and threats and explores communication and social relationships between learners of Russian and native speakers. Other topics include the pragmatics of gender, body language and etiquette in Russian. Prerequisite: RUSS B101, B102 or equivalent. Not offered in 2010-11.

RUSS B342 Russian Culture Today
T.Harte
This seminar focuses on current cultural trends in Russia, with special emphasis on the interplay
between various artistic media and post-Soviet Russia’s rapidly developing society. Students will be introduced to contemporary Russian literature, painting, television, film and music while considering such topics as Russia’s ambiguous attitude toward the West, the rise of violence in Russian society and Russia’s evaluation of the past. Prerequisite: RUSS 102 or the equivalent. Not offered in 2010-11.

RUSS B347 Qualitative Methods in Second Language Acquisition
S. Bain
This course introduces students to qualitative research design and its application in the study of second language acquisition. Considering ethnography as a research paradigm, discussions will critique existing second language acquisition research that is conducted using qualitative methods. This class will also give students an opportunity to apply their theoretical understanding of qualitative methods to the design of their own research project. Not offered in 2010-11.

RUSS B356 Topics in Modern European History
SO (Cross-listed in History)
L. Gerstein
Russian Literature and Russian Society (War and Peace, Crime and Punishment, Quiet Flows the Don, Dr. Zhivago, Master and Margarita, and The First Circle).

RUSS B360 Identity and Second Language Acquisition
Staff
Introduces the concept of linguistic identity in relation to other identity facets (i.e. gender, ethnicity, class and culture) and explores ways in which acquisition of a second language affects self-conception and self-representation. Employs critical discourse analysis to discuss how second language learners construct identities through socialization into new speech communities. No knowledge of Russian is required. Not offered in 2010-11.

RUSS B365 Russian and Soviet Film Culture
T. Harte
This seminar explores the cultural and theoretical trends that have shaped Russian and Soviet cinema from the silent era to the present day. The focus will be on Russia’s films and film theory, with discussion of the aesthetic, ideological and historical issues underscoring Russia’s cinematic culture. No previous study of cinema required, although RUSS 201 or the equivalent is required. Not offered in 2010-11.

RUSS B370 Acquisition of Russian as a Second Language
D. Davidson
This seminar introduces advanced undergraduate 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. Conducted primarily in Russian. Not offered in 2010-11.

RUSS B375 Language and Identity Politics of Language in Europe and Eurasia
D. Davidson
A brief general introduction to the study of language policy and planning with special emphasis on the Russophone world, the newly independent states of the former Soviet Union. Surveys current theoretical approaches to bilingualism and language shift. Analyzes Soviet language and nationality policy using published census data for the Soviet period through 1989. Focus on the current "language situation" and policy challenges for the renewal of functioning native languages and cultures and maintenance of essential language competencies, lingua franca, both within the Russian Federation and in the "Near Abroad." Not offered in 2010-11.

RUSS B380 Seminar in Russian Studies: New Developments in Contemporary Russian Language
D. Davidson
An examination of a focused topic in Russian literature such as a particular author, genre, theme or decade. Introduces students to close reading and detailed critical analysis of Russian literature in the original language. Readings in Russian. Some discussions and lectures in Russian. Prerequisites: RUSS 201 and one 200 level Russian literature course.

RUSS B390 Russian for Pre-Professionals I
O. Prokopenko
This capstone to the overall language course sequence is designed to develop linguistic and cultural proficiency in Russian to the "advanced level," preparing students to carry out advanced academic study or research in Russian in a professional field. Prerequisite: RUSS 305-306 or equivalent, certified proficiency levels of 2- or 2 in two skills, one of which must be oral proficiency.

RUSS B391 Russian for Pre-Professionals II
O. Prokopenko
Second part of year long capstone language sequence designed to develop linguistic and cultural proficiency to the "advanced level," preparing students to carry out advanced academic study or research in Russian in a professional field. Prerequisite: RUSS 390 or equivalent.

RUSS B398 Senior Essay
E. Allen, S. Bain, D. Davidson, T. Harte
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.
RUSS B399 Senior Conference  
S. Bain  
Exploration of an interdisciplinary topic in Russian culture. Topic varies from year to year. Requirements may include short papers, oral presentations and examinations.

RUSS B403 Supervised Work  
Staff

RUSS H480 Independent Study  
L. Gerstein
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.

Sociology Faculty
Professor Mark Gould, Chair
Assistant Professor Lisa McCormick
Assistant Professor Anat Yom-Tov
Associate Professor William F. Hohenstein, Emeritus

Sociology 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 six 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. Normally, such credit will be granted if the courses enhance the integrity of a program grounded in the Haverford curriculum.

