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2005

## Bryn Mawr College Undergraduate College Catalogue and Calendar, 2005-2006

Bryn Mawr College

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# Bryn Mawr College 



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## Bryn Mawr College



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## The Mission of Bryn Mawr College

The mission of Bryn Mawr College is to provide a rigorous education and to encourage the pursuit of knowledge as preparation for life and work. Bryn Mawr teaches and values critical, creative and independent habits of thought and expression in an undergraduate liberal-arts curriculum for women and in coeducational graduate programs in the arts and sciences and in social work and social research. Bryn Mawr seeks to sustain a community diverse in nature and democratic in practice, for we believe that only through considering many perspectives do we gain a deeper understanding of each other and the world.

Since its founding in 1885, the College has maintained its character as a small residential community that fosters close working relationships between faculty and students. The faculty of teacher/scholars emphasizes learning through conversation and collaboration, primary reading, original research and experimentation. Our cooperative relationship with Haverford College enlarges the academic opportunities for students and their social community. Our active ties to Swarthmore College and the University of Pennsylvania as well as the proximity of the city of Philadelphia further extend the opportunities available at Bryn Mawr.

Living and working together in a community based on mutual respect, personal integrity and the standards of a social and academic Honor Code, each generation of students experiments with creating and sustaining a self-governing society within the College. The academic and cocurricular experiences fostered by Bryn Mawr, both on campus and in the College's wider setting, encourage students to be responsible citizens who provide service and leadership for an increasingly interdependent world.

## Academic Calendars

2005-06

2005
August 29
October 7
October 17
November 23
November 28
December 8
December 9-10
December 11-16
2006
January 16
March 3
March 13
April 28
April 29-30
May 1-12
May 14

## 2006-07

2006
September 4
October 13
October 23
November 22
November 27
December 14
December 15-16
December 17-22
2007
January 22
March 9
March 19
May 4
May 5-8
May 9-18
May 20

First Semester
Classes begin
Fall break begins after last class
Fall break ends at 8 a.m.
Thanksgiving vacation begins after last class
Thanksgiving vacation ends at 8 a.m.
Last day of classes
Review period
Examination period
Second Semester
Classes begin
Spring vacation begins after last class
Spring vacation ends at 8 a.m.
Last day of classes
Review period
Examination period
Commencement

## First Semester

Classes begin
Fall break begins after last class
Fall break ends at 8 a.m.
Thanksgiving vacation begins after last class
Thanksgiving vacation ends at 8 a.m.
Last day of classes
Review period
Examination period
Second Semester
Classes begin
Spring vacation begins after last class
Spring vacation ends at 8 a.m.
Last day of classes
Review period
Examination period
Commencement

## Contact and Web Site Information

Mailing Address: Bryn Mawr College<br>101 N. Merion Avenue<br>Bryn Mawr, PA 19010-2899<br>Switchboard: 610-526-5000<br>College Web site: http://www.brynmawr.edu

An online version of the Catalog can be found on the College Web site at http://www. brynmawr.edu/catalog. In addition to the academic information printed in this publication, the online version presents information about the history of the college, research facilities, scholarship funds, student life and more.

For information regarding academic programs and regulations, academic advising, study abroad, the curriculum and special academic programs, visit the Dean's Office Web site at http://www.brynmawr.edu/deans.

For information regarding course schedules, registration, procedures, exams and student records, visit the Registrar's Office Web site at http://www.brynmawr.edu/registrar.

For information regarding entrance exams, advance placement or admissions, visit the Admissions Office Web site at http://www.brynmawr.edu/admissions.

For information about applying for financial aid or continuing financial aid, visit the Financial Aid Office Web site at http://www.brynmawr.edu/financialaid.

For information about student billing, refunds and student loans, visit the Comptroller's Office Web site at http://www.brynmawr.edu/comptroller.

For information about the Health Center and health insurance, visit the Health Center's Web site at http://www.brynmawr.edu/healthcenter.

For information about residential life, visit the Student Life Office Web site at http:// www.brynmawr.edu/residentiallife.

For information about meal plans and dining halls, visit the Dining Services Web site at http://www.brynmawr.edu/dining.

For information about the libraries and their special collections, visit the Libraries Web site at http://www.brynmawr.edu/library.

For information about computers, labs and technological resources, visit the Computing Services Web site at http://www.brynmawr.edu/computing.

For information about accommodations for students with disabilities, visit the Access Services Web site at http://www.brynmawr.edu/access_services.

For information about career development services, including pre-law advising and the Externship Program, visit the Career Development Office Welb site at http://www. haverford.edu/cdo.

For information about athletics, physical education, recreation and wellness, visit the Department of Athletics and Physical Education Web site at http://www.brynmawr. edu/athletics.

Web pages for individual academic departments and programs may be accessed from the following Web site: http://www.brynmawr.edu/find/fieldsofstudy.shtml.

## Student Responsibilities and Rights

The Honor Code

The high degree of trust and responsibility that the College has always given to students is reflected in the academic and social Honor Codes. These delegate to individual students the responsibility for integrity in their academic and social behavior. Responsibility for administering the academic Honor Code is shared with the faculty; the Academic Honor Board, composed of both students and faculty, mediates in cases of infraction. In the social Honor Code, as in all aspects of their social lives, students are self-governing; a Social Honor Board, consisting of 10 students, mediates in cases where social conflicts cannot be resolved by the individuals directly involved. Trained student mediators work with students to resolve conflicts in effective ways.

The successful functioning of the Honor Code is a matter of great pride to the Bryn Mawr community, and it contributes significantly to the mutual respect that exists among students and between students and faculty. While the Honor Code makes great demands on the maturity and integrity of students, it also grants them an independence and freedom that they value highly. To cite just one example, many examinations are self-scheduled, so that students may take them at whatever time during the examination period is most convenient for their own schedules and study patterns.

In resolving academic cases, the Honor Board might fail a student on an assignment or in a course, or separate her from the College temporarily or permanently. Social infractions that are beyond the ability of the Honor Board to resolve might be brought to a Dean's Panel, which exercises similar authority. For details regarding Honor Hearings and Dean's Panels, please refer to the Student Handbook.

## Privacy of Student Records

The Family Educational Rights and Privacy Act of 1974 was designed to protect the privacy of educational records, to establish the right of students to inspect and review their educational records, and to provide guidelines for the correction of inaccurate or misleading data through informal and formal hearings. Students have the right to file complaints with the Family Educational Rights and Privacy Act Office (FERPA), Department of Education, 5411 Switzer Building, 330 C Street S.W., Washington, D.C. 20201, concerning alleged failures by the institution to comply with the act.

Copies of Bryn Mawr's policy regarding the act and procedures used by the College to comply with the act can be found in the Undergraduate Dean's Office. Questions concerning the Family Educational Rights and Privacy Act may be referred to the Undergraduate Dean's Office.

## Directory Information

Bryn Mawr College designates the following categories of student information as public or "directory information." Such information may be disclosed by the institution for any purpose, at its discretion.

| Category I | Name, address, dates of attendance, class, current enrollment status, <br> electronic mail address |
| :--- | :--- |
| Category II | Previous institution(s) attended, major field of study, awards, honors, <br> degree(s) conferred |
| Category III | Date of birth |
| Category IV | Telephone number |
| Category V | Marital status |

Currently-enrolled students may withhold disclosure of any category of information under the Family Educational Rights and Privacy Act of 1974 by written notification, which must be in the Registrar's Office by August 15 . Forms requesting the withholding of directory information are available in the Registrar's Office. Bryn Mawr College assumes that failure on the part of any student to request the withholding of categories of directory information indicates individual approval of disclosure.

## Campus Security Information

As part of its compliance with Pennsylvania's College and University Security Information Act, Bryn Mawr provides to all students and all applicants for admission a brochure describing the College's security policies and procedures. The College also makes available to all students and applicants the crime report required by the Commonwealth of Pennsylvania for the most recent three-year period.

## Right-to-Know Act

The Student Right-to-Know Act requires disclosure of the graduation rates of degreeseeking undergraduate students. Students are considered to have graduated if they complete their programs within six years of the normal time for completion.

## Class entering fall 1998 (Class of 2002)

Size at entrance 344
Graduated after 3 years 1.2\%
after 4 years $75 \%$
after 5 years $80.2 \%$
after 6 years $81.7 \%$

## Equality of Opportunity

Bryn Mawr College does not discriminate on the basis of race, color, religion, national or ethnic origin, sexual orientation, age or disability in the administration of its educational policies, scholarship and loan programs, and athletic and other College-administered programs, or in its employment practices.

In conformity with the Civil Rights Act of 1964, as amended, it is also the policy of Bryn Mawr College not to discriminate on the basis of sex in its educational programs, activities or employment practices. The admission of only women in the Undergraduate College is in conformity with a provision of the Act. Inquiries regarding compliance with this legislation and other policies regarding nondiscrimination may be directed to the Equal Opportunity Officer, Florence Goff, who administers the College's procedures, at 610-526-5275.

## Students with Disabilities

Bryn Mawr welcomes the full participation of students with disabilities in all aspects of campus life and is committed to providing equal access to the College's programs, services and activities in accordance with Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990. For information about the College's services for students with learning, physical or psychological disabilities, contact the coordinator of Access Services in Canwyll House.

## Access Services

Bryn Mawr is committed to providing equal access for individuals with disabilities and welcomes qualified students with disabilities to the College community. Students who require assistance because of a learning, physical or psychological disability are encouraged to contact the coordinator of Access Services in Canwyll House as early as possible to discuss their needs.
Like other student services at Bryn Mawr, Access Services responds to each student's concerns individually. The coordinator works with the student, and others on campus when necessary, to identify appropriate support and reasonable accommodations to help her participate as fully as possible in the College's programs and activities. Current relevant documentation of a disability from a qualified professional is required to verify eligibility and to help determine appropriate accommodations. Disclosure of a disability is voluntary, and the information is maintained on a confidential basis. It is the student's responsibility to obtain any required documentation.
For information about eligibility criteria, specific documentation requirements, and procedures for requesting accommodations, please contact the coordinator of Access Services in Canwyll House.

## Fees and Refunds

## Costs of Education

The tuition fee in 2005-06 for all undergraduate students, resident and nonresident, is \$29,570 a year.

Summary of Fees and Expenses for 2005-06

| Tuition | $\$ 29,570$ |
| :--- | :--- |
| Residence (room and board) | $\$ 10,090$ |
| College fee | $\$ 520$ |
| Self Government Association fee | $\$ 240$ |
| Other Fees |  |
| Laboratory fee (per lab per semester) | $\$ 35$ |
| Continuing enrollment fee (per semester) | $\$ 250$ |

Faced with rising costs affecting all parts of higher education, the College has had to raise tuition annually in recent years. Further increases may be expected.

## Schedule of Payments

By registering for courses, students accept responsibility for the charges of the entire academic year, regardless of the method of payment. The College bills for each semester separately. The bill for the fall semester is sent in late June and is due August 1. The bill for the spring semester is sent in late November and is due January 2.

As a convenience to parents and students, the College currently offers a payment plan administered by an outside organization that enables monthly payment of all or part of annual fees in installments without interest charges. Payments for the plan commence prior to the beginning of the academic year. Information about the payment plan is available from the Comptroller's Office.

No student is permitted to attend classes or enter residence until payment of the College charges has been made each semester. No student may register at the beginning of a semester, graduate, receive a transcript or participate in room draw until all accounts are paid, including the activities fee assessed by the student Self Government Association officers. This fee covers class and hall dues and support for student organizations and clubs. All resident students are required to participate in the College meal plan.

A fee of $\$ 250$ per semester will be charged to all undergraduates who are studying at another institution during the academic year and who will transfer the credits earned to Bryn Mawr College, with the exception of students in the Junior Year Abroad Program.

Students are permitted to reserve a room during the spring semester for the succeeding academic year, prior to payment of room and board fees, if they intend to be in residence during that year. Those students who have reserved a room but decide, after June 15 , to withdraw from the College or take a leave of absence are charged a fee of $\$ 500$. This charge is billed to the student's account.

All entering students are required to make a deposit of $\$ 200$. This deposit is applied to the student's tuition account.

## Refund Policy

Written notice of intention to withdraw must be submitted to the student's dean. The date on which written notice is received (or the date on which the student signs a notice of withdrawal) is the official date of withdrawal. All students receiving financial aid must consult with the Financial Aid Office and the Comptroller's Office, including students who have received government-insured loans, such as loans guaranteed by state agencies and by the federal government to meet educational expenses for the current academic year. Bryn Mawr College's refund policies are in compliance with federal regulations.

Details on the federal calculation of refunds can be obtained from the assistant director of Financial Aid and/or from the Comptroller's Office.

## Financial Aid

For general information about financial aid and how to apply for financial aid, consult the Financial Aid Office Web site at http://www.brynmawr.edu/financialaid. To obtain more information about the financial aid application and renewal process, types of aid available and regulations governing the disbursement of funds from grant and loan programs, contact the Financial Aid Office to request a copy of the Financial Aid Handbook, which is updated and published every year.

## The Academic Program

## The Curriculum

The Bryn Mawr curriculum is designed to encourage breadth of learning and training in the fundamentals of scholarship in the first two years, and mature and sophisticated study in depth in a major program during the last two years. Its overall purpose is to challenge the student and prepare her for the lifelong pleasure and responsibility of educating herself and playing a responsible role in contemporary society. The curriculum encourages independence within a rigorous but flexible framework of divisional and major requirements and fosters self-recognition for individuals as members of diverse communities and constituencies.

The Bryn Mawr curriculum obtains further breadth through inter-institutional cooperation. Virtually all undergraduate courses and all major programs at Bryn Mawr and Haverford Colleges are open to students from both schools, greatly increasing the range of available subjects. With certain restrictions, full-time Bryn Mawr students may also take courses at Swarthmore College, the University of Pennsylvania and Villanova University during the academic year without payment of additional fees.

## Requirements for the A.B. Degree

Thirty-two units of work are required for the A.B. degree. These must include:

- One College Seminar (students who entered before the fall of 2004 must complete two).
- One unit to meet the quantitative skills requirement.
- Work to demonstrate the required level of proficiency in foreign language.
- Six units to meet the divisional requirements.
- A major subject sequence.
- Elective units of work to complete an undergraduate program.

In addition, all students must complete eight half-semesters of physical education, successfully complete a swim proficiency test and meet the residency requirement.

## College Seminar Requirement

The aim of the College Seminar is to engage students in careful examination of fundamental issues and debates that can illustrate the choices we make in our daily lives. By encouraging critical thinking, focused discussion and cogent writing, the seminars help prepare students for a modern world that demands perceptive understanding both within and outside of the frameworks of particular disciplines.

Students who matriculate in the fall of 2004 or thereafter must complete one College Seminar in the fall of their first year. Students who entered before the fall of 2004 must complete two College Seminars, the first in the fall of the first year and the second before the end of the sophomore year. Students must attain a grade of 2.0 or higher in each seminar used to satisfy this requirement.

## Foreign Language Requirement

Bryn Mawr recognizes the inherent intellectual value and fundamental societal importance of acquiring a level of proficiency in the use of one or more foreign languages. The study of foreign languages serves a number of convergent curricular and student interests, including the appreciation of cultural differences, a global perspective across academic disciplines, cognitive insights into the workings of language systems, and alternative models of perceiving and processing human experience.

Before the start of the senior year, each student must have demonstrated a knowledge of one foreign language by:

- Passing a proficiency test offered by the College every spring and fall or
- Attaining a score of at least 690 in a language achievement test of the College Entrance Examination Board, or by passing with an honor grade an Advanced Placement, International Baccalaureate or A-level test or
- Completing at the College two courses (two units) above the elementary level with an average grade of at least 2.0 or a grade of at least 2.0 in the second course or
- For a non-native speaker of English who has demonstrated proficiency in her native language, two semesters of College Seminars or one College Seminar and one writing intensive course.


## Quantitative Requirement

Before the start of the senior year, each student must have demonstrated competence in college-level mathematics or quantitative skills by:

- Passing with an honor grade an Advanced Placement, International Baccalaureate or A-level examination in mathematics or
- Passing one course with a grade of at least 2.0 from those designated with a "Q" in the Tri-Co Course Guide.

The purpose of the quantitative requirement is to provide the Bryn Mawr graduate with the competence to evaluate and manage the wide array of information underlying many of the decisions she will make as a member of society and in her personal life. The
range of potentially useful quantitative skills is extensive and cannot be covered by any individual course. However, a single course can give the student an appreciation of the value of quantitative analysis as well as increase the facility and confidence with which she uses quantitative skills in her later academic, professional and private roles.

A course meeting the quantitative requirement will provide the student with the skills to estimate and check answers to quantitative problems in order to determine reasonableness, identify alternatives and select optimal results. It will also provide her with a recognition that mathematical and statistical tools have limits. Such a course is designed to help students develop a coherent set of quantitative skills that become progressively more sophisticated and can be transferred to other contexts. In all cases, courses meeting the quantitative requirement will have rigor consistent with the academic standards of the department(s) in which they are located.

Students who matriculated in the fall of 2002 or thereafter may count a single course or exam towards both the quantitative requirement and a divisional requirement, so long as that course is identified as Q and Division I, II or III in the Tri-Co Course Guide. Students who entered before the fall of 2002, however, may not count the course or examination used to fulfill the quantitative requirement toward any other requirement.

## Divisional Requirements

Before the start of the senior year, each student must have completed, with a grade of 2.0 or higher, two courses in the social sciences (Division I), two courses in the natural sciences and mathematics (Division II), and two courses in the humanities (Division III). Courses satisfying this requirement are marked "I", "II" or "III" in the Tri-Co Course Guide. Courses identified as interdivisional, e.g. "I or III," may be used by a student to satisfy either one - but not both - of the appropriate divisional requirements; but only one of the two courses used to satisfy any divisional requirement may be such an interdivisional course.

At least one required course in Division II must be a laboratory course, designated "IIL" in the Tri-Co Course Guide. One performance course in music, dance or theater or one studio art course may be used to fulfill one of the two course requirements in the humanities. A student may not use courses in her major subject to satisfy requirements in more than one division, unless the courses are cross-listed in other departments. Only one of the two courses used to satisfy any divisional requirement may be fulfilled by tests such as the Advanced Placement, International Baccalaureate or A levels taken on work done before entering Bryn Mawr.

The goal of the divisional requirements is to increase the breadth and variety of the student's intellectual experience at the College. The divisions represented in these requirements describe not only different portions of human experience, but also characteristic methods of approach. Although any division of knowledge is imperfect, the current divisions - social sciences, the natural sciences and mathematics, and the humanities -- have the advantage of being specific while still broad enough to allow the student a good deal of flexibility in planning her coursework.

## Social Sciences (Division I)

The social sciences are concerned with human social behavior; the motivations, institutions and processes that shape this behavior; and the outcomes of this behavior for different groups and individuals. The areas of social-sciences inquiry include such wideranging topics as policy-making, cultural change, revolutions, poverty and wealth, generational conflict and international relations. The social sciences disciplines provide the student with a set of theoretical frameworks with which to organize her analysis of these substantive areas, and a set of methodological tools with which to test empirically - in the uncontrolled laboratory of the real world - the hypotheses that these frameworks generate.

## Natural Sciences and Mathematics (Division II)

Knowledge of the physical world is a fundamental part of human experience; understanding the workings of nature is essential to our lives. To achieve this understanding, the student should be familiar with the concepts and techniques of the natural sciences as well as mathematics, the language of science. This understanding must go beyond a knowledge of scientific facts to include a facility with the scientific method and the techniques of scientific inquiry, logical reasoning and clear exposition of results.