Sociology 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.

Sociology Courses
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. Offered occasionally.

133 Social Problems SO
A. Yom-Tov
This course is designed to identify the nature and severity of social problem and to evaluate proposed solutions to such problems. The goal of this class is to provide basic tools to answer questions such as the following: What constitutes a social problem? Who defines when something is a social problem? Why do some social problems receive so much attention, while others are ignored? Under what conditions do different types of social problems emerge? In this course, students will learn to think critically about a variety of social problems in our society and about the strategies and policies designed to solve problems such as poverty, crime, wage inequality, educational inequality, racism and sexism. Students will learn to criticize popular discourses from a critical sociological perspective and will be encouraged to form their own opinions and critiques.

155 Foundations in Social Theory SO
L. McCormick
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, and Piaget. There is some variation between different sections of the course.

207 Internal Disorder: Deviance and Revolution SO
M. Gould
Offered occasionally.

215 Quantitative Methods SO/QU
A. Yom-Tov
An introduction to the use of statistics in sociological research. Prerequisite: Soc 155 a or b or permission of instructor.

235 Class, Race, and Education SO (Cross-listed in African and Africana Studies and Peace and Conflict Studies-Bi Co Conc)
M. Gould
An examination of the effects of class and race on educational and occupational outcomes, emphasizing the contemporary United States.

237 Topics in Historical Sociology SO
M. Gould

244 Self and Society SO
L. McCormick
An examination of the historical, cultural, embodied, and interactional contexts in which selfhood is defined, experienced, and enacted. Particular emphasis on the perspectives of symbolic interactionism, social constructionism, and ethnomethodology to analyze the processes and settings in which selfhood is constituted, disrupted, and transformed. Typically offered in alternate years.

252 Social Change SO
Staff
Prerequisite: Sociology 155a or b, or consent of instructor.

257 Sociology of the Arts SO (Cross-listed in Music)
L.McCormick
An introduction to sociological perspectives on the arts. Topics include the relationship between art and social structure, the social sources of aesthetic meaning, the social consequences of artistic classifications and representations, the use of art to construct and undermine social boundaries, the social relations of creating, producing, evaluating, and consuming art, the functions of art in everyday life, and the potential for art to promote social change. Typically offered in alternate years.

260 Contemporary Issues in Immigration SO
A.Yom-Tov
This course is designed to cover the main areas of social science research on immigration. It will advance understanding of processes of migration and the effects of immigration, while evaluating competing and complementary theoretical frameworks explaining these migratory processes.

266 Inequality in Labor Markets SO
A.Yom-Tov
The course provides a conceptual and theoretical framework for understanding labor market inequality in the United States. Students will compare and contrast sociological theories and arguments with the economic theories that have had an impact on the sociological study of trends in the levels of inequality, the nature of employment, disparities in access to employment, gender and racial inequality.

275 Sociology of Formal Organizations SO
Staff
This course is aimed as an introduction to classical and contemporary sociological research on organizations. Prerequisite: Socl 155a or b or consent of the instructor. Typically offered in alternate years.

277 Political Sociology SO
M.Gould
An introduction to the study of political systems and the interrelationships between the polity and other societal subsystems. Typically offered in alternate years.

297 Economic Sociology SO (Cross-listed in Economics)
M.Gould
The sociological analysis of economic systems and the sociological reconstruction of microeconomic and philosophical theories. Prerequisite: Socl 155a or b, Econ 105, or consent of the instructor. Typically offered in alternate years.

298 Law and Sociology SO
M.Gould
An examination of the jurisprudential consequences derived from the sociological reconstruction of microeconomic and philosophical theories. Typically offered in alternate years.

320 Advanced Quantitative Methods for Sociologists SO/QU
A.Yom-Tov
Advanced statistical methods and regression analyses. Prerequisite: Sociology 215 or equivalent. The course assumes knowledge of descriptive statistics, correlations, the theory of estimation and hypothesis testing. Previous exposure to regression would be an advantage.

356 Seminar in Social Theory SO
M.Gould, Staff
Prerequisite: Socl 155 a or b.

450 Senior Departmental Studies SO
M.Gould, L.McCormick, A.Yom-Tov
Thesis work, two semesters required of majors in their senior year.

460 Teaching Assistant SO
M.Gould
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.

480 Independent Study SO
M.Gould, L.McCormick, A.Yom-Tov
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.
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 001-002, 100, 101, and 102).

2) Language instruction is followed by courses in literature, film, culture and civilization, and linguistics 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 240: Latin American and Iberian Culture and Civilization; Spanish/Comparative Literature; 250: Quixotic Narratives; and 266: Iberian Orientalism and the Nation).

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.

**SPANISH FACULTY**

Barbara Riley Levin Professor of Spanish
Israel Burshatin
Associate Professor Roberto Castillo Sandoval
Visiting Associate Professor Ariana Huberman
Associate Professor Graciela Michelotti
Assistant Professor Ana López Sánchez
Assistant Professor Aurelia Gómez Unamuno

**SPANISH MAJOR REQUIREMENTS**

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 (two semesters), 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.

Spanish B200 “Temas culturales” and B202 “Introducción al análisis literario” (formally cited at the 100 level) do not count for major requirements.

**SPANISH MINOR REQUIREMENTS**

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.

Spanish B200 “Temas culturales” and B202 “Introducción al análisis literario” (formally cited at the 100 level) do not count for minor requirements.

**SPANISH 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.

**SPANISH COURSES**

**001 Elementary Spanish HU**

**Staff**

Development of basic phonetic and structural skills. Greatest emphasis is placed on spoken Spanish, with...
grammar and written exercises, to develop oral proficiency. The course meets for five hours a week: three hours with the instructor and two hours in mandatory tutorial sections. This is a two-semester course. Both semesters are needed to receive credit. Students must register in the same section in the Spring semester even if the instructor changes. This section and 002B01 reserved for those who have not had Spanish before. Does not count toward the major. Typically offered every Fall.

002 Elementary Spanish HU
Staff
Development of basic phonetic and structural skills. Greatest emphasis is placed on spoken Spanish, with grammar and written exercises, to develop oral proficiency. The course meets for five hours a week: three hours with the instructor and two hours in mandatory tutorial sections. This is a two-semester course. Both semesters are needed to receive credit. Prerequisite: Spanish 001. Does not count toward the major. Typically offered every Spring.

100 Basic Intermediate HU
Staff
A course for students who have achieved a basic knowledge of Spanish but have limited experience and/or confidence communicating in the language. Students will improve their conversational and writing skills while learning about the 'realities' of Spanish-speaking countries. The course meets for five hours a week: three hours with the instructor and two hours in mandatory tutorial sections. Prerequisite: Access only through placement exam. Does not count toward the major. Typically offered every Fall.

101 Intermediate Spanish HU
A.Huberman
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. The course meets for five hours a week: three hours with the instructor and two hours in mandatory tutorial sections. Prerequisite: Spanish 002, placement, or consent. Does not count toward the major. Typically offered every Fall.

102 Advanced Intermediate Spanish HU
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. The course meets for five hours a week: three hours with the instructor and two hours in mandatory tutorial sections. Prerequisite: Spanish 101, placement, or consent. Does not count toward the major. Typically offered every Semester.

201 Exploring Critical Issues Through Writing HU
A.Lopez-Sanchez
The course aims to provide students with the skills necessary to successfully undertake writing assignments in the upper-division Spanish courses. Students will be engaged in discussions of, and write about topics such as identity, borders and migrations, and manifestations of violence. Prerequisite: Spanish 102, placement, or consent.

203 Writing the Jewish Trajectories in Latin America HU (Cross-listed in Comparative Literature and Latin American and Iberian Studies)
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, placement, or consent.

205 Studies in the Spanish American Novel HU (Cross-listed in Comparative Literature and Latin American and Iberian Studies)
G.Michelotti
Introduction to selected short 20th-century Spanish-American short stories and novels. Prerequisite: Spanish 102, placement, or consent. Typically offered in alternate years.

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, placement, or consent of the instructor.

210 Spanish and Spanish American Film Studies HU (Cross-listed in Comparative Literature and Latin American and Iberian Studies)
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 classic and more recent directors such as Luis Buñuel, Carlos Saura, Pedro Almodovar, Lucrecia Martel among others. The class will focus 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: Span 102, placement, or consent.

214 Writing the Nation: 19th-Century Literature in Latin America HU (Cross-listed in Comparative Literature and Latin American and Iberian Studies)  
R. Castillo Sandeval  
An examination of seminal literary texts written in Latin America in the nineteenth 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.

221 Narrating Modern Mexico HU  
A. Gómez Unamuno  
The course focuses on cosmopolitanism and on representations of the rural world as a contradictory modernity in seminal Mexican novels. Prerequisite: Span 102, placement, or consent.

222 Rethinking Latin America in Contemporary Narrative HU (Cross-listed in Comparative Literature and Latin American and Iberian Studies)  
A. Gómez Unamuno  
This course explores literary texts and films produced after the 80s. These texts address political issues including memory, gender, violence, and border, and destabilize foundational identities and mythic representations found in the Latin American Boom narrative. Prerequisite: Spanish 102, placement, or consent.