## Humanities (Division III)

In humanities coursework, the student creates and interprets many different kinds of artifacts, compositions, monuments and texts that are and have been valued by human cultures here and throughout the world. The humanities encompass the histories, philosophies, religions and arts of different cultural groups, as well as the various theoretical and practical modes of their investigation and evaluation.

## The Major

In order to ensure that the student's education involves not simply exposure to many ideas and disciplines but development of competence and some degree of mastery in at least one, she must choose an area to be the focus of her work in the last two years at the College.

The following is a list of major subjects.
Anthropology
Astronomy (Haverford College)
Biology
Chemistry
Classical and Near Eastern Archaeology
Classical Culture and Society
Classical Languages
Comparative Literature
East Asian Studies
Economics
English
Fine Arts (Haverford College)
French and French Studies
Geology
German and German Studies
Greek
Growth and Structure of Cities
History
History of Art
Italian
Latin
Mathematics
Music (Haverford College)
Philosophy
Physics
Political Science
Psychology
Religion (Haverford College)
Romance Languages
Russian
Sociology
Spanish

Each student must declare her major subject before the end of the sophomore year by consulting with the departmental adviser with whom she completes a major work plan that she then submits to her dean.

No student may choose to major in a subject in which she has incurred a failure, or in which her average is below 2.0 .

A student may double major with the consent of both major departments and of her dean, but she should expect to complete all requirements for both major subjects.

Students may choose to major in any department at Haverford College, in which case they must meet the major requirements of Haverford College and the degree requirements of Bryn Mawr College. Procedures for selecting a Haverford major are available from the Haverford Dean's Office at all times and are sent to all sophomores in the early spring. Permission of the Haverford dean is required for a double major that includes a Haverford department.

Every student working for an A.B. degree is expected to maintain grades of 2.0 or higher in all courses in her major subject. A student who receives a grade below 2.0 in a course in her major is reported to the Undergraduate Council and may be required to change her major. If, at the end of her junior year, a student has a major-subject average below 2.0, she must change her major. If she has no alternative major, she will be excluded from the College. A student who is excluded from the College is not eligible for readmission. A student whose numerical grade average in her major remains above 2.0 but whose work has deteriorated may also be required to change her major.

A student with unusual interest or preparation in several areas can consider an independent major, a double major, or a major with a strong minor or a concentration involving work in several departments built around one major as a core. Such programs can be arranged by consulting the dean and members of the departments concerned.

Each department sets its own standards and criteria for honors in the major, with the approval of the Curriculum Committee. Students should see departments for details.

## The Independent Major Program

The Independent Major Program is designed for students whose interests cannot be accommodated by an established departmental or interdepartmental major. An independent major is a rigorous, coherent and structured plan of study - from introductory through advanced work in a recognized field within the liberal arts - constructed largely from courses offered at Bryn Mawr and Haverford Colleges.

The following is a list of recent independent majors.

American Studies<br>Computer Science<br>Cultural Studies<br>Dance<br>Feminist and Gender Studies<br>International Relations<br>Linguistics<br>Medieval Studies<br>Peace and Conflict Studies<br>Theater

Students interested in the Independent Major Program should attend the informational teas and meet with Associate Dean Judy Balthazar in the fall of their sophomore year. In designing an independent major, students must enlist two faculty members to serve as sponsors. One, who acts as director of the program, must be a member of the Bryn Mawr faculty; the other may be a member of either the Bryn Mawr or Haverford faculty. To propose an independent major, students must submit completed applications by the end of the fourth week of classes in the spring of their sophomore year or, for junior transfer students, by the end of the fourth week of classes in the fall of their junior year.

The application for an independent major consists of:

- A proposal developed with the advice of the sponsors describing the student's reasons for designing the independent major and explaining why her interests cannot be accommodated by a related departmental or interdepartmental major.
- An independent major work plan of 11 to 14 courses, at least seven of which must be taken at Bryn Mawr or Haverford. The plan will include up to two courses at the 100 level and at least four at the 300 or 400 level, including at least one semester of a senior project or thesis (403).
- Supporting letters from the two faculty sponsors, discussing the academic merits of the independent major work plan and the student's ability to complete it.
- A letter from the student's dean regarding her maturity and independence.
- A copy of the student's transcript.

The Independent Majors Committee, composed of four faculty members, two students and one dean, evaluates the proposals on a case-by-case basis. Their decisions are final. The fact that a particular topic was approved in the past is no guarantee that it will be approved again. The committee considers the following issues:

- Is the proposed independent major appropriate within the context of a liberal-arts college?
- Could the proposed independent major be accommodated instead by an established major?
- Are the proposed courses expected to be offered over the next two years?
- Will faculty members be available for consistent and good advising?
- Does the student's record indicate likely success in the proposed independent major?

If the committee approves the proposed major and its title, the student declares an independent major. The committee continues to monitor the progress of students who have declared independent majors and must approve, along with the sponsors, any changes in the program. A grade of 2.0 or higher is required for all courses in the independent major. If this standard is not met, the student must change immediately to a departmental major.

## Physical Education Requirement

Throughout its history, the College has been committed to developing excellence. The Department of Athletics and Physical Education affirms the College's mission by offering a variety of opportunities to promote self-awareness, confidence and the development of skills and habits that contribute to a healthy lifestyle. The College's comprehensive program includes competitive intercollegiate athletics, diverse physical education and wellness curricula, and leisure and recreational programs designed to enhance the quality of life for the broader campus community.

All students must complete eight credits in physical education and successfully complete a swim-proficiency test. Semester and half-semester courses are offered in dance, aquatics, individual sports, team sports, outdoor recreation, wellness and fitness. Physical-education credit is awarded for participation on intercollegiate teams, rugby, equestrian and ultimate frisbee club teams. Students may earn up to two credits in physical education for pre-approved independent study. Students are encouraged to complete the requirement by the conclusion of their sophomore year.

## Residency Requirement

Each student must complete six full-time semesters and earn a minimum of 24 academic units while in residence at Bryn Mawr. These may include courses taken at Haverford and Swarthmore Colleges and the University of Pennsylvania during the academic year. The senior year must be spent in residence. Seven of the last 16 units must be earned in residence. Students do not normally spend more than the equivalent of four years completing the work of the A.B. degree. Exceptions to this requirement for transfer students entering as second-semester sophomores or juniors are considered at the time of matriculation.

## Exceptions

All requests for exceptions to the above regulations are presented to the Curriculum Committee for approval. Normally, a student consults her dean and prepares a written statement to submit to the committee; a student may, in unusual cases, request permission to appear before the committee.

## Academic Regulations

## Registration

Each semester all Bryn Mawr students preregister for the next semester's courses in consultation with their deans. Failure to do so results in a $\$ 15$ fine. Once a student has selected a major, she must also consult her major adviser about her program each semester. Students must then confirm their registration with the deans and submit their final programs to the registrar on the announced days at the beginning of each semester. Failure to confirm registration results in a $\$ 25$ fine.

Students normally carry a complete program of four courses (four units) each semester. Requests for exceptions must be presented to the student's dean. Students may not register for more than five courses (five units) per semester. Requests for more than five units are presented to the Curriculum Committee for approval.

A student may take four units over four years, not more than one in any semester, under the Credit/No Credit (CR/NC) or Haverford College's No Numerical Grade (NNG) option. A student may not elect both the CR/NC and NNG option in the same semester. A student registered for five courses is not permitted a second CR/NC or NNG registration. For regulations concerning the NNG option, see Haverford College's academic regulations.

Transfer students may take one CR/NC unit for each year they spend at Bryn Mawr.
A student registered for a course under either option is considered a regular member of the class and must meet all the academic commitments of the course on schedule. The instructor is not notified of the student's CR/NC or NNG registration because this information should in no way affect the student's responsibilities in the course.

Faculty members submit numerical grades for all students in their courses. For students registered CR/NC, the registrar converts numerical grades of 1.0 and above to CR and the grade of 0.0 to NC. Numerical equivalents of CR grades are available to each student from the registrar, but once the $\mathrm{CR} / \mathrm{NC}$ option is elected, the grade is converted to its numerical equivalent on the transcript only if the course becomes part of the student's major.

The grade submitted by the faculty member is not factored into the student's grade point average. However, that grade is taken into consideration when determining the student's eligibility for magna cum laude and summa cum laude distinctions (see page 30).

Students may not take any courses in their major subject under this option, but they may use it to take courses towards the College Seminar, Quantitative, Divisional or Foreign Language Requirements. While all numerical grades of 1.0 or better will be recorded on the transcript as "CR," the registrar will keep a record of whether the course meets the 2.0 minimum needed to count towards a requirement.

Students wishing to take a course CR/NC must sign the registrar's register by the end of the sixth week of classes. No student is permitted to sign up for CR/NC after that time. Students who wish to register for CR/NC for year-long courses in which grades are given at the end of each semester must register $\mathrm{CR} / \mathrm{NC}$ in each semester because $\mathrm{CR} / \mathrm{NC}$ registration does not automatically continue into the second semester in those courses. Haverford students taking Bryn Mawr courses must register for CR/NC at the Haverford Registrar's Office.

Some courses, including many introductory survey courses, are designed as two-semester sequences, but students may take either semester without the other and receive credit for the course. There are, however, a very few courses designed as yearlong, two-semester sequences that require students to complete the second semester in order to retain credit for the first semester. Such courses are designated in each department's course list. Students must have the permission of the professor to receive credit for only one semester of such a course.

Most departments allow students to pursue independent study as supervised work, provided that a professor agrees to supervise the work. Students pursuing independent study usually register for a course in that department numbered 403 and entitled Supervised Work, unless the department has another numerical designation for independent study. Students should consult with their deans if there are any questions regarding supervised work.

Students may audit courses with the permission of the instructor. There are no extra charges for audited courses, and they are not listed on the transcript. Students may not register to take the course for credit after the stated date for Confirmation of Registration.

Some courses are designated as limited enrollment in the Tri-Co Course Guide. The Tri-Co Course Guide provides details about restrictions. If consent of the instructor is required, the student is responsible for securing permission. If course size is limited, the final course list is determined by lottery. Students who have preregistered are given
preference for inclusion in the lottery, but only those present on the first day of class to sign a list circulated by the instructor are considered.

Students who confirm their registration for five courses may drop one course through the third week of the semester. After the third week, students taking five courses are held to the same standards and calendars as students enrolled in four courses.

No student may withdraw from a course after confirmation of registration, unless it is a fifth course dropped as described above. Exceptions to this regulation may be made jointly by the instructor and the appropriate dean only in cases when the student's ability to complete the course is seriously impaired due to unforeseen circumstances beyond her control.

## Cooperation with Neighboring Institutions

Full-time students at Bryn Mawr may register for courses at Haverford, Swarthmore and the University of Pennsylvania during the academic year without payment of additional fees according to the procedures outlined below. This arrangement does not apply to summer schools. Credit toward the Bryn Mawr degree (including the residency requirement) is granted for such courses with the approval of the student's dean, and grades are included in the calculation of the grade point average. Bryn Mawr also has a limited exchange program with Villanova University.

Students register for Haverford courses in exactly the same manner as for Bryn Mawr courses, but students who register for Haverford courses that are limited in enrollment must follow Haverford procedures as described in the Tri-Co Course Guide.

Bryn Mawr students in Haverford courses are subject to Haverford regulations as applied and interpreted by the Haverford deans. For the purposes of these regulations, a course is defined as a Haverford or Bryn Mawr course solely on the basis of its designation in the course list ("B" for Bryn Mawr and "H" for Haverford), not the campus on which it is taught.

To register for a Swarthmore course, a student must take a note of permission from her dean to Parrish Hall at Swarthmore and return it, with the Swarthmore registrar's signature, to the Bryn Mawr registrar. She must also secure the instructor's permission.

Bryn Mawr students may register for up to two liberal-arts courses a semester in the College of Arts and Sciences or the College of General Studies at the University of Pennsylvania, on a space-available basis, provided that the course is not regularly offered at Bryn Mawr or Haverford. Scheduling problems are not considered an adequate reason for seeking admission to a course at Penn.

Not all courses offered at Penn are acceptable for credit toward the A.B. degree at Bryn Mawr. Students are responsible for determining that the courses they wish to take are acceptable for credit toward their degrees and should consult their deans before registering for courses at Penn.

In order to register for a course at Penn, the student should consult the Penn Course Guide, take a note of permission from her dean to the College of General Studies at Penn and return it, with an appropriate signature, to the Bryn Mawr registrar. Notes of permission are available in the Dean's Office.

If the Penn Course Guide indicates that permission of the instructor is required for enrollment in a course, the student is responsible for securing this permission. Bryn Mawr students may not register for courses at Penn until the first week of each semester and must meet all Penn deadlines for dropping and adding courses. It is the student's responsibility to make arrangements for variations in academic calendars. Students should consult their deans if they have any questions about Penn courses or registration procedures.

Bryn Mawr juniors and seniors may take one course per semester in the College of Arts and Sciences at Villanova University on a space-available basis, provided that the course is not offered at Bryn Mawr or Haverford. If the course is fully enrolled, Bryn Mawr students can be admitted only with the permission of the Villanova instructor. This exchange is limited to superior students for work in their major or in an allied field; students must have permission of both their major adviser and their dean.

Courses at Villanova may be taken only for full grade and credit; Bryn Mawr students may not elect Villanova's pass/fail option for a Villanova course. Credits earned at Villanova are treated as transfer credits; the grades are not included in the student's grade point average, and these courses do not count toward the residency requirement.

In order to register for a course at Villanova, the student should consult the Villanova Course Guide, available in the Dean's Office, and obtain a registration form to be signed by her major adviser and returned to the Dean's Office. The Dean's Office forwards all registration information to Villanova; students do not register at Villanova. Students enrolled in a course at Villanova are subject to Villanova's regulations and must meet all Villanova deadlines regarding dropping/adding, withdrawal and completion of work. It is the student's responsibility to make arrangements for variations in academic calendars. Students should consult their deans if they have any questions about Villanova courses or registration procedures.

Bryn Mawr students enrolled in courses at Swarthmore, the University of Pennsylvania, Villanova, or by special agreement with other institutions, are subject to the regulations of these institutions. It is the student's responsibility to inform herself about these regulations.

## Conduct of Courses

Regular attendance at classes is expected. Responsibility for attendance, and for learning the instructor's standards for attendance, rests solely with each student. Absences for illness or other urgent reasons are excused, and it is the student's responsibility to contact her instructors and dean. The student should consult her instructors about making up the work. If it seems probable to the dean that a student's work may be seriously handicapped by the length of her absence, the dean may require the student to withdraw from one or more courses.

## Quizzes, Examinations and Extensions

Announced quizzes - written tests of an hour or less - are given at intervals throughout most courses. The number of quizzes and their length are determined by the instructor. Unannounced quizzes may also be included in the work of any course. If a student is absent without previous excuse from a quiz, she may be penalized at the discretion of the instructor. The weight is decided by the instructor. If a student has been excused from a quiz because of illness or some other emergency, a make-up quiz is often arranged.

An examination is required of all students in undergraduate courses, except when the work for the course is satisfactorily tested by other means. If a student fails to appear at the proper time for a self-scheduled, scheduled or deferred examination, or fails to return a take-home exam, she is counted as having failed the examination.

A student may have an examination deferred by her dean only in the case of illness or some other emergency. When the deferral means postponement to a date after the conclusion of the examination period, she must take the examination at the next Deferred Examination Period.

Within the semester, the instructor in each course is responsible for setting the date when all written reports, essays, critical papers and laboratory reports are due. The instructor may grant permission for extensions within the semester; the written permission of the dean is not required, although instructors may ask students to inform their dean of the extension or may themselves inform the dean that they have granted an extension.

All essays and written reports in any course must be submitted to the instructor no later than the last day of classes in each semester. In special cases when a student has been prevented from completing her work due to circumstances beyond her control, with the joint written permission of the instructor and her dean, the date for handing in a piece of written work may be extended beyond the last day of classes, and the date for handing in a paper in lieu of examination may be extended beyond the examination period. In these cases, the student must request an extension slip from her dean, take it to the instructor for approval and signature, and return it to her dean.

When written extensions are submitted to the registrar by the student's dean, the instructor submits a grade of Incomplete, which is temporarily recorded on the transcript. If the student does not meet the date set in her extension, and does not request and receive a further extension, the instructor is required to submit a final grade. When official extensions are not received by the registrar from the dean, and the instructor submits a grade of Incomplete or fails to submit a grade, that grade is temporarily recorded on the transcript as an Unauthorized Incomplete. No grade, except a failure, can be recorded in place of an Unauthorized Incomplete without an extension or other appropriate action taken jointly by the student's dean and instructor.

Seniors must submit all written work at least 48 hours before the time senior grades are due in the Registrar's Office. Extensions beyond that date cannot be granted to any senior who expects to graduate that year.

Specific dates for all deadlines are published and circulated by the registrar. It is the student's responsibility to inform herself of these dates.

Grading and Academic Record

| Grading Scale | Letter Grade <br> Equivalent | Explanation |
| :---: | :---: | :--- |
| 4.0 | A | MERIT |
| 3.7 | $\mathrm{~A}-$ | Merit grades range from 4.0 (outstanding) |
| 3.3 | $\mathrm{~B}+$ | to 2.0 (satisfactory). |
| 3.0 | B | Courses in which students earn merit |
| 2.7 | $\mathrm{~B}-$ | grades can be used to satisfy the major |
| 2.3 | $\mathrm{C}+$ | and curricular requirements. |
| 2.0 | C |  |
| 1.7 | $\mathrm{C}-$ |  |
| 1.3 | $\mathrm{D}+$ | PASSING |
| 1.0 | D |  |
| 0.0 | F | FAILING |

Once reported to the registrar, a grade may be altered by the faculty member who originally submitted the grade, or by the department or program chair on behalf of the absent faculty member, by submitting a change-of-grade form with a notation of the reason for the change. Once reported to the registrar, no grade may be changed after one year except by vote of the faculty.

A student must attain grades of 2.0 or higher in at least one-half of the total number of courses taken while at Bryn Mawr. She may be excluded from the College at the close
of any semester in which she has failed to meet this requirement and is automatically excluded if more than one-half of her work falls below 2.0 at the close of her junior year. A student who is excluded from the College is not eligible for readmission.

Every student working for an A.B. degree is expected to maintain grades of 2.0 or higher in all courses in her major subject. No student may choose as her major subject one in which she has received a grade below 1.0 or one in which her average is below 2.0.

A student receiving a grade below 2.0 in any course in her major subject (including a course taken at another institution) is reported to the Undergraduate Council and may be required to change her major.

At the end of the junior year, a student having a major subject average below 2.0 must change her major. If she has no alternative major, she is excluded from the College and is not eligible for readmission.

The Undergraduate Council reviews the records of all students whose work has failed to meet the academic standards of the College. A student's record is brought to the attention of the council when she has incurred a failure or NC following a previous failure or NC , or when her work has failed to meet either the general standards embodied in the Merit Rule or the specific standards in the major subject. The Undergraduate Council also reviews the record of any student whose work has seriously deteriorated.

A student whose record is brought before the council has a consultation with her dean and receives a letter specifying the standards she must meet by the end of the following semester. The student's parent(s) or guardian(s) receive a copy of this letter. A student whose record has been reviewed by the council is put on probation the following semester, or the semester of her return if she has been asked to withdraw, and may be required to meet regularly with her dean. Faculty members are requested to submit mid-semester reports for students whose work has been unsatisfactory. Students who meet the standards specified by the council during the semester on probation are then no longer on probation.

Any student whose record is reviewed by the council may be required to withdraw from the College and present evidence that she can do satisfactory work before being readmitted. The council may also recommend to the president that the student be excluded from the College. An excluded student is not eligible for readmission to the College.