230 Medieval and Golden Age Spain: Literature, Culture, and Society HU (Cross-listed in Latin American and Iberian Studies)  
I. Burshatin  
Introduction to the culture and literature of medieval and early modern Spain: Castilian, religious diversity, and cultural transformations, from the Reconquest to the Habsburgs. Prerequisite: Spanish 102, placement, or consent.

235 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 chosen acts or scenes from one or more of the plays analyzed during the semester. Prerequisite: SPAN 102, placement, or consent of the instructor.

240 Latin American and Iberian Culture and Civilization HU (Cross-listed in Latin American and Iberian Studies)  
Staff  
An interdisciplinary exploration of Latin America and Spain. Topics will include imperial expansion, colonialism, independence, national and cultural identities, and revolution. This course is designed to serve as the introduction to the Concentration in Latin American and Iberian Studies. Course taught in English.

248 Poetry and Politics in Spain HU (Cross-listed in Latin American and Iberian Studies)  
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 Fuentes). Prerequisite: Spanish 102, placement, or consent.

250 Quixotic Narratives HU (Cross-listed in Comparative Literature and Latin American and Iberian Studies)  
I. Burshatin  
Study of Cervantes, Don Quixote and of some of the works of fiction, criticism, philosophy, music, art and film which have drawn from Cervantes’s novel or address its formal and thematic concerns, including self-reflexivity, nation and narration, and constructions of gender, class, and “race” in narrative. Other authors read include Borges, Foucault, Laurence Sterne, Graham Greene, Vladimir Nabokov, and Kathy Acker. Course taught in English.

260 Understanding Contemporary Spain: Its Debates and Transformation HU  
A. Lopez-Sanchez  
The course explores the social and political questions that have shaped Spain in the post-Franco era, and the language that defines them. We will examine the transition to democracy, nationalism and the shifts in linguistic policy, the 'Basque problem,' and the current debates over national identity. Prerequisite: SPAN 102, placement, or consent.

266 Iberian Orientalism and the Nation HU (Cross-listed in Comparative Literature and Latin American and Iberian Studies and African and Africana Studies)  
I. Burshatin  

This course examines cultural production in the frontier cultures of medieval Iberia and the patterns of collaboration and violence among Islamic, Christian, and Jewish communities. Other topics include Christian "reconquest" and the construction of Spanishness as race and nation; foreign depictions of Spain as Europe’s exotic other; internal colonialism and Morisco resistance; and contemporary African migrations. Class conducted in English. Prerequisite: Freshman Writing or Span 102 or consent.

273 The Invention of Pablo Neruda: Poetics and Politics HU
I.Burshatin, 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: Span 102, placement, or consent.

280 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. Offered occasionally.

307 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.

312 Inquiring Minds: Inquisition, Writing, and the Early Modern Subject HU
I.Burshatin
Prerequisite: Spanish 200 level, placement, or consent.

313 Literature of the Caribbean HU (Cross-listed in Latin American and Iberian Studies)
I.Burshatin
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.

315 Novísima literatura hispanoamericana HU
G.Michelotti
A selection of recent, representative Latin American fiction, examined in light of the transformations in the narrative discourse after the seminal novels of the Latin American "Boom" of the 60’s and 70’s. Prerequisite: A 200 level course or consent of instructor.

320 Spanish American Colonial Writings HU (Cross-listed in Comparative Literature and Latin American and Iberian Studies)
R. Castillo Sandoval
Representative writings from the textual legacy left by Spanish discovery, conquest, and colonization of the New World. Emphasis will be placed on the 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: One 200 level Spanish course or consent.

322 Politics of Memory in Latin America HU (Cross-listed in Comparative Literature)
A.Gomez Unamuno
Memory and the writing of history in contemporary Latin American narratives. We will address themes such as the struggle against forgetting, the construction of memory, and the writing of the official history in novels, testimonies and documentaries. Prerequisite: Spanish 200 level, or consent of the instructor.

324 Gender Dissidence in Hispanic Writing HU (Cross-listed in Comparative Literature and Gender and Sexuality Studies and Latin American and Iberian Studies)
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 of Avila; Gloria Anzaldúa; and Reinaldo Arenas. Prerequisite: A 200 level course or consent of the instructor.

340 The Moor in Spanish Literature HU (Cross-listed in African and Africana Studies)
I.Burshatin
The discourse concerning Spain’s Muslims and their descendants: the Moor as other (sensual, fanatical or exemplary but flawed) and as a metaphor of power, from the Christian Reconquest and the expulsion of the Moriscos to Juan Goytisolo’s Reivindicación del conde don Julián. Prerequisite: A 200 level course or consent of the instructor.

343 The Latin American City and its Narratives HU (Cross-listed in Comparative Literature and Latin American and Iberian Studies)
G.Michelotti
An exploration of how literary and visual art texts have imagined the Latin American metropolitan space. Students will reflect on the representation of urban communities in Latin American cities such as Buenos Aires, Mexico and Havana among others. Prerequisite: A 200 level course, or consent of the instructor.

352 Evita and Her Sisters HU (Cross-listed in Comparative Literature and Gender and Sexuality Studies and Latin American and Iberian Studies)
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 time 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. Female subjects would include: Malinche, Virgen de Guadalupe, La Llorona, Sor Juana Inés de la Cruz, testimonial literature, Mothers of Plaza de Mayo, and Frida Kahlo. Prerequisite: A 200 level course or consent of the instructor.

360 Learning-Teaching a Foreign Language HU (Cross-listed in Education)
A.Lopez-Sánchez
This course is designed for the advanced student of Spanish, who is interested in the processes involved in learning a foreign language, and/or contemplating teaching it. Prerequisite: A 200 level course, or consent of the instructor.

365 The Politics of Language in the Spanish-Speaking World HU (Cross-listed in Linguistics)
A.Lopez-Sánchez
The course will explore the relationship between (national) identity and language, and the specific outcomes of (language) policies and educational practices in societies where Spanish is spoken, generally alongside other mother tongues, often as the dominant language, but also in a minority situation. Prerequisite: A 200 level course or consent of instructor.

385 Popular Culture, Cultural Identity and the Arts in Latin America HU (Cross-listed in Comparative Literature and Latin American and Iberian Studies)
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 "folletí" (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, popular dance, and the cinema. Prerequisite: A 200 level course or consent of instructor.

480 Independent Study HU
I.Burshatin
Prerequisite: Consent of the instructor. Offered occasionally.

490 Senior Departmental Studies HU
R.Castillo Sandoval
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. Typically offered every Semester.

COURSES OFFERED AT Bryn MAWR COLLEGE
Composición avanzada
Borges y sus lectores
“Memoria negra”: la literatura afro-hispánica en África y las Américas
El cuento y la novela corta
Ariel-Calibán- el discurso americano
Escriptoras españolas
Teatro del siglo de oro
La representación de la mujer
Adaptaciones literarias en el cine español
Surrealismo al realismo mágico
La novela latina
Brown Affect: Narrating Latina/o Lives
TransNation: Queer Diasporas
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 writers who can construct arguments that matter, craft prose that resonates with their intended audience, and understand how writing and learning cannot be extricated. The Writing Program is affiliated with the Writing Center, and administers the first-year writing seminars.

All first-year students take one of these writing seminars. 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 prepare students who need extra exposure to academic writing. To help students negotiate the demands of academic writing, courses include practice in critical reading, argumentation, style, and editing; they also stress writing as a process, where the first draft is not the last and where feedback from peers becomes crucial in revising.

Students interested in Creative Writing will find these courses listed under the English Department.

WRITING PROGRAM FACULTY
Acting Director of the Writing Program and Assistant Professor of English Debora Sherman
Visiting Assistant Professor of Writing and Consultant to the Writing Program Kristin Lindgren
Elizabeth Ufford Green, Professor of Natural Sciences
Judith Owen, Professor of History
Emma Lapsansky-Werner, Associate Professor of French
Duane Kight, Assistant Professor of English
Laura McGrane, Visiting Assistant Professor of English
Tom Devaney, Visiting Assistant Professor of English
Peter Gaffney, Visiting Assistant Professor of Visual Culture, Fine Arts and Philosophy
John Muse, Visiting Assistant Professor of Writing
Joseph Benatov, Visiting Assistant Professor of Writing
Sue Benston, Visiting Assistant Professor of Writing
Barbara Hall, Visiting Assistant Professor of Writing and Philosophy
Hanna Pitkin, Visiting Assistant Professor of Writing
April Logan, Visiting Assistant Professor of Writing
Matt Ruben, Visiting Assistant Professor of Writing
Carol Schilling, Visiting Instructor of Writing
Christian DuComb, Visiting Assistant Professor of Visual Culture

WRITING PROGRAM COURSES

106 Children of the Night and Their Music

HU

D. Koltonski
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). Prerequisite: Open only to first-year students as assigned by the Director of College Writing. (Satisfies the first year writing requirement.)