## Cumulative Grade Point Averages

In calculating cumulative grade point averages, grades behind CR, NC or NNG are not included. Summer school grades from Bryn Mawr earned on this campus are included, as are summer school grades from Avignon and Florence. No other summer school
grades are included. Term-time grades from Haverford College, Swarthmore College and the University of Pennsylvania earned on the exchange are included. Term-time grades transferred from other institutions are not included.

## Distinctions

The A.B. degree may be conferred cum laude, magna cum laude and summa cum laude.

## Cum laude

All students with cumulative grade point averages of 3.40 or higher, calculated as described above, are eligible to receive the degree cum laude.

## Magna cum laude

To determine eligibility for magna cum laude, grade point averages are recalculated to include grades covered by CR, NC and NNG. All students with recalculated grade point averages of 3.60 or higher are eligible to receive the degree magna cum laude.

## Summa cum laude

To determine eligibility for summa cum laude, grade point averages are recalculated to include grades covered by CR, NC and NNG. The 10 students with the highest recalculated grade point averages in the class receive the degree summa cum laude, provided their recalculated grade point averages equal or exceed 3.80.

## Credit for Work Done Elsewhere

All requests for transfer credit must be approved by the Transfer Credit Committee. Credit may be transferred for liberal-arts courses taken at accredited four-year colleges and universities, provided that the student earns grades of 2.0 or C ( C - grades are not acceptable for transfer credit) or better in these courses. Credit will not be transferred for a course taken by correspondence or distance learning, even if it is sponsored by an accredited four-year institution. Work done at approved foreign institutions is also accepted for transfer credit; in cases where numerical or letter grades are not given, the Transfer Credit Committee considers written evaluations of the student's work to determine whether she has earned the equivalent of at least 2.0 grades for this work. Grades earned in courses accepted for transfer credit are not included in the grade point average.

A student wishing transfer credit must submit an official transcript to the registrar. A student who wishes to meet College requirements (such as the College Seminar, quantitative or divisional requirements) with courses taken elsewhere must obtain approval from her dean or the registrar. In some cases, the student may be asked to obtain the approval of the appropriate department. Note that the foreign language requirement cannot generally be satisfied via transfer credit.

Credit is calculated on an hour-for-hour basis. Four semester hours are the equivalent of one unit of credit. Students taking a semester or year of coursework away from Bryn Mawr must take the normal full-time course load at the institution they are attending in order to receive a semester (four units) or a year (eight units) of transfer credit. Usually 15 or 16 semester hours, or between 22 and 24 quarter hours, is the equivalent of four units at Bryn Mawr; between 30 and 32 semester hours, or 45 and 48 quarter hours, is the equivalent of eight units at Bryn Mawr. Students who complete less than a full-time program with grades of at least 2.0 or C receive proportionally less transfer credit.

A student who wishes to spend a semester or a year away from Bryn Mawr as a full-time student at another institution in the United States should have the institution and her program approved in advance by her dean, major adviser and other appropriate departments. A student who plans foreign study needs the approval of the Foreign Study Committee in addition to that of her dean, major adviser and other appropriate departments.

Students who transfer to Bryn Mawr from another institution may transfer a total of eight units. Exceptions to this rule for second-semester sophomores and for juniors are considered at the time of the student's transfer application.

Students may use work that is not transferred for credit to satisfy College requirements, provided that such work would meet the standards for transfer credit.

A student who wishes to present summer school work for credit must obtain advance approval of her plans from her dean and must submit an official transcript to the registrar. No credit is given for a course graded below 2.0 or C ( C - grades are not acceptable). Credit is calculated as closely as possible on an hour-for-hour basis. A total of no more than four units earned in summer school may be counted toward the degree; of these, no more than two units may be earned in any one summer.

Students may receive up to four units of transfer credit for courses taken prior to graduation from secondary school, provided that these courses were taught at the college and not at the high school and were not counted toward secondary school graduation requirements. These courses may include those taken at a community college. In all other respects, requests for transfer credit for work done prior to secondary school graduation are subject to the same provisions, procedures and limits as all other requests for transfer credit.

## Departure from the College

Every student who leaves Bryn Mawr prior to graduation must see her dean and complete a Notice of Departure. For a student departing during the academic year, some fees may be refundable. The specific dates of the refund schedule are published annually and are
available in the Comptroller's Office. For resident students, the date of departure is the date on which keys are returned to the Public Safety Office. The comptroller does not calculate a refund until notice is received that keys have been returned.

## Academic Leave of Absence

A student who is in good academic standing at the College may apply to her dean for a leave of absence. (A student who loses her good standing after having been granted a leave of absence will normally be required to change her status to "withdrawn.") A leave may be requested for one or two semesters and, once approved, reinstatement is granted contingent on residential space available at the time a student wishes to return to the College. Application should be made in writing by June 15 of the academic year preceding the requested leave (or November 15 for a second-semester leave). The deans and members of the student's major department review any questions raised by the student or her dean regarding the approval of leave. A student should confirm her date of return, by letter to her dean, by March 1 preceding return for the fall semester and by December 1 for return in the spring semester.

A student may extend her leave of absence for one additional semester beyond the originally agreed upon date of return, with her dean's permission. Application must be made in writing by June 15 of the academic year preceding the requested extension (or by November 15 for a second-semester extension). A student who does not return after a leave without permission for an extension, or who does not return after an extension of leave, is withdrawn from the College and must apply for readmission.

## Medical Leave of Absence

A student may, on the recommendation of the College physician or her own doctor, at any time request a medical leave of absence for reasons of health. The College reserves the right to require a student to withdraw for reasons of health if, in the judgment of the medical director, she is not in sufficiently good health to meet her academic commitments or to continue in residence at the College. Permission to return from a medical leave is granted when the College's Health Service receives satisfactory evidence of recovery.

## Psychological Leave of Absence

Occasionally a student experiences psychological difficulties that interfere with her ability to function at college. Taking time away from college to pursue therapy may be necessary. The College sees this choice as restorative, not punitive. With evidence of improvement in health, Bryn Mawr welcomes the student's return.

The College believes that time away for psychological reasons should, in most cases, be for an entire academic year to allow sufficient time for growth, reflection and meaningful therapy - students who hurry back prematurely tend to risk a second failure. Therefore, medical leaves of absence for psychological reasons are granted for a period
of one year, except in unusual situations. Readmission requires the approval of Bryn Mawr's medical director or the appropriate member of the College's counseling staff. The student should ask the physician or counselor with whom she has worked while on leave to contact the appropriate person at the College's Health Service when she is ready to apply to return.

Students who want to return in September must submit all readmission materials by July 1. Those who want to return in January must submit all readmission materials by November 15

## Required Withdrawal

Any student may be required to withdraw from the college because she fails to meet the academic standards of the college (page 29, "Undergraduate Council"), because of an infraction of the honor code or other community norm (page 10, "The Honor Code"), or because she is not healthy enough to meet her academic commitments (see above).

In addition, any student whose behavior disrupts either the normal conduct of academic affairs or the conduct of life in the residence halls may be required to withdraw by the Dean of the Undergraduate College. If the student wishes to appeal the decision, a committee consisting of three faculty members from the Undergraduate Council, the president of the Self Government Association and the head of the Honor Board hears the student and the dean. The committee makes its recommendations to the president of the college; the president's decision is binding. In cases of required withdrawal, no fees are refunded.

## Readmission After Withdrawal

Students who withdraw, whether by choice or as a result of the above procedures, must apply for readmission if they wish to return. Students who wish to return from withdrawal should request an application for readmission from their dean. Students must submit their readmission application and all supporting documents no later than July 1 (for return in the fall) or November 15 (for return in the spring).

## Academic Opportunities

## Minors and Concentrations

Many departments, but not all, offer a minor. Students should see departmental entries for details. The minor is not required for the A.B. degree. A minor usually consists of six units, with specific requirements to be determined by the department. If a course taken under the Credit/No Credit (CR/NC) or Haverford College's No Numerical Grade (NNG) option subsequently becomes part of a student's minor, the grade is not converted to its numerical equivalent. There is no required average for a minor.

The following is a list of subjects in which students may elect to minor. Minors in departments or programs that do not offer majors appear in italics.

| Africana Studies | German and German Studies |
| :--- | :--- |
| Anthropology | Greek |
| Biology | Growth and Structure of Cities |
| Chemistry | History |
| Classical and Near Eastern Archaeology | History of Art |
| Classical Culture and Society | International Studies |
| Comparative Literature | Italian |
| Computational Methods | Latin |
| Computer Science | Mathematics |
| Creative Writing | Music |
| Dance | Philosophy |
| East Asian Studies | Physics |
| Economics | Political Science |
| Education | Psychology |
| English | Russian |
| Film Studies | Sociology |
| French and French Studies | Spanish |
| Gender and Sexuality | Theater Studies |
| Geology |  |

The concentration, which is not required for the degree, is a cluster of classes that overlap the major and focus a student's work on a specific area of interest:

Creative Writing (with an English major)
East Asian Studies
Environmental Studies (in an anthropology, biology, chemistry, economics, English, geology, growth and structure of cities, or political science major)
Gender and Sexuality

Geoarchaeology (in an anthropology, classical and Near Eastern archaeology, or geology major)
Hispanic and Hispanic-American Studies
Neural and Behavioral Sciences (with a biology or psychology major)
Peace and Conflict Studies

## Combined A.B./M.A. Degree Programs

The combined A.B./M.A. program lets the unusually well-prepared undergraduate student work toward a master's degree while still completing her bachelor's degree. Students in this program complete the same requirements for each degree as do students who undertake the A.B. and then the M.A. sequentially, but are offered the unique opportunity to work toward both degrees concurrently and to count up to two courses towards both degrees. A full description of requirements for the program and application procedures appear at http://www.brynmawr.edu/deans/ABMA_Program.shtml.

## 3-2 Program in Engineering and Applied Science

The College has negotiated arrangements with the California Institute of Technology whereby a student interested in engineering and recommended by Bryn Mawr may, after completing three years of work at the College, transfer into the third year at Cal Tech to complete two full years of work there. At the end of five years she is awarded an A.B. degree by Bryn Mawr and a Bachelor of Science degree by Cal Tech. Programs are available in many areas of specialization.

In her three years at Bryn Mawr, the student must complete the College Seminar, quantitative, foreign language and divisional requirements, as well as a prescribed science program and the basis for a Bryn Mawr major. (Students completing the program have had majors at Bryn Mawr in mathematics, physics and chemistry.) Students do not register for this program in advance; rather, they complete a course of study that qualifies them for recommendation by the College for application in the spring semester of their third year at the College. Prerequisites for recommendation include completion of courses required by Bryn Mawr and a minimum of one year each of chemistry, mathematics (including multivariable calculus and differential equations) and physics. Approval of the student's major department is necessary at the time of application and for the transfer of credit from the Cal Tech program to complete the major requirements at Bryn Mawr.

Students considering this option should consult the program liaison in the Department of Physics at the time of registration for Semester I of their first year and each semester thereafter to ensure that all requirements are being completed on a satisfactory schedule.

## 3-2 Program in City and Regional Planning

This arrangement with the Department of City and Regional Planning at the University of Pennsylvania allows a student to earn an A.B. degree with a major in the growth and structure of cities at Bryn Mawr and a degree of Master of City Planning at the University of Pennsylvania in five years. While at Bryn Mawr the student must complete the College Seminars, quantitative, foreign-language and divisional requirements and the basis of a major in growth and structure of cities. The student applies to the M.C.P. program at Penn in her sophomore or junior year. No courses taken prior to official acceptance into the M.C.P. program may be counted toward the master's degree, and no more than eight courses may be double-counted toward both the A.B. and the M.C.P. after acceptance. For further information students should consult Gary McDonogh, director of the Growth and Structure of Cities Program, early in their sophomore year.

## Summer Language Programs

Summer language programs offer students the opportunity to spend short periods of time conducting research, studying a language and getting to know another part of the world well.

Bryn Mawr offers a six-week summer program in Avignon, France. This total-immersion program is designed for undergraduate and graduate students with a serious interest in French language, literature and culture. The faculty of the Institut is composed of professors teaching in colleges and universities in the United States and Europe. Classes are held at the Palais du Roure and other sites in Avignon; the facilities of the Médiathèque Ceccano as well as the Université d'Avignon library are available to the group. Students are encouraged to live with French families or "foyers." A certain number of independent studios are also available.

Applicants for admission must have strong academic records and have completed a course in French at a third-year college level or the equivalent. For detailed information concerning admission, curriculum, fees, academic credit and scholarships, students should consult Professor Brigitte Mahuzier of the Department of French and/or visit the Avignon Web site at http://www.brynmawr.edu/avignon.

Bryn Mawr, in conjunction with the University of Pennsylvania, offers a summer program of intensive study in Florence. Focusing on Italian language, culture, art and literature, the coeducational program is open to students from Bryn Mawr and other colleges and universities. Courses carry full, transferable credit and are taught by professors from institutions in both the United States and Europe. Applicants must have a solid academic background and a serious interest in Italian culture, but need not have previous course work in Italian; introductory classes are offered. Students can make their own travel and
housing arrangements, though most choose to stay at a hotel conveniently located in the center of Florence. Information about these accommodations is available through the program. Some need-based financial aid is available. For information, contact Professor Nicholas Patruno in the Department of Italian.

The College also participates in summer programs with the American Council of Teachers of Russian (A.C.T.R.) in Moscow, St. Petersburg and other sites in Russia. These overseas programs are based at several leading Russian universities and are open to Bryn Mawr students who have reached the Intermediate level of proficiency in speaking and reading. Summer programs are 8 weeks in length and provide the equivalent of 2 course units of work in advanced Russian language and culture. Many Bryn Mawr students also take part in the semester (4 units) or academic year (8 units) programs in Russia as well. For further information about the A.C.T.R. programs, students should consult the Department of Russian or ACTR at http://www.actr.org

## Study Abroad in the Junior Year

Bryn Mawr encourages eligible students to consider studying abroad for a semester as a part of their undergraduate education, subject to the requirements of their majors. Study abroad can enhance students' language skills, broaden their academic preparation, introduce them to new cultures, and enhance their personal growth and independence. Each student, in consultation with her dean, her major adviser, and the study abroad adviser, Li-Chen Chin, selects the program appropriate to her academic interests and abilities.

The College has approved about 70 programs in colleges and universities in other countries. Students who study abroad include majors across the humanities, the social sciences and the natural sciences. Last year students studied in Argentina, Australia, Botswana, Canada, Chile, China, Costa Rica, Denmark, Egypt, France, Germany, Ghana, Greece, Ireland, Israel, Italy, Japan, Mexico, Netherlands, New Zealand, Russia, Senegal, South Africa, Spain and the United Kingdom. Applicants must have strong academic records and must meet the language requirements set forth by the overseas program where they intend to study. Most non-English speaking programs expect students to meet at least intermediate proficiency level before matriculation.

Only foreign language majors or students desiring to study with programs for which one semester is not an option may receive a full year of credit for study abroad. Requests for exceptions will be considered from students who present a compelling academic plan requiring a full year of study outside the United States.

All students who study abroad continue to pay Bryn Mawr tuition and, for programs that include food and housing, room and board fees to Bryn Mawr. The College, in turn, pays the program fees directly to the institution abroad. Financial aid for study abroad is
available for students who are eligible for assistance and have been receiving aid during their first and sophomore years. If the study abroad budget is not able to support all of those on aid who plan to study abroad, priority will be given to those for whom it is most appropriate academically and to those who have had the least international experience.

The Foreign Studies Committee determines a student's eligibility by looking at a variety of factors, including the overall and major grade point averages, intellectual coherence of the study abroad experience in the academic program, and faculty recommendations.

## Preparation for Careers in Architecture

Although Bryn Mawr offers no formal degree in architecture or a set preprofessional path, students who wish to pursue architecture as a career may prepare for graduate study in the United States and abroad through courses offered in the Growth and Structure of Cities Program (see page 187). Students interested in architecture and urban design should pursue the studio courses $(226,228)$ in addition to regular introductory courses. They should also select appropriate electives in architectural history and urban design (including classes in classical and Near Eastern archaeology, East Asian studies and history of art) to gain a broad exposure to architecture over time as well as across cultural traditions. Affiliated courses in physics and calculus meet requirements of graduate programs in architecture; theses may also be planned to incorporate design projects. These students should consult as early as possible with Senior Lecturer Daniela Voith and Associate Professor Carola Hein in the Growth and Structure of Cities Program.

## Preparation for Careers in the Health Professions

The Bryn Mawr curriculum offers courses that meet the requirements for admission to professional schools in medicine, dentistry, veterinary medicine and public health. Each year a significant number of Bryn Mawr graduates enroll in these schools. The minimal requirements for most medical and dental schools are met by one year of English, one year of biology, one year of general chemistry, one year of organic chemistry and one year of physics; however, many medical schools do require one additional semester of upper-level coursework in biology. Schools of veterinary medicine usually require upper-level coursework in biology. Students considering careers in one of the health professions are encouraged to discuss their plans with the undergraduate health professions adviser in Canwyll House. The Health Professions Advising Office publishes the Guide for First- and Second-Year Students Interested in the Health Professions. This handbook is available at the meeting for first-year students during Customs Week and at the Health Professions Advising Office in Canwyll House. More information about preparing for careers in the health professions, including the Guide for First- and Sec-ond-Year Students, is also available at the Health Professions Advising Office Web site, http://www.brynmawr.edu/healthpro.

## Preparation for Careers in Law

Because a student with a strong record in any field of study can compete successfully for admission to law school, there is no prescribed program of "pre-law" courses. Students considering a career in law may explore that interest at Bryn Mawr in a variety of ways - e.g., by increasing their familiarity with U.S. history and its political process, participating in Bryn Mawr's well established student self-government process, "shadowing" alumnae/i lawyers through the Career Development Office's externship program and refining their knowledge about law-school programs in the Pre-Law Club. Students seeking guidance about the law-school application and admission process may consult with the College's pre-law adviser, Jane Finkle, at the Career Development Office.

## Teaching Certification

Students majoring in biology, chemistry, English, French, history, Latin, mathematics, physics, political science, Spanish and a number of other fields that are typically taught in secondary school, may get certified to teach in public secondary high schools in Pennsylvania. By reciprocal arrangement, the Pennsylvania certificate is accepted by most other states as well. A student who wishes to teach should consult her dean, the Education Program adviser and the chair of her major department early in her college career so that she may make appropriate curricular plans. Students may also choose to get certified to teach after they graduate through Bryn Mawr's Continuing Education program. For further information, see the Education Program, page 133.

## AFROTC — Reserve Officer Training Corps

Bryn Mawr students are eligible to participate in the Air Force Reserve Officer Training Corps (AFROTC) through an agreement with Saint Joseph's University. All AFROTC aerospace studies courses are held on the Saint Joseph's campus. This program enables a Bryn Mawr student to earn a commission as an Air Force officer while concurrently satisfying her baccalaureate degree requirements.

The AFROTC program of aerospace studies at Saint Joseph's University offers both twoyear and four-year curricula leading to a commission as a second lieutenant in the Air Force. In the four-year curriculum, a student takes the General Military Course (GMC) during the first and sophomore years, attends a four-week summer training program, and then takes the Professional Officer Course (POC) in the junior and senior years. The student is under no contractual obligation to the Air Force until entering the POC or accepting an Air Force scholarship. In the two-year curriculum, the student attends a six-week summer training program and then enters the POC in the junior year.