107 Political Obligation and Civil Disobedience

HU

D. Koltonski
One fundamental issue in political morality concerns what you owe, as a citizen, to your country or your fellow citizens. Since virtually everyone is a citizen of some country, the question of what duties, if any, citizenship brings with it is a pressing one. In this course, we will take up this issue by asking the following sorts of questions: What is the purpose of law? When do you have a moral duty to obey the law? Can you have a moral duty to fight and even to die for your country? When is civil disobedience morally justified? Can it ever be morally required? Do your answers change when the country is a democracy? We will look at several historical and contemporary authors’ answers to these questions, including John Locke, David Hume, Henry David Thoreau, Martin Luther King, Hanna Pitkin, George Orwell and John Rawls. Prerequisite: Open only to students as assigned by the Director of the Writing Program. (Satisfies the first year writing requirement.)

109 Perspectives on Immigration and Education in the United States

B. Hall
The primary goal of this course is to challenge students as academic readers, writers and thinkers while providing support for continuous growth. We will immerse ourselves in the historical, social, cultural, political, linguistic, and various other contexts of immigration to the United States, with a focus on salient issues relating to k-12 public education. What kinds of experiences, we will ask, have immigrant students had in American schools in the past century? Have schools served this population well? How are schooling and citizenship related? Does public education facilitate or hinder immigrant students in attaining the “American dream” of success and fortune? How do various kinds of educational practice (like bilingual education, English as a Second Language
115 Encounters with the Unconscious: Dreams, Memory & Madness HU
P. Gaffney
What is the unconscious and how does it work? How does it differ from conscious thought and language—what is it trying to say? This course will consider the role of the unconscious in memory, madness, and contemporary visual culture, as well as its influence on our own writing. Beginning with William James’s work on the unconscious and stream of consciousness writing, we will proceed by reading works by André Breton, Virginia Woolf, Kurt Vonnegut, and Philip K. Dick, and viewing films like Fight Club, Brazil, The Matrix and Blade Runner. Prerequisite: Open only to first-year students as assigned by the Director of College Writing. (Satisfies the first year writing requirement.)

116 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. Prerequisite: Open only to first-year students as assigned by the Director of College Writing. (Satisfies the first year writing requirement.)

117 Reading Culture: Poverty in the United States HU
M. Ruben
Poverty is one of the most persistent problems and controversial issues in the United States. Along with its obvious economic dimensions, poverty has a wide variety of cultural meanings. In fact, the subject of poverty forces us to think critically about how we define and understand the concept of culture. Through a selective critical examination of fiction and nonfiction works addressing the theme of poverty in America, this course will explore key methods for studying and writing about culture. It will look at how poverty and poor people have been discussed and represented in the United States at various points during the last 125 years, and it will provide an opportunity to explore the many ways “poverty” and “culture” intersect and interact, each term affecting the meaning of the other. Readings from Horatio Alger, Sandra Cisneros, Michael Eric Dyson, Barbara Ehrenreich, Michael Harrington, Jacob Riis, and Richard Wright. Prerequisite: Open only to first-year students as assigned by the Director of College Writing. (Satisfies the first year writing requirement.)

118 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? Prerequisite: Open only to first-year students as assigned by the Director of College Writing. (Satisfies the first year writing requirement.)

119 Memoirs About Creating a Life in Science or Medicine HU
C. Schilling
This seminar brings together two seemingly dissimilar activities: writing about a life and making a career in science or medicine. Yet life writing—a term that includes autobiography, memoir, personal essay, biography, blog, and more—and doing science or medicine have more in common than might at first seem likely. They share the intellectual pursuit of making discoveries, the ethical challenge of creating trust, and the act of making choices. This semester we’ll read a selection of life writing that describes the process of becoming a scientist or physician. The readings will include first-person essays by physicians and Audrey Young’s memoir of her moral and professional growth during her first years as a hospital physician, The House of Hope and Fear. We’ll also turn to James Watson’s The Double Helix, which describes the work in his early twenties that led to the co-discovery of the structure of DNA molecule, and Brenda Maddox’s biography Rosalind Franklin: The Dark Lady of DNA, written to correct Watson’s representation of Franklin. While these readings will expose some myths about doing science and medicine, they’ll also create new ones. The readings will also instigate ethical questions about life writing itself, especially about the responsibilities and complexities of representing one’s self and others to the world. This project will ultimately invite us to explore relationships between composing a story and composing a life. Prerequisite: Open only to first-year students as assigned by the Director of College Writing. (Satisfies the first year writing requirement.)

120 Evolutionary Arguments HU
C. Schilling
When Darwin somewhat humbly prophesized at the end of The Origin of Species, “In the distant future I see open fields for far more important researches,”
he was thinking about research into the past. "Light will be thrown," he added, "on the origin of man and his history." While that prediction has come true, other research that follows his theory of selection has focused on the future, one shaped by efforts to directly control the human genome. In this seminar, we'll read and debate recent arguments by bioethicists about the ethics of genetic manipulations and follow those arguments into such works of the imagination as the film GATTACA and Kenny Fries's memoir, The History of My Shoes and the Evolution of Darwin's Theory. Along the way, we'll pause to learn about the eugenics movement of the past and cultural understandings of human perfection, normalcy, and disability. We'll question the formal structures of the arguments, their definitions of key terms like natural, and the assumptions they make about human relationships, aspirations, and worth. **Prerequisite:** Open only to first-year students as assigned by the Director of College Writing. (Satisfies the first year writing requirement.)

**124 Writing and the Senses HU**

_T. Devaney_

"What I am trying to translate," Cezanne said, "is more mysterious; it is entwined in the very roots of being." Reading our senses requires interpretation. What do the senses teach us about ourselves? How do they help us understand who we are in our sense-saturated world? How do the senses simultaneously inform each other? What on-going problems do they pose and which do they help us resolve? "Writing and the Senses" is a course that will help you to become a more effective and sophisticated writer using the five senses as a focus. The mode of the class is "close reading" and the analysis of text combined with the exploration of how our sense-data provides insight into the cognitive, biological, and spiritual aspects of our human nature. The seminar is designed to sharpen and broaden your senses and sensibilities via expository writing. Readings include selections from _Flush: A Biography_ by Virginia Woolf, _Letters on Cezanne_ by Rainer Maria Rilke, _Proust Was a Neuroscientist_ by Jonah Lehrer, _Musicalophilia: Tales of Music and the Brain_ by Oliver Sacks, and _How to Cook a Wolf_ by M.F.K. Fisher. **Prerequisite:** Open only to students as assigned by the Director of the Writing Program. (Satisfies the first year writing requirement.)

**126 Passion, Proof and Persuasion: The Nature of Scientific Inquiry NA (Cross-listed in Biology)**

_J. Oneco_

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. **Prerequisite:** Open only to first-year students as assigned by the Director of College Writing. (Satisfies the first year writing requirement.)

**129 The Lotus Sutra: Text, Image, and Practice HU (Cross-listed in East Asian Studies and Religion)**

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. **Prerequisite:** Open only to first-year students as assigned by the Director of College Writing. (Satisfies the first year writing requirement.)

**130 Themes in the Anthropology of Religion SO (Cross-listed in Anthropology)**

_Z. Ngwane_

**Prerequisite:** Open only to first-year students as assigned by the Director of College Writing. (Satisfies the first year writing requirement.)

**132 Carnival and Culture from the Acropolis to Mardi Gras HU**

_C. DuComb_

This course will examine carnival and the carnivalesque in several cultural contexts, from the theatre festivals of ancient Greece to Mardi Gras in contemporary New Orleans. How, when, and why do societies create space for carnivalesque performances of masking and celebration? Can such performances incite social change, or do they reinforce existing structures of power? "Carnival and Culture" will introduce students to an array of carnivalesque practices in Europe, Africa, and the Americas, with a particular focus on the representation of carnival in theatre, film, and television. Course materials will include plays by Euripides, Ben Jonson, Wole Soyinka, and Suzan-Lori Parks; screenings from film and television productions by Marcel Camus, David Simon, and Eric Overmyer; and theoretical and historical studies of carnival by Mikhail Bakhtin, Victor Turner, and Joseph Roach. Frequent writing assignments in a variety of formats will encourage students to explore carnival both as a rich site of cultural formation and as a productive lens for cultural analysis. **Prerequisite:** Open only to students as assigned by the Director of the Writing Program. (Satisfies the first year writing requirement.)

**133 The American West in Fact and Fiction SO**

_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...
136 Myth & Society HU
B. Mulligan
Why did Vergil turn to the myth of Troy to comment on the rise of Rome’s empire and the fall of its republican government? How did Freud use the myth of Oedipus in formulating the principles of psychoanalysis? Focusing on the mythologies of the ancient Mediterranean in particular those of Greece and Rome we will explore the roles that myth can play in society. In the process of investigating a variety of approaches individuals and societies can take to myth, students will hone their abilities at critical reading and writing. Whenever possible, we will draw connections and comparisons to the mythologies of other cultures (including our own). Prerequisite: Open only to first-year students as assigned by the Director of College Writing. (Satisfies the first year writing requirement.)