The subject matter of the first and sophomore year is developed from a historical perspective and focuses on the scope, structure and history of military power with an emphasis
on the development of air power. During the junior and senior years, the curriculum concentrates on the concepts and practices of leadership and management, and the role of national security issues in contemporary American society.

In addition to the academic portion of the curriculum, each student participates in a two-hour Leadership Laboratory each week. During this period, the day-to-day skills and working environment of the Air Force are discussed and explained. The Leadership Lab uses a student organization designed for the practice of leadership and management techniques.

The AFROTC program offers one-, one-and-a-half-, two-, two-and-a-half-, three-, and three-and-a-half-year scholarships on a competitive basis to qualified applicants. All scholarships cover tuition, lab fees, a flat-rate allowance for books and a tax-free monthly stipend. All members of the POC, regardless of scholarship status, receive the tax-free monthly stipend plus additional support for those not on scholarship.

Degree credit allowed toward the Bryn Mawr A.B. for AFROTC courses is determined on an individual basis. For further information about the AFROTC cross-enrollment program, scholarships and career opportunities, contact the Professor of Aerospace Studies, AFROTC Det. 750, Saint Joseph's University, 5600 City Avenue, Philadelphia, Pa., 19131 , (610) 660-3190. Interested students should also consult their deans.

## Continuing Education Program

The Continuing Education Program provides highly qualified women, men and highschool students who do not wish to undertake a full college program leading to a degree the opportunity to take courses at Bryn Mawr College on a fee basis, prorated according to the tuition of the College, space and resources permitting. Students accepted by the Continuing Education Program may apply to take up to two courses per semester; they have the option of auditing courses or taking courses for credit. Alumnae/i who have received one or more degrees from Bryn Mawr (A.B., M.A., M.S.S., M.L.S.P. and/or Ph.D.) and women and men 60 years of age and older are entitled to take undergraduate courses for credit at the College at a special rate. This rate applies only to continuingeducation students and not to matriculated McBride Scholars. Continuing-education students are not eligible to receive financial aid from the College. For more information or an application, contact the Continuing Education Program office at (610) 526-6515 or send a request to Continuing Education, Bryn Mawr College, 101 North Merion Avenue, Bryn Mawr, Pa., 19010-2899.

## Katharine E. McBride Scholars Program

The Katharine E. McBride Scholars Program serves women beyond the traditional college entry age who wish to earn an undergraduate degree at Bryn Mawr. The program admits women who have demonstrated talent, achievement and intelligence in various areas, including employment, volunteer activities and home or formal study. McBride Scholars are admitted directly as matriculated students.

Once admitted to the College, McBride scholars are subject to the residency rule, which requires that a student take a minimum of 24 course units while enrolled at Bryn Mawr. Exceptions will be made for students who transfer more than eight units from previous work. Such students may transfer up to 16 units and must then take at least 16 units at Bryn Mawr. McBride Scholars may study on a part-time or full-time basis. For more information or an application, visit the McBride Program Web site at http://www.brynmawr.edu/mcbride, send an e-mail to mcbrides@brynmawr.edu or call (610) 526-5373.

## Postbaccalaureate Premedical Program

Women and men who hold bachelor's degrees but need introductory science courses before making initial application to schools of medicine, dentistry and veterinary medicine may apply to the Postbaccalaureate Premedical Program. The Postbac Program stresses intensive work in the sciences. It is designed primarily for students who are changing fields and who have not previously completed the premedical requirements. Applications are considered for admission in the summer or fall only. Applications should be submitted as early as possible because decisions are made on a rolling admissions basis. The Postbac Program is highly selective. Please visit http://www.brynmawr. edu/postbac for more information.

Students enrolled in the Postbac Program may elect to apply early for provisional admission to an outstanding group of medical schools with which Bryn Mawr has a "consortial" arrangement. Students who are accepted at a medical school through the consortial process enter medical school in the September immediately following the completion of their postbaccalaureate year. Otherwise, students apply to medical school during the summer of the year they are completing the program.

The following are Bryn Mawr's "consortial" medical schools:

- Brown University School of Medicine
- Dartmouth Medical School
- Drexel University College of Medicine
- George Washington University School of Medicine and Health Sciences
- Jefferson Medical College of Thomas Jefferson University
- SUNY Downstate College of Medicine
- SUNY at Stony Brook School of Medicine Health Sciences Center
- Temple University School of Medicine
- University of Medicine and Dentistry of New Jersey - Robert Wood Johnson Medical School
- University of Pittsburgh School of Medicine
- University of Rochester School of Medicine


## Summer Courses

During Summer Sessions I and II, qualified women and men, including high-school students, may take courses in the sciences, mathematics and intensive language studies in Russian. Students may use these courses to fulfill undergraduate requirements or prepare for graduate study. The current summer-session calendar should be consulted for dates and course descriptions. Each course carries full academic credit.

## Centers for 21st Century Inquiry

Bryn Mawr's interdisciplinary centers encourage innovation and collaboration in research, teaching and learning. The four interrelated centers are designed to bring together scholars from various fields to examine diverse ways of thinking about areas of common interest, creating a stage for constant academic renewal and transformation.

Flexible and inclusive, the centers help ensure that the College's curriculum can adapt to changing circumstances and evolving methods and fields of study. Through research and internship programs, fellowships and public discussions, they foster links among scholars in different fields, between the College and the world around it, and between theoretical and practical learning.

The Center for Ethnicities, Communities and Social Policy is devoted to the interdisciplinary study of diverse communities and the examination of social-policy questions in the North American context. The Center sponsors research by faculty and students, hosts visiting scholars, and provides a forum for public discussion of issues significant to academics, policy-makers and the broader community.

The Center for International Studies brings together scholars from various fields to define global issues and confront them in their appropriate social, scientific, cultural and linguistic contexts. The Center supports collaborative, cross-disciplinary research and prepares students for life and work in the highly interdependent world and global economy of the 21st century.

The Center for Science in Society was founded to facilitate the broad conversations, involving scientists and nonscientists as well as academics and nonacademics, that are essential to continuing explorations of the natural world and humanity's place in it. Through research programs, fellowships and public discussions, the Center supports innovative, interdisciplinary approaches to education in the sciences, novel intellectual and practical collaborations, and continuing inquiry into the interdependent relationships among science, technology and other aspects of human culture.

The Center for Visual Culture is dedicated to the study of visual forms and experience of all kinds, from ancient artifacts to contemporary films and computer-generated images. It serves as a forum for explorations of the visual aspect of the natural world as well as the diverse objects and processes of visual invention and interpretation around the world.

## Praxis Program

The Praxis Program is part of the Civic Engagement Office and is located in Dolwen on Cambrian Row. Praxis is an experiential, community-based learning program that integrates theory and practice through student engagement in active, relevant fieldwork, enhances student learning and builds citizenship skills. The program provides consistent, equitable guidelines along with curricular coherence and support to students and faculty who wish to combine coursework with fieldwork and community-based research. The three designated types of Praxis courses - departmental courses, interdepartmental seminars and independent studies - are described on page 44 and at http://www.brynmawr.edu/praxis.

Praxis courses on all levels are distinguished by genuine collaboration with fieldsite organizations. A dynamic process of reflection incorporates lessons learned in the field into the classroom setting and applies theoretical understanding gained through classroom study to work done in the broader community. The nature of fieldwork assignments and projects varies according to the learning objectives for the course and according to the needs of the organization.

The role of the Praxis Office is to assist faculty in identifying, establishing and supporting field placements and to develop ongoing partnerships with community organizations, such as social service agencies, schools, government offices and museums. Field supervisors orient the student to the fieldsite, identify placement objectives and oversee the work of the student at the site. Field supervisors frequently visit the classroom as guest presenters and co-teachers. Faculty members retain ultimate responsibility and control over the components of the Praxis Program that make it distinctly academic: course reading and discussion, rigorous process and reflection, and formal presentation and evaluation of student progress.

There are three levels of Praxis courses (see below), which require increasing amounts of fieldwork but do not need to be taken successively: departmental courses (Praxis 1), interdepartmental seminars (Praxis 2) and independent study (Praxis 3). Praxis courses may be offered in any department and students may enroll in more than one Praxis course at a time. Students enrolled in more than one Praxis course are sometimes able to use the same field placement to meet the requirements of both courses. Praxis-style courses taken at other institutions are subject to prior approval by the Praxis Office and faculty supervisor.

A Praxis I Departmental Course uses fieldwork as a form of experiential learning to enrich the study and understanding of a single disciplinary topic. Fieldwork typically constitutes 25 percent of total coursework assigned. Students typically complete one 2- to 3-hour fieldsite visit a week. Students are eligible for Praxis I courses according to departmental guidelines.

A Praxis II Interdepartmental Seminar is a multidisciplinary course combining more substantial fieldwork with an academic focus on a central topic (e.g., geographic location, historical period, social issue, etc.) studied from several disciplinary perspectives. Field-work typically constitutes 50 percent of total coursework assigned. Students typically complete two 2- to 3-hour fieldsite visits a week. Praxis II courses are available to sophomore and higher-level students who are in good academic standing.

A Praxis III Independent Study places fieldwork at the center of a supervised learning experience. Fieldwork is supported by appropriate readings and regular meetings with a faculty member who must agree in advance to supervise the project. Faculty are not obligated to supervise Praxis III courses and may decline to do so. Departments may limit the number of Praxis III courses that a faculty member may supervise.

Students who plan to undertake a Praxis III Independent Study should submit a completed Praxis III proposal to their dean for her/his signature at pre-registration and then return the form to the Praxis Office to be reviewed by the Praxis Program Director. The Praxis III learning plan - which must include a description of the student's course, all stipulated coursework, a faculty supervisor, a fieldsite, a fieldsite supervisor and fieldwork responsibilities - must be approved by the Praxis Program Director by the beginning of the semester in which the course will take place. The Praxis Program Director will notify the Registrar's Office when the Praxis III learning plan is approved, at which point a course registration number will be created for the course. Students are encouraged to visit the Praxis Office to discuss possible field placements, although they are not discouraged from developing their own fieldsites.

Praxis III fieldwork typically constitutes 75 percent of total coursework assigned, with students typically completing two 4- to 5-hour fieldsite visits per week. Praxis III courses are available to sophomore and higher-level students who are in good academic standing. No student may take more than two Praxis III courses during her time at Bryn Mawr.

## College Seminars

Co-Directors
Gail Hemmeter, Department of English
Stephen Salkever, Department of Political Science

## Steering Committee

Linda Caruso-Haviland, Dance Program
Jody Cohen, Education Program
Alison Cook-Sather, Education Program
Robert Dostal, Department of Philosophy
Michelle Francl, Department of Chemistry
Paul Grobstein, Department of Biology
Jane Hedley, Department of English
Mark Lord, Theater Program
George Pahomov, Department of Russian
Bethany Schneider, Department of English
The College Seminars are discussion-oriented, reading- and writing-intensive courses for first-year students. All students are required to take a College Seminar during the first semester of their first year. Topics vary from year to year, but all seminars are designed to engage broad, fundamental issues and questions, ones that are not defined by the boundaries of any academic discipline. The purpose of the seminars is to help students become better close readers and interpretive writers. Course materials are chosen to elicit critical thinking and lively discussion, and may include, in addition to books and essays, films, material objects, social practices, scientific observations and experiments. Seminars offered in recent years include

## Questions of Gender: Engendering Questions

What does it mean to be male or female in our culture? Fact and myth interact in complex ways to produce a society's "knowledge" of sex and gender: the process of that interaction in our own society will be the guiding thread of this course. We'll look at how sex difference is established biologically in human beings, and consider various ways in which male-female difference matters, or is supposed to matter, in everyday life.

## Worldviews and Ways of Life

How can we best make sense of the universe? What ways of life are more or less worth pursuing? We consider and connect these questions in texts from several different times and places. The first comes from Athens in the fifth and fourth centuries B.C.E.: Sophocles and Plato. From ancient China, we look at writings from Confucius and Chuang Tzu. From early modern Europe, we compare Machiavelli's The Prince, Shakespeare's Hamlet and Descartes' Discourse on Method. We conclude with one 19th- and one 20th-century novel, Mary Shelley's Frankeustein and Don DeLillo's White Noise.

## The Injured Child in Psychology and Literature

Among 20th-century psychological and psychoanalytic theorists a broad consensus exists that childhood is a crucially important period in every human life. Patterns of behavior and feeling are established in childhood that persist into adulthood; a psychic wound received in childhood will leave scars that persist into adult life. This course will bring together psychological discussions of childhood injuries and their healing from the works of Donald Winnicott, Alice Miller, Erich Fromm and Karen Horney with fictional texts including Thomas Hardy's Tess of the d'Urbervilles, Emily Bronte's Wuthering Heights, F. Scott Fitzgerald's The Great Gatsby and Leo Tolstoy's Childhood.

## Memory and Imagination: The Self in Story and Society

In this course we consider the nature of memory and its relationship to imagination, both in the evolving life of the individual and in the development of the larger group or culture. We look at the relationship of identity to power, and address the question of how re-considering memory and identity might open up new imaginative spaces in global contexts. Our inquiry will include novels, memoirs, essays by anthropologists and poets as well as photographs, artwork and films. We will write descriptively and critically, drawing on memory and imagination as well as analysis to develop and revise our understandings.

## We Live Here: Humans and the Environment

The purposes of this seminar are several: first, to examine some of the basic biological dynamics of ecology; second, to explore a variety of human impacts upon the environment and some problems they entail; third, to notice some of the ways in which different cultures and times have used the concept of "Nature" to frame the human place in the natural world; fourth, to sample some different disciplinary perspectives on the environment and its problems; and finally, to raise the question of improving and perhaps healing the rifts and tensions between the human and the natural.

## Dance of the Spheres

Using models and experiences from the sciences, arts and literature, this course explores the varied and often unexpected interplay of different ways of knowing that have come to characterize the Western intellectual tradition. Among the questions to be considered: how do we as individuals and as cultures grow in our knowledge of ourselves and the universe; how do the ways of knowing that we construct affect what we know; are all ways of knowing created equal?

## Islam, Politics and Modernity

Islam has been concerned with the practical problems of politics and society since the Prophet Muhammad sought to create a just community in seventh-century Arabia. Contemporary Islamist movements seek to modernize in the name of reason as well as revelation, using prior principles to address modern challenges. The course emphasizes works of history, fiction, social science, and film, to examine how Muslims have understood the relationship between politics and reason, how the challenge of modernity is understood, and how the political role of religion has been enacted. No prior knowledge of Islam is assumed.

## Outsiders and Insiders: The Construction of Identity

In this course we will examine the categories of "outsider" and "insider" to look at the privileges, burdens and paradoxes that accompany each in relation to questions about gender, race, sexuality, class, history and power. The course is designed to present a diversity of learning approaches as well as materials, traditional classroom activities (group work, class discussion, etc.) as well as hands-on experiential learning. We will read poetry, novels and essays, as well as watch films. To help ground our exploration, we will read selections from theoretical texts that examine how identities and communities are formed.

## Classical Mythology and the Contemporary Imagination

The myths of the Greeks and Romans have provided an inexhaustible imaginative source for artists throughout the history of Western civilization, and each age has rewritten these myths (by translating them or adapting them) to reflect its own interests and anxieties. Writers have superimposed their visions upon the source myth, and in turn these visions have been examined by literary criticism, creating a kind of archaeology of interpretation on three levels. In the tension between the source myth and its reinterpretations lies the interest and the challenge for us as critics and as writers.

## Academic Awards and Prizes

The following awards, fellowships, scholarships and prizes are awarded by the faculty and are given solely on the basis of academic distinction and achievement.

The Academy of American Poets Prize, awarded in memory of Marie Bullock, the Academy's founder and president, is given each year to the student who submits to the Department of English the best poem or group of poems. (1957)

The Seymour Adelman Book Collector's Award is given each year to a student for a prizewinning collection on any subject, single author or group of authors, and may include manuscripts and graphics. (1980)

The Seymour Adelman Poetry Award was established by Daniel and Joanna Semel Rose, Class of 1952, to provide an award in honor of Seymour Adelman. The award is designed to stimulate further interest in poetry at Bryn Mawr. Any member of the Bryn Mawr community - undergraduate or graduate student, staff or faculty member - is eligible for consideration. The grant may be awarded to fund research in the history or analysis of a poet or poem, to encourage the study of poetry in interdisciplinary contexts, to support the writing of poetry or to recognize a particularly important piece of poetic writing. (1985)

The Horace Alwyne Prize was established by the Friends of Music of Bryn Mawr College in honor of Horace Alwyne, Professor Emeritus of Music. The award is presented annually to the student who has contributed the most to the musical life of the College. (1970)

The Areté Fellowship Fund was established by Doreen Canaday Spitzer '31. The fund supports graduate students in the Departments of Greek, Latin and Classical Studies, History of Art, and Classical and Near Eastern Archaeology. (2003)

The Bain-Swiggett Poetry Prize was established by a gift of Mr. and Mrs. Glen Levin Swiggett. This prize is to be awarded by a committee of the faculty on the basis of the work submitted. (1958)

The Berle Memorial Prize Fund in German Literature was established by Lillian Berle Dare in memory of her parents, Adam and Katharina Berle. The prize is awarded annually to an undergraduate for excellence in German literature. Preference is given to a senior who is majoring in German and who does not come from a German background. (1975)

The Bolton Prize was established by the Bolton Foundation as an award for students majoring in the growth and structure of cities. (1985)

The Bryn Mawr European Fellowship has been awarded each year since the first class graduated in 1889. It is given for merit to a member of the graduating class, to be applied toward the expenses of one year's study at a foreign university. The European Fellowship continues to be funded by a bequest from Elizabeth S. Shippen.

The Commonwealth Africa Scholarship was established by a grant from the Thorncroft Fund Inc. at the request of Helen and Geoffrey de Freitas. The scholarship is used to send a graduate to a university or college in Commonwealth Africa, to teach or to study, with a view to contributing to mutual understanding and the furtherance of scholarship. In 1994, the description of the scholarship was changed to include support for current undergraduates. (1965)

The Hester Ann Corner Prize for distinction in literature was established in memory of Hester Ann Corner, Class of 1942, by gifts from her family, classmates and friends. The award is made to a junior or senior on the recommendation of a committee composed of the chairs of the Departments of English and of Classical and Modern Foreign Languages. (1950)

The Katherine Fullerton Gerould Memorial Prize was founded by a gift from a group of alumnae, many of whom were students of Mrs. Gerould when she taught at Bryn Mawr from 1901 to 1910. It is awarded to a student who shows evidence of creative ability in the fields of informal essay, short story and longer narrative or verse. (1946)

The Elizabeth Duane Gillespie Fund for Scholarships in American History was founded by a gift from the National Society of Colonial Dames of America in the Commonwealth of Pennsylvania in memory of Elizabeth Duane Gillespie. Two prizes are awarded annually on nomination by the Department of History, one to a member of the sophomore or junior class for work of distinction in American history, a second to a senior doing advanced work in American history for an essay written in connection with that work. The income from this fund has been supplemented since 1955 by annual gifts from the society. (1903)

The Maria L. Eastman Brooke Hall Memorial Scholarship was founded in memory of Maria L. Eastman, principal of Brooke Hall School for Girls, Media, Pennsylvania, by gifts from the alumnae and former pupils of the school. It is awarded annually to the member of the junior class with the highest general average and is held during the senior year. Transfer students who enter Bryn Mawr as members of the junior class are not eligible for this award. (1901)

The Charles S. Hinchnan Memorial Scholarship was founded in the memory of the late Charles S. Hinchman of Philadelphia by a gift made by his family. It is awarded annually to a member of the junior class for work of special excellence in her major subject(s) and is held during the senior year. (1921)

The Sarah Stifler Jesup Fund was established in memory of Sarah Stifler Jesup, Class of 1956, by gifts from New York alumnae, as well as family and friends. The income is to be awarded annually to one or more undergraduate students to further a special interest, project or career goal during term time or vacation. (1978)

The Pauline Jones Prize was established by friends, students and colleagues of Pauline Jones, Class of 1935. The prize is awarded to the student writing the best essay in French, preferably on poetry. (1985)

The Anna Lerah Keys Memorial Prize was established by friends and relatives in memory of Anna Lerah Keys, Class of 1979. The prize is awarded to an undergraduate majoring in classical and Near Eastern archaeology. (1984)

The Sheelah Kilroy Memorial Scholarship in English was founded in memory of their daughter Sheelah by Dr. and Mrs. Phillip Kilroy. This prize is awarded annually on the recommendation of the Department of English to a student for excellence of work in an English course. (1919)

The Richmond Lattimore Prize for Poetic Translation was established in honor of Richmond Lattimore, professor of Greek at Bryn Mawr and distinguished translator of poetry. The prize is awarded for the best poetic translation submitted to a committee composed of the chairs of the departments of classical and modern languages. (1984)

The Helen Taft Manning Essay Prize in History was established in honor of Helen Taft Manning '15, in the year of her retirement, by her class. The prize is awarded to a senior in the Department of History for work of special excellence in the field. (1957)

The McPherson Fund for Excellence was established through the generous response of alumnae/i, friends, and faculty and staff members of the College to an appeal issued in the fall of 1996. The fund honors the achievements of President Emeritus Mary Patterson McPherson. Three graduating seniors are named McPherson Fellows in recognition of their academic distinction and community service accomplishments. The fund provides support for an internship or other special project.

The Nadia Anne Mirel Memorial Fund was established by the family and friends of Nadia Anne Mirel '85. The fund supports the research or travel of students undertaking imaginative projects in the following areas: children's educational television, and educational film and video. (1986)

The Martha Barber Montgomery Fund was established by Martha Barber Montgomery ' 49 , her family and friends to enable students majoring in the humanities, with preference to those studying philosophy and/or history, to undertake special projects. The fund may be used, for example, to support student research and travel needs, or an internship in a nonprofit or research setting. (1993)

The Elinor Nahm Prizes in Italian are awarded for excellence in the study of Italian at the introductory, intermediate and advanced levels. (1991)

The Elinor Nalm Prizes in Russian are awarded for excellence in the study of Russian language and linguistics and of Russian literature and culture. (1991)

The Milton C. Nahm Prize in Philosophy is awarded to the senior philosophy major whose thesis is judged most outstanding. (1991)

The Elisabeth Packard Art and Archaeology Internship Fund was established by Elisabeth Packard '29 to provide stipend and travel support to enable students majoring in history of art or classical and Near Eastern archaeology to hold museum internships, conduct research or participate in archaeological digs. (1993)

The Alexandra Peschka Prize was established in memory of Alexandra Peschka '64 by gifts from her family and friends. The prize is awarded annually to a member of the firstyear or sophomore class and writer of the best piece of imaginative writing in prose. The award is made by a committee of the Department of English, which consults the terms stated in the deed of gift. (1969)

The Jeanne Quistgaard Memorial Prize was given by the Class of 1938 in memory of their classmate, Jeanne Quistgaard. The income from this fund may be awarded annually to a student in economics. (1938)

The Laura Estabrook Romine '39 Fellowship in Economics was established by a gift from David E. Romine, to fulfill the wish of his late brother, John Ransel Romine III, to establish a fund in honor of their mother, Laura Estabrook Romine '39. The fellowship is given annually to a graduating senior or alumna, regardless of undergraduate major, who has received admission to a graduate program in economics. (1996)

The Barbara Rubin Award Fund was established by the Amicus Foundation in memory of Barbara Rubin '47. The fund provides summer support for students undertaking internships in nonprofit or research settings appropriate to their career goals, or study abroad. (1989)

The Gail Anı Sclweiter Prize Fund was established in memory of Gail Ann Schweiter ' 79 by her family. The prize is to be awarded to a science or mathematics major in her junior or senior year who has shown excellence both in her major field and in musical performance. (1993)

The Charlotte Angas Scott Prize in Mathenatics is awarded annually to an undergraduate on the recommendation of the Department of Mathematics. It was established by an anonymous gift in memory of Charlotte Angas Scott, professor of mathematics and a member of the faculty of Bryn Mawr College from 1885 to 1924. (1960)

The Elizabeth S. Shippen Scholarship in Foreign Language was founded under the will of Elizabeth S. Shippen of Philadelphia. It is awarded to a junior whose major subject is French, German, Greek, Italian, Latin, Russian or Spanish for excellence in the study of foreign languages. (1915)

The Elizabeth S. Shippen Scholarship in Science was founded under the will of Elizabeth S. Shippen of Philadelphia and is awarded to a junior whose major subject is biology, chemistry, geology or physics for excellence in the study of sciences. (1915)

The Gertrude Slaughter Fellowship was established by a bequest of Gertrude Taylor Slaughter, Class of 1893 . The fellowship is to be awarded to a member of the graduating class for excellence in scholarship to be used for a year's study in the United States or abroad. (1964)

The Ariadne Solter Fund was established in memory of Ariadne Solter '91 by gifts from family and friends to provide an annual award to a Bryn Mawr or Haverford undergraduate working on a project concerning development in a third world country or the United States. (1989)

The Katherine Stains Prize Fund in Classical Literature was established by Katherine Stains in memory of her parents, Arthur and Katheryn Stains, and in honor of two excellent 20th-century scholars of classical literature, Richmond Lattimore and Moses Hadas. The income from the fund is to be awarded annually as a prize to an undergraduate student for excellence in Greek literature, either in the original or in translation. (1969)

The M. Carey Thomas Essay Prize is awarded annually to a member of the senior class for distinction in writing. The award is made by the Department of English for either creative or critical writing. It was established in memory of Miss Thomas by her niece, Millicent Carey McIntosh '20. (1943)

The Emma Osborn Thompson Prize in Geology was established by a bequest of Emma Osborn Thompson, A.B. 1904. From the income of the bequest, a prize is to be awarded from time to time to a student in geology. (1963)

The Laura van Straaten Fund was established by Thomas van Straaten and his daughter, Laura van Straaten '90, in honor of Laura's graduation. The fund supports a summer internship for a student working to advance the causes of civil rights, women's rights or reproductive rights. (1990)

The Esther Walker Award was founded by a bequest from William John Walker in memory of his sister, Esther Walker '10. It may be given annually to a member of the senior class who, in the judgment of the faculty, has displayed the greatest proficiency in the study of living conditions of northern African Americans. (1940)

The Anna Pell Wheeler Prize in Mathematics is awarded annually to an undergraduate on the recommendation of the Department of Mathematics. It was established by an anonymous gift in honor of Anna Pell Wheeler, professor emeritus of mathematics and a member of the faculty of Bryn Mawr College from 1918 until her death in 1966. (1960)

The Thomas Raeburn White Scholarships were established by Amos and Dorothy Peaslee in honor of Thomas Raeburn White, trustee of the College from 1907 until his death in 1959, counsel to the College throughout these years, and president of the trustees from 1956 to 1959. The income from the fund is to be used for prizes to undergraduate students who plan to study foreign languages abroad during the summer under the auspices of an approved program. (1964)

The Anne Kirschbaum Winkelman Prize, established by the children of Anne Kirschbaum Winkelman ' 48 , is awarded annually to the student judged to have submitted the most outstanding short story. (1987)

## Scholarships for Medical Study

The following scholarships may be awarded to seniors intending to study medicine, after their acceptance by a medical school, or to graduates of Bryn Mawr intending or continuing to pursue a medical education. Applications for the scholarship should be made to the premedical adviser before March 15 preceding the academic year in which the scholarship is to be held. Applications for renewal of scholarships must be accompanied by letters of recommendation from instructors in the medical school.

The Linda B. Lange Fund was founded by bequest of $\$ 30,000$ under the will of Linda B. Lange, A.B. 1903. The income from this fund provides the Anna Howard Shaw Scholarship in Medicine and Public Health, awarded on recommendation of the president and faculty to a member of the graduating class or a graduate of the College for the pursuit, during an uninterrupted succession of years, of studies leading to the degrees of M.D. and Doctor of Public Health. The award may be continued until the degrees are obtained. (1948)

The Hannah E. Longshore Memorial Medical Scholarship was founded by Mrs. Rudolf Blankenburg in memory of her mother by a gift of $\$ 10,000$. The Scholarship is awarded by a committee of the faculty to a student who has been accepted by a medical school. It may be renewed for each year of medical study. (1921)

The Jane V. Myers Medical Scholarship Fund of $\$ 10,000$ was established by Mrs. Rudolf Blankenburg in memory of her aunt. The scholarship is awarded by a committee of the faculty to a student who has been accepted by a medical school. It may be renewed for each year of medical study. (1921)

The Harriet Judd Sartain Memorial Scholarship Fund was founded by bequest of $\$ 21,033$ under the will of Paul J. Sartain. The income from the fund is to establish a scholarship which is awarded to a member of the graduating class who, in the judgment of the faculty, needs and is deserving of assistance for the study of medicine. The scholarship may be continued for the duration of her medical course. (1948)

## Areas of Study

## Definitions

## Major

In order to ensure that the student's education involves not simply exposure to many ideas and disciplines but development of competence and some degree of mastery in at least one, she must choose a major subject at the end of sophomore year. With the guidance of the major adviser, students plan an appropriate sequence of courses. The following is a list of major subjects:
Anthropology
Astronomy (at Haverford College)
Biology
Chemistry
Classical and Near Eastern Archaeology
Classical Culture and Society (see Greek, Latin and Classical Studies)
Classical Languages (see Greek, Latin and Classical Studies)
Comparative Literature
East Asian Studies
Economics
English
Fine Arts (at Haverford College)
French and French Studies
Geology
German and German Studies
Greek (see Greek, Latin and Classical Studies)
Growth and Structure of Cities
History
History of Art
Italian
Latin (see Greek, Latin and Classical Studies)
Mathematics
Music (at Haverford College)
Philosophy
Physics

Political Science
Psychology
Religion (at Haverford College)
Romance Languages
Russian
Sociology
Spanish

## Minor

The minor typically consists of six courses, with specific requirements determined by the department or program. A minor is not required for the degree. The following is a list of subjects in which students may elect to minor. Minors in departments or programs that do not offer majors appear in italics.

## Africana Studies

Anthropology
Biology
Chemistry
Classical and Near Eastern Archaeology
Classical Culture and Society (see Greek, Latin and Classical Studies)
Comparative Literature
Computational Methods
Computer Science
Creative Writing
Dance
East Asian Studies
Economics
Education
English
Film Studies
French and French Studies
Gender and Sexuality
Geology
German and German Studies
Greek (see Greek, Latin and Classical Studies)
Growth and Structure of Cities

History
History of Art
International Studies
Italian
Latin (see Greek, Latin and Classical Studies)
Mathematics
Music
Philosophy
Physics
Political Science
Psychology
Russian
Sociology
Spanish
Theater Studies

## Concentration

The concentration, which is not required for the degree, is a cluster of classes that overlap the major and focus a student's work on a specific area of interest:
Creative Writing (with an English major)
Environmental Studies (in an anthropology, biology. chemistry, economics, English, geology, growth and structure of cities, or political science major)
Gender and Sexuality
Geoarchaeology (in an anthropology, classical and Near Eastern archaeology, or geology major)
Hispanic and Hispanic-American Studies
Neural and Behavioral Sciences (with a biology or psychology major)
Peace and Conflict Studies
Key to Course Letters
ANTH Anthropology
ARTA Arts in Education

ASTR Astronomy
BIOL Biology
CHEM Chemistry
CNSE Chinese
ARCH Classical and Near Eastern
Archaeology
CSTS Classical Culture and Society
COML Comparative Literature
CMSC Computer Science
ARTW Creative Writing
ARTD Dance
EAST East Asian Studies
ECON Economics
EDUC Education
ENGL English
ARTS Fine Arts
FREN French and French Studies
GNST General Studies
GEOL Geology
GERM German and German Studies
GREK Greek
CITY Growth and Structure of Cities
HEBR Hebrew and Judaic Studies
HIST History
HART History of Art
ITAL Italian
JNSE Japanese
LATN Latin
MATH Mathematics
MUSC Music
PHIL Philosophy
PHYS Physics
POLS Political Science
PSYC Psychology
RELG Religion
RUSS Russian
SOCL Sociology
SPAN Spanish
ARTT Theater

## Key to Course Numbers

001-099
Elementary and intermediate courses. With rare exceptions, these courses are not part of the work in the major.

100-199
First-year courses.
200-299
Second-year courses.
300-399
Advanced courses in the major.
400-499
Special categories of work (e.g., 403 for a unit of supervised work).

Some courses listed together are full-year courses. Students must complete the second semester of a full-year course in order to receive credit for both semesters. Fullyear courses are indicated by the phrase "both semesters are required for credit" in the course description. Other courses listed together are designed as two-semester sequences, but students receive credit for completing either semester without the other.

A semester course usually carries one unit of credit. Students should check the course guide for unit listing. One unit equals four semester hours or six quarter hours.

## Key to Requirement Indicators

Quantitative Skills: Indicates courses that meet the requirement for work in Quantitative Skills.

Division I: Indicates courses that meet part of the divisional requirement for work in the social sciences.

Division IIL: Indicates courses that meet the laboratory science part of the divisional requirement for work in the natural sciences and mathematics.

Division II: Indicates courses that meet part of the divisional requirement for work in the natural sciences or mathematics, but not the laboratory science part of the Division II requirement.

Division III: Indicates courses that meet part of the divisional requirement for work in the humanities.

Division I or III: Indicates courses that can be used to meet part of the divisional requirement for work in either the social sciences or the humanities.

## Neighboring College Courses

Selected Haverford College courses are listed in this catalog when applicable to Bryn Mawr programs. Consult the Haverford catalog for full course descriptions. Students should consult their deans or major advisers for information about Swarthmore College, University of Pennsylvania and Villanova University courses pertinent to their studies. Catalogs and course guides for Swarthmore, Penn and Villanova are available in the Undergraduate Dean's Office.

## Course Descriptions

Each course description includes information about prerequisites. In parentheses following the description are the name(s) of the instructor(s), the College requirements that the course meets, if any, and information on cross-listing. Descriptions for cross-listed courses are listed once in the home department of the primary crosslisted course.

At the time of this printing, the course offerings and descriptions that follow were accurate. Whenever possible, courses that will not be offered in the current year are so noted. There may be courses offered in the current year for which information was not available at the time of this catalog printing. For the most up-to-date and complete information regarding course offerings, faculty, status and divisional requirements, please consult the Tri-Co Course Guide, which can be found on the College Web site at http://www.trico.haverford.edu, or the Bryn Mawr-Haverford Course Guide, which is available in print prior to the start of each semester.

## Africana Studies

Students may complete a minor in Africana studies.

## Coordinators

Robert Washington
Tracey Hucks, at Haverford College
The Africana Studies Program brings a global outlook to the study of Africa and the African diaspora. Drawing on analytical perspectives from anthropology, history, literary studies, political science and sociology, the program focuses on African people and African cultures against a background of increasing globalization and dramatic social, economic and political change.

Bryn Mawr's Africana Studies Program participates in a U.S. Department of Education-supported consortium with Haverford and Swarthmore Colleges and the University of Pennsylvania. Through this consortium, Bryn Mawr students have an opportunity to take a broad range of courses beyond those offered at Bryn Mawr by enrolling in courses offered by the three other participating institutions. Bryn Mawr's Africana Studies Program sponsors a study abroad semester at the University of Nairobi, Kenya, and participates in similar study abroad programs offered by its consortium partners in Zimbabwe, Ghana and Senegal.

Students are encouraged to begin their work in the Africana Studies Program by taking Introduction to Africana Studies
(General Studies 101). This introductory level course, which provides students with a common intellectual experience as well as a foundation for subsequent work in Africana studies, should be completed by the end of the student's junior year.

## Minor Requirements

The requirements for a minor in Africana studies are the following:

1. One-semester interdisciplinary course Bryn Mawr/Haverford General Studies 101: Introduction to Africana Studies.
2. Six semester courses from an approved list of courses in Africana studies.
3. A senior thesis or seminar-length essay in an area of Africana studies.

Students are encouraged to organize their course work along one of several prototypical routes. Such model programs might feature:

1. Regional or area studies; for example, focusing on Brazil, the English-speaking Caribbean or North America.
2. Thematic emphases; for example, exploring decolonization, class politics, ethnic conflicts and/or economic development in West and East Africa.
3. Comparative emphases; for example, problems of development, public health, governance or family and gender.

The final requirement for the Africana studies minor is a senior thesis or its equivalent. If the department in which the student is majoring requires a thesis, she can satisfy the Africana studies requirement by writing on a topic that is approved
by her department and the Africana Studies Program coordinator. 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 Africana Studies Program coordinator.

Africana studies courses currently offered at Bryn Mawr include:

ANTH B253 Childhood in the African Experience
ARCH B101 The Uses of the Past: Introduction to Egyptian and near Eastern Archaeology
CITY B266 Schools in American Cities
CITY B338 The New African Diaspora
EDUC B200 Critical Issues in Education
EDUC B266 Schools in American Cities
ENGL B263 Toni Morrison and the Art of Narrative Conjure
ENGL B362 African American Literature
GNST B101 African Civilizations: An Interdisciplinary Introduction to Africana Studies
GNST B 103 Introduction to Swahili Language and Culture I
GNST B105 Introduction to Swahili Language and Culture II
HIST B203 High Middle Ages
HIST B303 Topics in American History
POLS B243 African and Carribbean Perspectives in World Politics
SOCL B215 Challenges and Dilemmas of Diversity: Racial and Ethnic Relations in American Society
SOCL B338 The New African Diaspora

Africana studies courses currently offered at Haverford include:

ANTH H205B Social Anthropology
ENGL H270A Portraits in Black: The Influence of an Emergent African American Culture
ENGL H363B Topics in American Literature: John Brown's Body: Violence, National Fantasy and
PHIL H233B Philosophy and Race POLS H123B American Politics: Difference and Discrimination
POLS H235B African Politics

## Anthropology

Students may complete a major or a minor in anthropology. Within the major, students may complete a concentration in environmental studies or geoarchaeology.

## Faculty

Richard S. Davis, Professor and Major Adviser
Philip L. Kilbride, Professor and Chair
Melissa Murphy, Lecturer
Melissa Pashigian, Assistant Professor (on leave 2005-06)
Ayumi Takenaka, Assistant Professor
Amanda Weidman, Assistant Professor
Anthropology is a holistic study of the human condition in both the past and the present. The anthropological lens can bring into focus the social, cultural, biological and linguistic variations that characterize the diversity of humankind throughout time and space. The frontiers of anthropology can encompass many directions: the search for early human fossils in Africa, the excavations of prehistoric societies and ancient civilizations, the analysis of language use and other expressive forms of culture, or the examination of the significance of culture in the context of social life.

## Major Requirements

Requirements for the major are Anthropology 101, 102, 303, 398, 399, an ethnographic area course that focuses on the cultures of a single region, and four additional 200- or 300-level courses in anthropology. Students are encouraged to
select courses from each of four subfields of anthropology: archaeology, bioanthropology, linguistics or sociocultural.

Students may elect to do part of their work away from Bryn Mawr. Courses that must be taken at Bryn Mawr include Anthropology $101,102,303,398$ and 399.

## Honors

Qualified students may earn departmental honors in their senior year. Honors are based on the quality of the senior thesis $(398,399)$. Units of independent work may be taken with the approval of the instructor in the department.