138 Critical Issues in Education: Politics and Practices SO (Cross-listed in Education)
A. Lenick
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. Prerequisite: Open only to first-year students as assigned by the Director of College Writing. (Satisfies the first year writing requirement.)

140 The Language of Argument HU
J. Muse
In this course students will learn how to analyze arguments, compose arguments of their own, and write clear, concise, and elegant prose. The first half of the course will relate principles of argument and composition to principles of textual analysis. A good reader can analyze the logic of an argument, the style of its presentation, and the way it solicits its audience. Similarly, the good writer understands her audience, adopts a style appropriate to the situation, and crafts an argument that establishes grounds for possible agreement. A good writer is a better reader. For example, in Act II, scene ii of Hamlet Polonius wastes time while saying since brevity is the soul of wit / And tediousness the limbs and outward flourishes I will be brief. He can’t even speak briefly of brevity but follows his aphorism with a redundant flourish of his own. Like Polonius, when you present your reader with tedious prose you present yourself as tedious. And though few occasions warrant such a presentation, this course will supply students with the power to suit their words to different occasions and the power to read how others in turn both craft themselves and either succeed or fail to convince. The second half of the course will consider the relation between experience and language, between our world and our words. Using the analytic tools assembled during the first half, we will examine works of philosophy and literature that seek to define this relation. Texts will include, Plato’s Gorgias, Friedrich Nietzsche’s early essay, “On Truth and Lying in an Extra-moral Sense,” and Toni Morrison’s novel, Sula. We will evaluate these works on the basis of their claims about language and on the basis of the language of these claims. Prerequisite: Open only to first-year students as assigned by the Director of College Writing. (Satisfies the first year writing requirement.)

142 Excursions in the Void: Existentialism, Nihilism and Radical Doubt HU
P. Gaffney
This course will explore the ethical, political and aesthetic implications of existentialism with reference to other "moments of doubt" in philosophy and literature, including nihilism and radical doubt. Writing assignments and class discussion will aim at answering questions like the following: What is existentialism good for? Does it constitute a plausible strategy for engaging the complexity, difficulty and ambiguity of everyday experience? Prerequisite: Open only to members of the first-year class as assigned by the Director of College Writing. (Satisfies the first year writing requirement.)

146 Freedom and Power in the Information Age NA
D. Wonnacott
An exploration of the impact of information technology on our ability to create a balance between conflicting rights, e.g. does the government have a right to wiretap our phones? How can we balance copyright protection with our right to free speech? We will examine arguments that have been made for various balances at various times and enter into the fray with our own essays, sharing drafts with each other and using feedback to produce work that is clearly written, logically consistent, and relevant. Prerequisite: Open only to first-year students as assigned by the Director of College Writing. (Satisfies the first year writing requirement.)

148 Innovation, Rebellion and Dissent HU
J. Benatov
What motivates people to rebel? This course examines the notions of originality and dissent from both a social and an aesthetic perspective. Our readings and analyses during the semester will demonstrate that there is no clear-cut separation between these two spheres and that artistic and social idiosyncrasy are mutually constitutive elements. Readings include: Herman Melville,
"Bartleby, the Scrivener;" Jorge Luis Borges, "Tl'n, Uqbar, Orbis Terririus;" Philip Roth, "The Conversion of the Jews;" "Elie the Fanatic;" J.D. Salinger, "A Perfect Day for Bananafish;" "Teddy;" Ken Kesey, "One Flew Over the Cuckoo's Nest;" "Pulp Fiction," Dir. Quentin Tarantino; "Adaptation," Dir. Spike Jonze; Italo Calvino, "If on a Winter's Night a Traveler." Prerequisite: Open only to first-year students as assigned by the Director of College Writing. (Satisfies the first year writing requirement.)

150 Introduction to Literary Analysis HU (Cross-listed in English)  
P. Gaffney
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." Courses 2010-11: Gaffney, "Living to Tell the Tale: Travel Narratives in Western Literature;" McGrane, "Deception, Recognition, and Returns;" McInerney, "All's Fair in Love and War;" Sherman, "The Use(s) of the Past" and "Gender, Sexuality and the Body." Introduces and carries credit toward the English major. Prerequisite: Open only to members of the first-year class as assigned by the Director of College Writing. (Satisfies the first year writing requirement.)

480 Independent Study HU

COURSES AT BRYN MAWR
(These courses do not fulfill the writing requirement of Haverford College but are open to Haverford students as space is available.)

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)
## SUPPLEMENTAL INFORMATION

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