## Minor Requirements

Requirements for a minor in anthropology are $101,102,303$, one ethnographic area course and two additional 200 or 300 level courses in anthropology.

## Concentration in Environmental Studies

The Department of Anthropology participates with other departments in offering a concentration within the major in environmental studies (see page 151).

## Concentration in Geoarchaeology

The Department of Anthropology participates with other departments in offering a concentration within the major in geoarchaeology (see page 99).

## ANTH B101 Introduction to

Anthropology: Archaeology and Human Evolution
The place of humans in nature, human evolution and the history of culture to the rise of early civilizations in the Old and New Worlds. In addition to the lecture/discussion classes, there is a one hour weekly lab. (Davis, Murphy, Division I)

## ANTH B102 Introduction to Anthropology: Cultural Anthropology

An introduction to the methods and theories of cultural anthropology in order to understand and explain cultural similarities and differences among contemporary societies. (Kilbride, Weidman, Division I)

ANTH B185 Urban Culture and Society
(Arbona, McDonogh, Division I; crosslisted as CITY B185)

ANTH B190 The Form of the City:
Urban Form from Antiquity to the Present
(Hein, Division I or III; cross-listed as CITY B190 and HART B190)

## ANTH B203 Human Ecology

The relationship of humans with their environment; culture as an adaptive mechanism and a dynamic component in ecological systems. Human ecological perspectives are compared with other theoretical orientations in anthropology. Prerequisites: Anthropology 101, 102 or permission of instructor. (Davis, Division I) Not offered in 2005-06.

## ANTH B206 Conflict and Conflict

Management: A Cross-Cultural Approach
(Ross, Division I; cross-listed as POLS B206)

## ANTH B208 Human Biology

A traditional focus in physical anthropology, human biology encompasses an overview of how humans, as individuals and populations, are similar and different in their biology, and how this can be studied and understood. We consider the relationships between human populations and their environment, integrating aspects of human physiology, demographic ecology and human genetics, both at the molecular and population levels. Prerequisite: Anthropology 101 or permission of instructor. (staff, Division I) Not offered in 2005-06.

## ANTH B209 Human Evolution

The position of humans among the primates, processes of biocultural evolution, the fossil record and contemporary human variation. Weekly lab. Prerequisite: Anthropology 101 or permission of instructor. (Murphy, Division I) Not offered in 2005-06.

## ANTH B210 Medical Anthropology

An examination of the linkages between culture, society, disease and illness. A wide range and distribution of health-related experiences, discourse, knowledge and practice among different societies and among different positionings within society are considered. Sorcery, witchcraft, herbal remedies, healing rituals, folk illnesses, modern disease, scientific medical perception, clinical technique and epidemiology
are examined as diagnoses and therapies embedded within social forms and practices that are culturally informed and anchored in a particular historical moment. Prerequisite: Anthropology 102 or permission of instructor. (Pashigian, Division I; cross-listed as CITY B209) Not offered in 2005-06.

## ANTH B212 Primate Evolution and

 BehaviorAn exploration of the aspects of the biology and behavior of living primates as well as the evolutionary history of these close relatives. The major focus of this study is to provide the background upon which human evolution is best understood. (staff, Division I) Not offered in 2005-06.

## ANTH B220 Methods and Theory in Archaeology

An examination of techniques and theories archaeologists use to transform archaeological data into statements about patterns of prehistoric cultural behavior, adaptation and culture change. Theory development, hypothesis formulation, gathering of archaeological data and their interpretation and evaluation are discussed and illustrated by examples; theoretical debates current in American archaeology are reviewed; and the place of archaeology in the general field of anthropology is discussed. Prerequisite: Anthropology 101 or permission of instructor. (Davis, Division I) Not offered in 2005-06.

ANTH B223 Anthropology of Dance (Chakravorty, Division I or III; cross-listed as ARTD B223) Not offered in 2005-06.

ANTH B225 Paleolithic Archaeology A study of the Paleolithic archaeological record from Europe, Asia and Africa, focusing on the dynamics of cultural evolution; cultural and natural transformations leading to the Neolithic Revolution are also examined. Laboratory work with prehistoric materials is included. Prerequisite: Anthropology 101 or permission of instructor. (Davis, Division I)

## ANTH B229 Comparative Urbanism

(McDonogh, Division I; cross-listed as EAST B229 and CITY B229)

## ANTH B231 Cultural Profiles in Modern Exile

(Seyhan, Division III; cross-listed as COML B231 and GERM B231)

ANTH B232 Nutritional Anthropology
This course will explore the complex nature of human experiences in satisfying needs for food and nourishment. The approach is biocultural, exploring both the biological basis of human food choices and the cultural context that influences food acquisition and choice. Material covered will primarily be from an evolutionary and cross-cultural perspective. Also included will be a discussion of popular culture in the United States and our current obsession with food, such as dietary fads. (Murphy, Division I)

## ANTH B234 Forensic Anthropology

Introduces the forensic subfield of biological anthropology, which applies techniques of osteology and biomechanics to questions of forensic science, with practical applications for criminal justice.

Examines the challenges of human skeletal identification and trauma analysis, as well as the broader ethical considerations and implications of the field. Topics will include: human osteology; crime scene investigation; search and recovery of human remains; taphonomy; postmortem interval; trauma analysis; the development and application of innovative and specialized techniques; and the analysis and review of current forensic case studies and media representations. Prerequisite: Anthropology 101 or permission of the instructor. (Murphy, Division I)

## ANTH B236 Evolution

(Davis, Gardiner, Saunders, Division II; cross-listed as BIOL B236 and GEOL B236)

## ANTH B240 Traditional and PreIndustrial Technology

An examination of several traditional technologies, including chipped and ground stone, ceramics, textiles, metallurgy (bronze), simple machines and energy production; emphasizing the physical properties of various materials, production processes and cultural contexts both ancient and modern. Weekly laboratory on the production of finished artifacts in the various technologies studied. Prerequisite: permission of instructor. (Davis, Division I) Not offered in 2005-06.

## ANTH B242 Urban Fieldwork

(Takenaka, Division I; cross-listed as SOCL B242)

ANTH B246 Women's Narratives on Modern Migrancy, Exile and Diasporas (Seyhan, Division III; cross-listed as COML B245, GERM B245 and CITY B246) Not offered in 2005-06.

## ANTH B249 Asian American Communities

(Takenaka, Division I; cross-listed as CITY
B249 and SOCL B249)

## ANTH B251 Ethnography of Southeast Asia

An introduction to the social and cultural complexity of Southeast Asia - Brunei, Cambodia, Indonesia, Malaysia, Myanmar (Burma), the Philippines, Thailand and Vietnam. Classic and contemporary ethnographies explore the diversity and similarities among groups living in the region. Topics include contemporary political developments, cultural practices, ethnicity, gender and nationalism. Prerequisite: introductory course in any social science or permission of instructor. (Pashigian, Division I) Not offered in 2005-06.

## ANTH B253 Childhood in the African Experience

An overview of cultural contexts and indigenous literatures concerning the richly varied experience and interpretation of infancy and childhood in selected regions of Africa. Cultural practices such as pregnancy customs, naming ceremonies, puberty rituals, sibling relationships and gender identity are included. Modern concerns such as child abuse, street children and other social problems of recent origin involving children are considered in terms of theoretical approaches current in the so-
cial sciences. Prerequisites: anthropology major, any social sciences introductory course, Africana Studies concentration or permission of instructor. (Kilbride, Division I)

## ANTH B254 Survey of Western Architecture

(Cast, Hein, Division III; cross-listed as CITY B253, HIST B253 and HART B253) Not offered in 2005-06.

ANTH B258 Immigrant Experiences (cross-listed as SOCL B246)

ANTH B262 South Asian Ethnography Recent anthropological work on South Asia has been motivated by a concern for issues of ethnographic representation and a heightened awareness of the relationship between power, whether colonial or state power, and the production of knowledge. This stems from historiographical discussions that call for a critical examination of categories such as "tradition," "modernity," "community" and "nation." This course will focus on the ways in which such critiques have been taken up as inspirations for ethnographic research in contemporary South Asia. Topics may include the legacy of colonialist ideas about tradition and modernity or the constructions of gender, community and nation. (Weidman, Division I)

ANTH B267 The Development of the Modern Japanese Nation
(Takenaka, Division I; cross-listed as EAST B267 and SOCL B267)

## ANTH B270 Geoarchaeology

(cross-listed as ARCH B270 and GEOL B270)

## ANTH B281 Language in Social Context

Studies of language in society have moved from the idea that language reflects social position/identity to the idea that language plays an active role in shaping and negotiating social position, identity and experience. This course will explore the implications of this shift by providing an introduction to the fields of sociolinguistics and linguistic anthropology. We will be particularly concerned with the ways in which language is implicated in the social construction of gender, race, class and cultural/national identity. The course will develop students' skills in the ethnographic analysis of communication through several short ethnographic projects. (Weidman, Division I)

## ANTH B286 Cultural Perspectives on

 Ethnic Identity in the Post Famine Irish DiasporaTheoretical perspectives on assimilation and the social construction of Irish ethnic identity in response to social exclusion in the United States will be considered. Symbolic expressions of Irish ethnicity such as St. Patrick's Day celebrations will consider race and gender. The colonial model, especially in Africa, is a contrasting case for Irish adjustment there through immigration. Methodologically, the course will highlight a cultural perspective through use of ethnographies, personal biographies and literary products such as novels and films. Prerequisite: introductory course in
a social science or permission of instructor. (Kilbride, Division I) Not offered in 2005-06.

## ANTH B303 History of Anthropological Theory

A consideration of the history of anthropological theories and the discipline of anthropology as an academic discipline that seeks to understand and explain society and culture as its subjects of study. Several vantage points on the history of anthropological theory are engaged to enact a historically charged anthropology of a disciplinary history. Anthropological theories are considered not only as a series of models, paradigms or orientations, but as configurations of thought, technique, knowledge and power that reflect the changing relationships among societies and cultures of the world. Prerequisite: at least one additional anthropology course at the 200 or 300 level. (Kilbride, Division I)

## ANTH B312 Anthropology of Reproduction

An examination of social and cultural constructions of reproduction, and how power in everyday life shapes reproductive behavior and its meaning in Western and non-Western cultures. The influence of competing interests within households, communities, states and institutions on reproduction is considered. Prerequisite: at least one 200 -level ethnographic area course or permission of instructor. (Pashigian, Division I) Not offered in 2005-06.

## ANTH B327 American Colonial <br> History: Conquest Colonization and Conversion

(Gallup-Diaz; cross-listed as HIST B327)
Not offered in 2005-06.

## ANTH B333 Anthropological

Demography
Anthropological demography examines human population structure and dynamics through the understanding of birth, death and migration processes. It includes study of the individual's life history. Population dynamics in small- and large-scale societies, the history of human populations and policy implications of demographic processes in the developed and developing world will be discussed through a crosscultural perspective. (Davis, Division I)

ANTH B335 Elite and Popular Culture (McDonogh, Division I; cross-listed as CITY B335) Not offered in 2005-06.

## ANTH B336 Evolutionary Biology:

Advanced Topics
(Gardiner, Saunders, Murphy; cross-listed as BIOL B336 and GEOL B336) Not offered in 2005-06.

ANTH B341 Cultural Perspectives on Sexuality, Marriage and the Family This course considers various theoretical perspectives that inform our understanding of cross-cultural constructions of sexuality, marriage and the family. Sociobiology, deviance, feminism, social constructionism and cultural evolutionary approaches will be compared using primarily anthropologi-cal-ethnographic case examples. Applications will emphasize current U.S. socially
contested categories such as AIDS, plural marriage, gender diversity, divorce and rape. Prerequisites: any history, biology or social science major. (Kilbride, Division I) Not offered in 2005-06.

## ANTH B359 Topics in Urban Culture and Society

(Hein, Division I or III; cross-listed as GERM B321, CITY B360 and HART B359) Not offered in 2005-06.

## ANTH B397 Senior Seminar in

 Environmental Studies(staff; cross-listed as BIOL B397, GEOL B397 and CITY B397)

## ANTH B398, B399 Senior Conference

The topic of each seminar is determined in advance in discussion with seniors. Sections normally run through the entire year and have an emphasis on empirical research techniques and analysis of original material. Class discussions of work in progress and oral and written presentations of the analysis and results of research are important. A senior's thesis is the most significant writing experience in the seminar. (Davis, Kilbride, Weidman, Division I)

## ANTH B403 Supervised Work

Independent work is usually open to junior and senior majors who wish to work in a special area under the supervision of a member of the faculty and is subject to faculty time and interest. (staff)

## Arts Program

Students may complete a minor in creative writing, dance or theater. English majors may complete a concentration in creative writing. Students 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 through Haverford College.

## Faculty

Glenda Adams, Lecturer in Creative Writing
David Brick, Lecturer in Dance
Madeline Cantor, Senior Lecturer and Associate Director of Dance (on leave semester I)
Linda Caruso-Haviland, Associate Professor and Director of Dance
Benjamin Downing, Lecturer in Creative Writing
Hiroshi Iwasaki, Senior Lecturer and Designer/Technical Director of Theater (on leave semester II)
Karl Kirchwey, Associate Professor, Director of Creative Writing and Chair of the Arts Program
Ann Kjellberg, Lecturer in Creative Writing
Marc Lapadula, Lecturer in Creative Writing
Mark Lord, Associate Professor and Director of Theater
Elizabeth Mosier, Lecturer in Creative Writing
Rachel Simon, Lecturer in Creative Writing

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

## Arts in Education

## ARTA B251 Arts Teaching in Educational and Community Settings

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 investigates the theories of arts education. The praxis component allows 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. Enrollment limited to 15 . Prerequisite: at least an intermediate level of experience in an art form. This course can count towards the minor in Dance or in Theater. (Cantor, Division III; cross-listed as ARTD B256, EDUC B25I and ARTT B256)

## 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, fiction, creative nonfiction, playwriting, screenwriting and journalism) 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, students may submit an application to major in creative writing through the independent major program. (see page 20 ).

## 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 159, 260, $261,262,263,264,265,266,268,269)$ and three electives, including at least one course at the 300 level $(360,361,362$, $364,366,367,371,373,382$ ), 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 the genres of creative writing. Students should consult with the Creative Writing Program director 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 (see page 139).

## ARTW B159 Introduction to Creative Writing

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 firstyear 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 for students with the instructor to discuss their progress and interests. Half of class time will be spent discussing student work and half will be spent discussing syllabus readings. (Mosier, Division III)

## ARTW B251 Travel Writing

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

ARTW B260 Writing Short Fiction I This course offers an introduction to fiction writing, focusing on the short story. Students will consider fundamental elements of fiction and the relationship of structure,
style and subject matter, exploring these elements in their own work and in the assigned readings in order to develop an understanding of the range of possibilities open to the fiction writer. Writing exercises are designed to encourage students to explore the material and styles that most interest them, and to push their fiction to a new level of craft, so that over the semester their writing becomes clearer, more absorbing, and more sophisticated. (Mosier, Simon, Division III)

## ARTW B261 Writing Poetry I

This course will provide a semester-long survey of the formal resources available to students wishing to write print-based (as opposed to spoken-word) poems in English, beginning with syllabic verse, accentual verse and accentual-syllabic (metered) verse, as well as free verse. Students in this course will gain experience writing in a variety of verse forms (including cinquains, Anglo-Saxon accentual verse, and sonnets). The objective of the course will be to provide students with a sense of poetic identity and with the skills to find a form and a voice with which to express themselves on the printed page. (Kirchwey, Division III)

## ARTW B262 Playwriting I

This course is run as a workshop, with emphasis on in-class development of student work. The focus will be on theme, storytelling and dramatic action, and on weaving these three elements into a coherent whole. This will be achieved by concentrating primarily on the 10 -minute play form. Through weekly playwriting/rewriting assignments, students will complete two
stageworthy 10-15 minute original one-act plays and a notebook of critical comments. Students will critique each other's work as well as act in and direct it. Students will have individual meetings with the instructor at least biweekly to discuss and defend their dramatic efforts. (Lapadula, Division III; cross-listed as ARTT B262)

## ARTW B263 Writing Memoir I

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. The purpose of writing assignments and in-class discussion of syllabus readings is to explore the range of memoirs available for use as models (excerpts by writers including Elizabeth Bishop, Jacques Casanova, Annie Dillard, Frederick Douglass, Maxine Hong Kingston, Tim O'Brien) and elements such as voice and perspective, tone, plot, characterization and symbolic and figurative language. (Kirchwey, Division III) Not offered in 2005-06.

## ARTW B264 Feature Journalism

Unlike straight news stories, which tell the who, what, when and where of unfolding events, feature articles tell stories about people, places, events, trends and issues. This course will consider the many forms that feature writing can take and the reporting basics necessary to add depth and context to stories. The work of established writers will be used to examine beginnings, middles, endings, transitions, structures and voices to discover what makes for live-
ly and effective feature writing. Prominent journalists will be guest speakers. (Lotozo, Division III) Not offered in 2005-06.

## ARTW B265 Creative Nonfiction

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

## ARTW B266 Screenwriting

This combination discussion/workshop course is an introduction to dramatic writing for film. Basic issues in the art of storytelling will be analyzed: theme, dramatic structure, image and sound. The course will be an exploration of the art and impulse of storytelling, and it will provide a safe but rigorous setting in which to discuss student work. What is a story? What makes a character compelling, and conflict dramatic? How does a story engage our emotions? Through written exercises, close analysis of texts and the screening of film, we will come to better understand the tools and dictates of film writing. (Doyne, Division III) Not offered in 2005-06.

## ARTW B268 Writing Literary <br> Journalism

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

## ARTW B269 Writing for Children

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

## ARTW B360 Writing Short Fiction II For students whose previous work has demonstrated an ability and passion for fiction writing, and who are ready to undertake the discipline of reworking their best

material. Through first drafts and multiple revisions, private conferences, and class discussion of classic and contemporary literature, students form standards, sharpen their voices and vision, and surpass earlier expectations of limits. One goal is for students to understand the writing process in detail. Another goal is the production of a publishable short story. (staff, Division III) Not offered in 2005-06.

## ARTW B361 Writing Poetry II

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

## ARTW B362 Playwriting II

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

ARTW B364 Approaches to the Novel
An advanced workshop for students with a strong background in fiction writing who want to write a novel. Students are expected to write intensively, taking advantage of the structure and support of the class to complete the first draft of a ( $25,000-30,000$ word) novel/novella. Students will examine elements of fiction in their work and in novels on the reading list, exploring strategies for sustaining the writing of a long work. Prerequisite: Creative Writing 260 or proof of interest and ability. A writing sample of 10 double-spaced pages should be submitted to the instructor by the end of the fall semester. (Adams, Division III)

## ARTW B366 Writing Memoir II

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

## ARTW B367 Advanced Fiction/ Nonfiction

This advanced workshop will allow students to further develop the skills required for writing both fiction and creative nonfiction, and will explore the dividing line between the two genres. The course will be taught in sequential three-week "modules" by four distinguished visiting instructors who are also writers known for their work both in fiction and in nonfiction. Prerequisite: Creative Writing 260, 263 or 265 , or work demonstrating equivalent mastery of fiction or nonfiction prose. (staff, Division III) Not offered in 2005-06.

## ARTW B371 Fiction Master Class

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

## ARTW B373 Experimental Writing

 This course will introduce advanced writing students to new forms in fiction writing. Students will examine the challenges to convention in 20th- and 21 st-century fiction, including the open-ended character, experiments in time and narration, and new combinations of traditional literary and film genres - fairy tales, myth and film noir. Authors include Martin Amis, Italo Calvino, Angela Carter, Jim Crace, Don DeLillo, Michel Foucault, William Gass, Jürgen Habermas, Susanna Moore, Mary Shelley, Jeanette Winterson and Mary Wollstonecraft. (staff, Division III) Not offered in 2005-06.
## ARTW B382 Poetry Master Class

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

## ARTW B403 Supervised Work

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

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

ENGL H291A Poetry Writing: A Practical Workshop
ENGL H292B Poetry Writing II
ENGL H293A Fiction Writing: From the Conventional to the Experimental ENGL H294B Fiction Writing: States of Mind

## Dance

Dance is not only an art and an area of creative impulse and action; it is also a significant and enduring human behavior that can serve as a core of inquiry within the humanities. The Dance Program has, accordingly, designed a curriculum that provides varied courses in technique, composition, theory and performance for students at all levels of skill, interest and commitment. A full range of technique courses in modern, ballet, jazz and African dance is offered regularly. More specialized movement forms, such as Classical Indian and Flamenco, are offered on a rotating basis. The core academic curriculum includes advanced technique courses, performance ensembles, dance composition, independent work, courses in dance
research and in Western dance history as well as courses that present a perspective extending beyond this theatrical or social tradition. Students can minor in dance or submit an application to major through the independent major program (see page $20)$.

## Minor Requirements

Requirements for the dance minor are six units of coursework, three required (140, 142,343 or 344 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.

## ARTD B140 Approaches to Dance: Themes and Perspectives

An introduction to the significance and the potential of the creative, critical and conceptual processes of dance as performance art, ritual and a humanity. In considering dance as a vital area of academic inquiry, the fields of dance history, criticism, philosophy and ethnology are reviewed. Lectures, discussion, film, video and guest speakers are included. (Caruso-Haviland, Division III) Not offered in 2005-06.

## ARTD B142 Dance Composition I

An introduction to the process of making dances that explores basic elements including space, time, rhythm, energy, dynamics, qualities of movement and gesture, and both traditional and postmodern structures. Compositional theory will be approached through the experience and practice of making dance studies starting with simple solo phrases and moving towards more
complex and interactive group forms and processes. While primarily a studio course, students will be expected to begin to develop and broaden their understanding of dance as an art form and their abilities to see and critique dances Readings pertaining to the choreographic process will be assigned. (Brick, Division III)

## ARTD B223 Anthropology of Dance

(Chakravorty, Division I or III; cross-listed as ANTH B223) Not offered in 2005-06.

## ARTD B240 Dance History I: Roots of Western Theater Dance

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 the historic documentation of 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. (Ca-ruso-Haviland, Division III)

## ARTD B241 Dance History II: A History of Contemporary Western Theater Dance

The study of the development of contemporary forms of dance with emphasis on theater forms within the broader context of Western art and culture. Lecture, discussion and audiovisual materials. (staff, Division III) Not offered in 2005-06.

## ARTD B242 Dance Composition II

The goal of this course is to build on work accomplished in Composition I and to develop an understanding of and skill in the theory and craft of choreography. This includes deepening movement invention skills; exploring form and structure; 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 opportunities to revise and expand work. Readings will be assigned and related production problems will be considered. (Cantor, Division III)

## ARTD B250 Performing the Political Body

This is a combination lecture and studio course that explores how artists, activists and intellectuals perform cultural interventions in the public sphere according to particular expectations of social and political responsibilities. From this foundation, students will investigate the body as an active agent of social change and political action. Each class will focus on both theory and practice. (staff, Division III) Not offered in 2005-06.

ARTD B252 Africanisms in American Culture: Dance and Other Contexts This course explores the African-based, or Africanist, traditions and attitudes that pervade our daily lives from basketball to ballet. It interrogates the sometimes complementary, sometimes oppositional relationship between Africanist and Europeanist worldviews as they are manifested in the aesthetic and philosophical choices that dictate our lifestyles. It examines
broad fundamentals and specific examples that comprise both Africanist and Europeanist aesthetics in dance, music, literature and daily life through readings, discussion, video screenings and two to three studio experiences. Readings are drawn from linguistics, literary criticism and performance studies. (Dixon-Gottschild) Not offered 2005-06.

## ARTD B256 Arts Teaching in

 Educational and Community Settings (Cantor, Division III; cross-listed as ARTA B251, EDUC B251 and ARTT B256)
## ARTD B342 Advanced Choreography

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. (Cantor, Caruso-Haviland, Division III)

## Dance Technique

Three levels of ballet and modern dance are offered each semester. Improvisation, African dance and jazz are offered each year. Courses in techniques developed from other cultural forms, such as hiphop, classical Indian dance or Flamenco, are offered on a rotating basis as are conditioning techniques such as Pilates. All technique courses are offered for physical education credit but students may choose to register in some intermediate and advanced level courses for academic credit. (staff, Division III)

ARTD B231 Intermediate Dance Technique: Modern

## ARTD B331 Advanced Technique: Modern

## ARTD B232 Intermediate Dance

 Technique: Ballet
## ARTD B332 Advanced Dance

Technique: Ballet

## Dance Performance

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

ARTD B345 Dance Ensemble: Modern (001); Ballet (002); Jazz (003)

## ARTD B390 Senior Thesis/Project

## ARTD B403 Supervised Work

Research in a particular topic of dance under the guidance of an instructor, resulting in a significant final paper or project. (Cantor, Caruso-Haviland, Division III)

## Fine Arts

Fine arts courses at Bryn Mawr are offered through the Department of Fine Arts at Haverford College. Courses on either campus are offered to students of both colleges with the approval of the respective instructors. Prospective Fine Arts majors should plan their curricula with the major instructor. Throughout their progression, these students should strive to develop a portfolio of artwork showing strength and competence and a sense of original vision and personal direction appropriate for a major or minor candidate.

For major program requirements and course descriptions, see Fine Arts at Haverford College on page 155.

## Music

The Department of Music is located at Haverford and offers well-qualified students a major and minor in music. For a list of requirements and courses offered, see Music at Haverford on page 223.

## Music Performance

The following organizations are open to all students by audition. For information on academic credit for these groups, and for private vocal or instrumental instruction, see Music at Haverford (page 223).

The Haverford-Bryn Mawr Orchestra, with more than 70 members, rehearses once a week, and concerts are given regularly on both campuses. The annual concerto competition affords one or more students the opportunity to perform with the orchestra in a solo capacity.

The chamber music program is open to all members of the Haverford-Bryn Mawr Orchestra and to pianists who have passed an audition that includes sight reading. Students rehearse once a week on their own, in addition to once-weekly coaching. Performances, rehearsals and coachings are held on both campuses depending on students' schedules and preferences.

The Haverford-Bryn Mawr Chamber Singers is a select ensemble that demands a high level of vocal ability and musicianship. The group performs regularly on both campuses and in the Philadelphia area. Tours are planned within the United States and abroad.

The Haverford-Bryn Mawr Chorale is a large auditioned chorus that gives concerts with the Haverford-Bryn Mawr Orchestra each year.

The Haverford-Bryn Mawr Women's Ensemble emphasizes music for women's voices and trebles and performs several times in the academic year.

Chamber Ensemble Groups are formed within the context of the Chamber Music Seminar (Music 215). See Music at Haverford on page 223. Performances are held both on and off campus; students have the opportunity to perform in master classes with internationally known chamber musicians.

The Bryn Mawr Chamber Music Society offers extracurricular opportunities for experienced Bryn Mawr and Haverford students, faculty and staff to perform a variety of chamber works in a series of concerts held in the Music Room.

## 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.

## Minor Requirements

Requirements for the minor in theater are six units of course work, three required ( 150,251 and 252) and three elective. Students must consult with the theater faculty to ensure that the necessary areas in the field are covered. Students may submit an application to major in theater through the independent major program. (see page 20).

## 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.

## ARTT B150 Introduction to Theater

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. (Iwasaki, Division III)

## ARTT B250 Twentieth-Century Theories of Acting

An introduction to 20th-century theories of acting emphasizing the intellectual, aesthetic and sociopolitical factors surrounding the emergence of each director's approach to the study of human behavior on stage. Various theoretical approaches to the task of developing a role are applied in workshop and scene study. (Lord, Division III)

## ARTT B251 Fundamentals of Acting

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 20thcentury dramatic literature. (Lord, Division III)

## ARTT B252 Fundamentals of Technical Theater

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. (Iwasaki, Division III) Not offered in 2005-06.

## ARTT B253 Performance Ensemble

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, stu-
dents 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. (Lord, Division III)

## ARTT B254 Fundamentals of Theater Design

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. (Iwasaki, Division III) Not offered in 2005-06.

## ARTT B255 Fundamentals of Costume

 DesignHands-on practical workshop on costume design for performing arts; analysis of text, characters, movement, situations; historical and stylistic research; cultivation of initial concept through materialization and plotting to execution of design. (Iwasaki, Division III)

ARTT B256 Arts Teaching in Educational and Community Settings (Cantor, Division III; cross-listed as ARTA B251, ARTD B256 and EDUC B251)

ARTT B262 Playwriting I
(Lapadula, Division III; cross-listed as ARTW B262)

ARTT B351 Acting II: Solo
Performance
Builds on the methods learned in Theater 251 , with an emphasis on strategies of pre-
paring 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. (Lord, Division III) Not offered in 2005-06.

## ARTT B353 Advanced Performance Ensemble

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. (Lord, Division III)

## ARTT B354 Shakespeare on the Stage

An exploration of Shakespeare's texts from the point of view of the performer. A historical survey of the various approaches to producing Shakespeare from Elizabethan to contemporary times, with intensive scenework culminating in on-campus performances. (Lord, Division III) Not offered in 2005-06.

## ARTT B356 Endgames: Theater of Samuel Beckett

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 influ-
ences (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. (Lord)

## ARTT B359 Directing for the Stage

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. (Lord, Division III) Not offered in 2005-06.

## ARTT B403 Supervised Work (staff)

## Astronomy

Students may complete a major or minor in astronomy at Haverford College.

## Faculty

Stephen P. Boughn, John Farnum Professor of Astronomy Fronefield Crawford III, Visiting Assistant Professor of Physics R. Bruce Partridge, Bettye and Howard Marshall Professor of Natural Sciences

The objective of a major in astronomy is to study the phenomena of the extraterrestrial universe and to understand them in terms of the fundamental principles of physics. The department offers three courses, Astronomy 101a, Astronomy 112a, and Astronomy 114b, which can be taken with no prerequisites or prior experience in astronomy. The department also offers a half-credit course, Astronomy/Physics 152i, intended for first-year students who are considering a physical science major and wish the opportunity to study some of the most recent developments in astrophysics. Prospective majors usually study physics (Physics 105a and 106b) before enrolling in Astronomy 205a in the fall semester of their sophomore year, when they concurrently enroll in Physics 213a. Astronomy 206b and Physics 214b follow in the spring semester. Astronomy majors may then take up to four 300-level courses and may enroll in a research course (Astronomy 404a,b). Students planning on graduate study in astronomy are advised to study physics at an advanced level; in fact, many astronomy majors choose to
double major in physics and astronomy. The department also offers a minor in astronomy.

## Major Requirements

Requirements in the major subject are Astronomy 205a; Astronomy 206b; four 300-level astronomy courses, one of which may be replaced by an upper-level physics course; Astronomy 404, which may be replaced by approved independent research either at Haverford or elsewhere; and written comprehensive examinations. Prerequisites: Physics 105a (or 101a); Physics 106b (or 102b); Physics 213a; Physics 214b. Two mathematics courses are also required for the astronomy major; Mathematics 121 and all 200-level or higher mathematics courses can be used to satisfy this requirement. Bryn Mawr equivalents may be substituted for the nonastronomy courses. Astronomy/Physics 152 i is recommended but not required.

## Minor Requirements

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

## Requirements For Honors

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

## ASTR H101A Astronomical Ideas

Fundamental concepts and observations of modern astronomy, such as the motions and surface properties of the planets, the birth and death of stars, and the properties and evolution of the universe. Not intended for students majoring in the physical sciences. (Partridge, Division II) Offered in 2007-08 and alternate years.

## ASTR H112A Survey of the Cosmos

Properties and evolution of the universe and of large systems within it. The qualitative aspects of general relativity including black holes and of mathematical models for the geometry of the universe are studied, along with the history of the universe from its early exponential expansion to the formation of galaxies. The role of observations in refining modern scientific understanding of the structure and evolution of the Universe is stressed. The approach is quantitative, but any mathematics beyond straightforward algebra is taught as the class proceeds. Prerequisite: No prerequisites, but Astronomy 101 is useful. (Partridge, Division II) Offered in 2006-07 and alternate years.

## ASTR H114B Planetary Astronomy

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. (Partridge, Division II) Offered in 2006-07 and alternate years.

## ASTR H152I Freshman Seminar in

## Astrophysics

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). (Boughn, Division II)

## ASTR H205A Introduction to

Astrophysics I
General introduction to astronomy including: the structure and evolution of stars; the structure and formation of the Milky Way; the interstellar medium; and observational projects using the Strawbridge Observatory telescopes. Prerequisite: Physics 105a-106b and Math 114b or the equivalent. (Boughn, Division II)

## ASTR H206B Introduction to

Astrophysics II
Introduction to the study of: the properties of galaxies and their nuclei; cosmology; the Hot Big Bang model; the properties and evolution of the solar system; planetary surfaces and atmospheres; and exoplanets. Prerequisite: Astro 205a, Math 114b or equivalent or permission of the instructor. (Partridge, Division II)

## ASTR H313C Observational Optical Astronomy <br> One credit, full year course. Five observing projects that involve using the CCD

camera on a 16 -inch Schmidt-Cassegrain telescope. Projects include spectroscopy; variable star photometry; H-alpha imaging; imaging and photometry of galaxies and star clusters; instruction in the use of image processing software and CCD camera operation. Students work in groups of two with minimal faculty supervision. Formal reports are required. Prerequisite: Astronomy 205a. (Boughn)

## ASTR H320B Cosmology and Extragalactic Astronomy

The study of the origin, evolution and large-scale structure of the universe (Big Bang Theory). Review of the relevant observational evidence. A study of remote galaxies, radio sources, quasars and intergalactic space. Prerequisite: Astronomy 206b. (Partridge) Offered in 2005-06 and alternative years.

## ASTR H321B Stellar Structure and Evolution

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

## ASTR H322A Nonoptical Astronomy

Introduction to the basic techniques of radio astronomy, to the various emission mechanisms at radio wavelengths, and to radio studies of astronomical phenomena. Some discussion of other nonoptical branches of astronomy, especiafly X-ray astronomy, but also including neutrino, cosmic-ray, gravitational wave, infrared and ultraviolet astronomy. Prerequisite:

Astronomy 205a and 206b, or consent of instructor. (Partridge) Offered in 2006-07 and alternate years.

## ASTR H404A,B Research in Astrophysics <br> 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. (Boughn, Partridge, Crawford)

ASTR H480A,B Independent Study
Intended for students who want to pursue some topic of study that is not currently offered in the curriculum. In order to enroll, a student must have a faculty sponsor. Prerequisite: Astronomy 206b. (staff)

## Athletics and Physical Education

## Faculty

Carol Bower, Senior Lecturer
Amy Campbell, Senior Lecturer and
Director
Michelle Devan, Lecturer
Jody Law, Lecturer
Danya Pilgrim, Lecturer
Daniel N. Talbot, Lecturer
Katie Tarr, Instructor
Ray Tharan, Director of the Fitness Center
Lisa Treadway-Kurtz, Senior Lecturer Judy Wolfe, Senior Lecturer

The Department of Athletics and Physical Education offers 12 intercollegiate sports as an NCAA Division III institution and is a charter member of the Centennial Conference. Varsity team sports at Bryn Mawr include: badminton, basketball, crew, cross country, field hockey, indoor and outdoor track and field, lacrosse, soccer, swimming, tennis and volleyball. Rugby is a Bi-College varsity-club program. Other Bi-College clubs include equestrian and ultimate frisbee.

There is a physical education requirement for all undergraduates. The instructional offerings in physical education include certification courses, sport skills instruction, fitness courses, wellness classes, leadership courses and a sport and film class. All first-year students must complete the Wellness Issues class, a semester long course taught by members of the general faculty and athletic staff.

Consult the Physical Education Web site at http://www.brynmawr.edu/athletics for a list of current course offerings. Students may take courses at Haverford and Swarthmore Colleges.

The College believes that physical education and intercollegiate athletics are integral parts of a liberal-arts education. The department sponsors a variety of intercollegiate, physical education and recreational programs intended to enhance the quality of the student's nonacademic life on campus.

## Physical Education Requirements

The College requires eight units of physical education and the successful completion of a swimming-proficiency test. The test includes entry into the water, a 10 -minute swim demonstrating two strokes, one minute of treading water and two minutes of floating. For nonswimmers, successful completion of beginning swimming will fulfill the requirement. First-year students must complete the semester long Wellness Issues class. The physical education requirement must be completed by the end of junior year. Transfer students will receive credit toward the requirement from previous institutions after a review by the director of the department. Students with special needs should consult the director of physical education.

## Biology

Students may complete a major or minor in biology. Within the major, students may complete a minor in computational methods, or a concentration in environmental studies or neural and behavioral sciences.

## Faculty

Peter D. Brodfuehrer, Professor and Chair
Tamara L. Davis, Associate Professor (on leave 2005-06)
Wilfred A. Franklin, Laboratory Instructor
Stephen L. Gardiner, Senior Lecturer
Sarah Gibbs, Lecturer
Karen F. Greif, Professor
Paul Grobstein, Professor
Margaret A. Hollyday, Professor
John-David Swanson, Lecturer
Lauren J. Sweeney, Lecturer
Neal M. Williams, Assistant Professor
Theodore G. Wong, Assistant Professor
The programs of the department are designed to introduce students to unifying concepts and broad issues in biology, and to provide the opportunity for in-depth inquiry into topics of particular interest through coursework and independent study. Introductory- and intermediatelevel courses examine the structures and functions of living systems at all levels of organization, from molecules, cells and organisms to populations. Advanced courses encourage the student to gain proficiency in the critical reading of research literature, leading to the development, defense and
presentation of a senior paper. In addition, there are opportunities for independent research projects with faculty.

## Major Requirements

Course requirements for a major in biology include two semesters of introductory biology, 101 and 102 (or 103 plus either 101 or 102 , with the department's permission); six courses at the 200 and 300 level (excluding 390-398), of which at least three must be laboratory courses; and one senior seminar course (390-395, or 398). Two semesters of supervised laboratory research, 403 , may be substituted for one of the required laboratory courses. In addition, two semester courses in general chemistry and three additional semester courses in physics, chemistry, geology, mathematics, computer science, psychology (courses that satisfy the Division II requirement) or statistics are required for all majors. Selection of these three science courses needs to be done in consultation with the student's major adviser and be approved by the department. Students interested in pursuing graduate studies or medical school are encouraged to take two semesters each of physics and organic chemistry.

Students with a score of 4 or 5 on their Advanced Placement examinations, or equivalent International Baccalaureate scores, will receive divisional credit only; they may not be used for the major in biology. A student wishing to enter biology courses at the 200 level without having taken Biology 101 and 102 must take and pass the departmental placement exam. Courses in
other departments may be substituted for major requirements with the department's permission.

## Honors

The honors distinction requires maintaining a course average of 3.7 in the major and participating in departmental activities and events. Final selection for honors is made by the biology faculty from the list of eligible students.

## Minor Requirements

A minor in biology consists of six semester courses in biology. Courses in other departments may be substituted for minor requirements with the department's permission.

## Minor in Computational Methods;

 Concentrations in Environmental Studies and Neural and Behavioral SciencesThe Department of Biology participates with other departments in offering two concentrations within the major: environmental studies (see page 151) and neural and behavioral sciences (see page 230). A minor in computational methods is available for students interested in computational methods and their applications to biology (see page 112).

## Teacher Certification

The College offers a certification program in secondary teacher education (see page 133).

## Animal Experimentation Policy

Students who object to participating directly in laboratory activities involving the use of animals are required to notify the faculty member of her or his objections at the beginning of the course. If alternative activities are available and deemed consistent with the pedagogical objectives of the course by the faculty member, then a student will be allowed to pursue alternative laboratory activities without penalty.

## BIOL B101 Introduction to Biology I: Molecules to Cells

A comprehensive examination of topics in biochemistry, cell and molecular biology, genetics and development. Lecture three hours, laboratory three hours a week. (Greif, Hollyday, Gardiner, Franklin, Swanson, Division IIL)

## BIOL B102 Introduction to Biology II: Organisms to Populations

A comprehensive examination of topics in organismal diversity, physiology, ecology and evolution. Lecture three hours, laboratory three hours a week. Biology 101 is strongly recommended. (Brodfuehrer, Williams, Gardiner, Franklin, Division IIL)

## BIOL B103 Biology: Basic Concepts

An introduction to the major concepts of modern biology that both underlie and emerge from exploration of living systems at levels of organization ranging from the molecular and biochemical through the cellular and organismal to the ecological. Emphasis is placed on the observational and experimental bases for ideas that are both common to diverse areas of biology and represent important contributions of
biology to more general intellectual and social discourse. Topics include the chemical and physical bases of life, cell theory, energetics, genetics, development, physiology, behavior, ecology and evolution. Lecture three hours, laboratory three hours a week. (Grobstein, Division IIL)

## BIOL B201 Genetics

An introduction to heredity and variation, focusing on topics such as classical Mendelian genetics, linkage and recombination, chromosome abnormalities, population genetics and molecular genetics. Examples of genetic analyses are drawn from a variety of organisms, including bacteria, viruses, Drosophila and humans. Lecture three hours, laboratory three scheduled hours a week; some weeks require additional hours outside of the regularly scheduled lab. Prerequisites: Biology 101, 102 and Chemistry 103, 104. (Swanson, Division IIL)

## BIOL B202 Neurobiology and

 BehaviorAn introduction to the attempt to understand behavior in terms of the nervous system. A brief overview of fundamental principles of nervous system structure is followed by consideration of several topics chosen to illustrate how studies of the nervous system illuminate behavior and how studies of behavior contribute to better understanding of the nervous system. Examples cover a wide variety of invertebrate and vertebrate species, including humans. Lecture three hours a week. Prerequisites: Biology 101, 102 or permission of instructor. (Grobstein, Division II)

## BIOL B204 Histology

A lecture and laboratory course examining the cellular structure of tissues and the ways in which those tissues are combined to form the major organs of the body. The focus on tissue structure is used as a springboard throughout the course for discussing how structure provides the basis for understanding function. Lecture three hours, laboratory three hours a week. Prerequisites: Biology 101 and 102, or permission of instructor. (Sweeney, Division IIL)

## BIOL B209 Environmental Toxicology

An introduction to natural and man-made toxins and the impact they have on ecosystems. Effects on animal and plant systems are emphasized, but effects on humans are also considered. Risk analysis is presented and reference is made to their economic impact and the efforts to eliminate or control their presence in the ecosystem. Policy development and the factors - political, economic, ethical and public health - that play a role in policy development are analyzed. Lecture three hours a week. A required two-day field trip is taken in late spring; an extra fee is collected for this trip. Prerequisite: permission of instructor. (Prescott, Division II)

## BIOL B210 Biology and Public Policy

A lecture/discussion course on major issues and advances in biology and their implications for public-policy decisions. Topics discussed include reproductive technologies, genetic screening and gene therapy, environmental health hazards, and euthanasia and organ transplantation. Readings include scientific articles, public-
policy and ethical considerations, and lay publications. Lecture three hours a week. Prerequisite: one semester of introduciory biology or equivalent, or permission of instructor. (Greif, Division II)

## BIOL B215 Experimental Design and Statistics

An introductory course in designing experiments and analyzing data. This course is structured to develop students' understanding of when and how to use different quantitative methods rather than the theory of specific tests. Topics include summary statistics, sampling distributions, randomization, replication, parametric and nonparametric tests, and introductory topics in spatial statistics. The course is geared around weekly problem sets and interactive learning. Three hours of lecture/laboratory a week. Prerequisites: introductory biology, geology or permission of instructor. (Williams, Division II and Quantitative Skills)

## BIOL B220 Ecology

A study of the interactions between organisms and their environments. Current environmental issues and how human activities influence the biota are also discussed. Students become familiar with ecological principles and with methods ecologists use to address tricky ecological issues. Because sound ecological theory rests on a good understanding of natural history, students learn to develop their natural-history intuition by making weekly field observations and keeping a field journal. Lecture three hours a week, laboratory/field investigation three hours a week. There will be one field trip early in the semester lasting beyond
regular lab hours. Prerequisite: introductory biology or Geology 103. (Williams, Division IIL)

## BIOL B223 The Story of Evolution and the Evolution of Stories

(Dalke, Grobstein, Division II or III; cross-listed as ENGL B223) Not offered in 2005-06.

## BIOL B225 Biology of Plants

In-depth examination of the structures and processes underlying survival, growth, reproduction, competition and diversity in plants. Three hours of lecture a week. Prerequisites: Biology 101 and 102. (Wong, Division II and Quantitative Skills)

## BIOL B233 Psychobiology of Sex Differences

The goal of this course is to survey and review research and theory regarding biological, psychological, social and cultural determinants of sex differences. This course will follow a lecture/discussion format with weekly lab meetings. Over the semester we will examine sex differences in behavior. Specifically, we will explore the role that sex chromosomes and hormones, developmental processes, cultural socialization, and gender-role stereotypes play in the creation of sex differences in brain and behavior. Prerequisites: a course in biology or psychology, or permission of the instructors. (Hollyday, Thapar, Division IIL)

## BIOL B236 Evolution

A lecture/discussion course on the development of evolutionary thought, generally regarded as the most profound scientific
event of the 19th century; its foundations in biology and geology; and the extent of its implications to many disciplines. Emphasis is placed on the nature of evolution in terms of process, product, patterns, historical development of the theory, and its applications to interpretations of organic history. Lecture three hours a week. Prerequisite: a 100-level science course or permission of instructors. (Davis, Gardiner, Saunders, Division II; cross-listed as ANTH B236 and GEOL B236)

## BIOL B250 Computational Models in the Sciences

Intensive introduction to programming for scientific simulation; design, implementation and evaluation of computational models; and discussion of the role of theory in the natural and social sciences. Lecture one hour a week, laboratory five hours a week, independent research project. Enrollment limited to students with sophomore standing or higher. Prerequisites: two courses at any level in any single Division I or II department. (Wong, Division II and Quantitative Skills: cross-listed as CMSC B250 and GEOL B250)

## BIOL B271 Developmental Biology

An introduction to animal embryology and the concepts of developmental biology. Concepts are illustrated by analyzing the experimental observations that support them. Topics include gametogenesis and fertilization, morphogenesis, cell fate specification and differentiation, pattern formation, regulation of gene expression, neural and behavioral development, and sex determination. The laboratory focuses on vertebrate embryology and involves
study of prepared slides and observations and experiments on living embryos. Lecture three hours, laboratory three scheduled hours a week; most weeks require additional hours outside of the regularly scheduled lab. Prerequisites: Biology 101, 102 or permission of instructor. (Hollyday, Division IIL)

## BIOL B301 Organismal Biology:

## Vertebrate Structure

A comparative study of major organ systems in different vertebrate groups. Similarities and differences are considered in relation to organ system function and in connection with evolutionary relationships among vertebrate classes. Laboratory activities emphasize dissection of several vertebrate representatives, but also include examination of prepared microscope slides and demonstrations. Two three-hour lecture/laboratory meetings a week. Prerequisites: Biology 101, 102 or equivalent, one 200-level Biology course, and permission of instructor. (Gardiner) Not offered in 2005-06.

## BIOL B303 Animal Physiology

A comprehensive study of the physical and chemical processes in tissues, organs and organ systems that form the basis of animal function. Homeostasis, control systems and the structural bases of function are emphasized. Laboratories are designed to introduce basic physiological techniques and the practice of scientific inquiry. Lecture three hours, laboratory three hours a week. Prerequisites: Biology 101, 102, Chemistry 103, 104 and one 200-level Biology course (Histology recommended). (Brodfuehrer) Not offered in 2005-06.

## BIOL B304 Cell and Molecular Neurobiology

A problem-based laboratory course in which students investigate cellular and molecular properties of neurons and small networks of neurons using neuron simulations and animal experiments, and through critical reading of the primary literature. Two four-hour laboratory sessions per week. Prerequisites: Biology 101, 102, 202, Psychology 218 or Psychology 217 at Haverford. (Brodfuehrer) Not offered in 2005-06.

## BIOL B308 Field Ecology

An examination of the tools that ecologists use to discover how natural systems function. Class meetings are conducted indoors and outdoors, either on campus or in surrounding natural areas. In many labs, experiments are designed to address particular ecological questions. Students are expected to keep a field journal in which they record their observations and thoughts during field excursions. Each student also conducts an independent research project, which includes writing a short paper and giving an oral presentation describing the study. One two-hour lecture/laboratory, one four-hour lecture/laboratory a week. Prerequisites: Biology 220 and permission of instructor. (Williams) Not offered in 2005-06.

## BIOL B309 Biological Oceanography

A comprehensive examination of the principal ecosystems of the world's oceans, emphasizing the biotic and abiotic factors that contribute to the distribution of marine organisms. A variety of marine ecosystems are examined, including rocky intertidal,
and hydrocarbon seeps, with an emphasis on the distinctive characteristics of each system and the assemblage of organisms associated with each system. Lecture three hours, laboratory three hours a week. One required three-day field trip, for which an extra fee is collected, and other occasional field trips as allowed for by scheduling. Prerequisites: Biology 101, 102 and one 200-level science course, or permission of instructor. (Gardiner) Not offered in 2005-06.

## BIOL B313 Integrative Organismal Biology I

The first semester of a two-semester course focusing on how organisms cope with environmental challenges by investigating the requirements for life at the level of individual cells and multi-cellular organisms. Three hours of lecture and one hour discussion per week. Prerequisites: two semesters of introductory biology and general chemistry. (Brodfuehrer, Gardiner, Greif)

## BIOL B314 Integrative Organismal Biology II

The second semester of Integrative Organismal Biology. Laboratory-based course in which students investigate the anatomical and physiological properties of cells, tissues and organ systems, and how these properties allow organisms to interact successfully with their environment. Prerequisite: Biology 313 or permission of instructor. (Brodfuehrer, Gardiner, Greif)

## BIOL B321 Neuroethology

This course provides an opportunity for students to understand the neuronal basis of
behavior through the examination of how particular animals have evolved neural solutions to specific problems posed to them by their environments. The topics will be covered from a research perspective using a combination of lectures, discussions and student presentations. Prerequisite: Biology 202, Psychology 218 or Pscyhology 217 at Haverford. (Brodfuehrer)

## BIOL B326 From Channels to

## Behavior

Introduces the principles, research approaches, and methodologies of cellular and behavioral neuroscience. The first half of the course will cover the cellular properties of neurons using current and voltage clamp techniques along with neuron simulations. The second half of the course will introduce students to state-of-the-art techniques for acquiring and analyzing data in a variety of rodent models linking brain and behavior. Prerequisites: Biology 101 and one of the following: Psychology 218, Psychology 217 (Haverford) or Biology 202. (Brodfuehrer, Thomas; cross-listed as PSYC B326). Not offered in 2005-06.

## BIOL B328 Analysis of Geospatial Data Using GIS

(Crawford, Wong, Wright, Division II and Quantitative Skills; cross-listed as ARCH B328 and GEOL B328)

## BIOL B336 Evolutionary Biology:

## Advanced Topics

A seminar course on current issues in evolution. Discussion based on readings from the primary literature. Topics vary from year to year. One three-hour discussion a week. Prerequisite: Biology 236 or permis-
sion of instructor. (Gardiner, Saunders, Murphy; cross-listed as ANTH B336 and GEOL B336) Not offered in 2005-06.

## BIOL B340 Cell Biology

A lecture course with laboratory emphasizing current knowledge in cell biology. Among topics discussed are cell membranes, cell surface specializations, cell motility and the cytoskeleton, regulation of cell activity, energy generation and protein synthesis. Laboratory experiments are focused on studies of cell structure, making use of techniques in cell culture and immunocytochemistry. Lecture three hours, laboratory four hours a week. Prerequisites: Biology 201 or 271 , Chemistry 211, 212 (may be taken concurrently), or permission of instructor. One semester of biochemistry is recommended. (Greif) Not offered in 2005-06.

## BIOL B341, B343 Introduction to Biochemistry

A course on the structure, chemistry and function of amino acids, proteins, lipids, polysaccharides and nucleic acids; enzyme kinetics; metabolic relationships of carbohydrates, lipids and amino acids, and the control of various pathways; and protein synthesis. Lecture three hours, laboratory three hours a week or library project. Prerequisite: Chemistry 212. (Gibbs)

## BIOL B361 Emergence

(Blank, Grobstein; cross-listed as CMSC B361)

## BIOL B364 Developmental <br> Neurobiology

A lecture/discussion course on major topics in the development of the nervous system. Some of the topics to be addressed are cell generation, cell migration, cell survival and growth, axon guidance and target specificity, synapse formation and behavioral development. Lecture three hours a week. Prerequisite: Biology 201 or 271. (Greif) Not offered in 2005-06.

## BIOL B372 Molecular Biology

This course will introduce students to molecular biology as a method for scientific inquiry. In addition to learning basic techniques for manipulation and analysis of nucleic acids, students will read and critically evaluate primary literature. Students will demonstrate knowledge of the material through written work, class discussion and oral presentations. Lecture three hours a week. Prerequisites: either Biology 201, 340, 341 or permission of instructor. (Swanson)

## BIOL B390 Senior Seminar in Ecology

A focus on the interactions among organisms and their environments. Students read and discuss current and classic papers from the primary literature. Topics may include biogeographic patterns, population and community dynamics, and ecosystem functioning. We may explore current issues such as global warming, habitat degradation and fragmentation, loss of biodiversity and the introduction of alien species. The effects of these human-induced changes on the biota are examined. Students write, defend and publicly present one long research paper. Three hours of class lecture
and discussion a week, supplemented by frequent meetings with individual students. Prerequisite: Biology 220 or permission of instructor. (Williams)

## BIOL B391 Senior Seminar in Biochemistry

Topics of current interest and significance in biochemistry are examined with critical readings and oral presentations of work from the research literature. In addition, students write, defend and publicly present one long research paper. Three hours of class lecture and discussion a week, supplemented by frequent meetings with individual students. Prerequisites: Biology 341,343 or permission of instructor. (Gibbs)

## BIOL B392 Senior Seminar in Physiology

An advanced course in the study of the organization and function of physiological systems from the molecular level to the organismal level. Specific topics related to the organization and function of physiological systems are examined in detail using the primary literature. In addition, students write, defend and publicly present one long research paper. Three hours of class lecture and discussion a week, supplemented by frequent meetings with individual students. Prerequisite: Biology 303 or 304, or permission of instructor. (Sweeney)

## BIOL B393 Senior Seminar in Genetics

Topics of current interest and significance in genetics are examined with critical readings and oral presentations of work from the research literature. In addition, students
write, defend and publicly present one long research paper. Three hours of class lecture and discussion a week, supplemented by frequent meetings with individual students. Prerequisite: Biology 201 or permission of instructor. (Swanson)

## BIOL B394 Senior Seminar in Evolutionary Developmental Biology

Topics of current interest and significance in evolutionary developmental biology are examined with critical readings and oral presentations of work from the research literature. In addition, students write, defend and publicly present a research paper based on their readings. Three hours of class lecture and discussion a week, supplemented by frequent meetings with individual students. Prerequisite: Biology 236 or 271 , or permission of instructors. (Hollyday)

## BIOL B396 Topics in Neural and Behavioral Science

A seminar course dealing with current issues in the neural and behavioral sciences. It provides advanced students concentrating in neural and behavioral sciences with an opportunity to read and discuss in depth seminal papers that represent emerging thought in the field. In addition, students are expected to make presentations of their own research. Required for those with the concentration. (Hollyday, Sternberg; crosslisted as PSYC B396)

BIOL B397 Senior Seminar in Environmental Studies
(Rihiimaki; cross-listed as ANTH B397, GEOL B397 and CITY B397)

## BIOL B398 Senior Seminar in Science

 in Society.We will examine the scientific and mainstream literatures of global climate change and analyze them from a biologist's perspective. Students will write, defend and critique position papers on climate change and its consequences for natural and agricultural ecosystems. (Wong)

## BIOL B401 Supervised Research in

 Neural and Behavioral SciencesLaboratory or library research under the supervision of a member of the Neural and Behavioral Sciences committee. Required for those with the concentration. Prerequisite: permission of instructor. (staff; crosslisted as PSYC B401)

## BIOL B403 Supervised Laboratory Research in Biology

Laboratory research under the supervision of a member of the department. Prerequisite: permission of instructor. (staff)

## Chemistry

Students may complete a major or minor in chemistry. Within the major, students may complete a minor in computational methods or education. Concentrations in biological chemistry, environmental studies or geochemistry may be completed within the major. Students may complete an M.A. in the combined A.B./M.A. program.

## Faculty

Sharon J. Nieter Burgmayer, Professor (on leave semester I)
Michelle M. Francl, Professor and Chair Jonas I. Goldsmith, Assistant Professor
Krynn DeArman Lukacs, Senior Laboratory Lecturer and Major Adviser
William P. Malachowski, Assistant Professor
Frank B. Mallory, Professor
Maryellen Nerz-Stormes, Senior
Laboratory Lecturer
Silvia Porello, Lecturer
Susan A. White, Professor
The undergraduate course program in chemistry is designed to give students a sound background in both theoretical and practical aspects of four main fields: organic chemistry, physical chemistry, inorganic chemistry and biological chemistry. Furthermore, students may design courses of study that emphasize chemistry's connections to biology, earth sciences and computer science. Laboratory work is emphasized to provide students with modern training in experimental skills and analytical techniques. The core program,
consisting of courses at the 100 level and 200 level, covers fundamental principles of chemistry. This core program provides the basis for advanced work at the 300 level and 400 level, in which students encounter contemporary problems in chemistry and interdisciplinary fields and the progress that is being made toward solving them.

## Major Requirements

The requirements for a standard major in chemistry include the following 11 courses (or their equivalents): Chemistry 101, 103 or $103 \mathrm{~L}, 104,211,212,221,222,231$, 242,251 and 252 , and any two courses selected from among Chemistry 311,312 , $321,322,332,345$ or any chemistry course at the 500 level. Other required courses are Mathematics 101, 102 and 201 and Physics $103 / 104$ or $101 / 102$ (or their equivalents). All A.B. recipients who complete this program with two semesters of Chemistry 403 are certified by the American Chemical Society as having met that society's high standards for an undergraduate degree in chemistry. This is the program recommended for students intending to pursue graduate studies in chemistry.

Majors are encouraged to take additional chemistry courses at the 300 (or 500) level and at the 400 (research) level beyond the requirements of the standard program. Additional courses in mathematics and other natural sciences can contribute breadth to the chemistry major. Students with a strong interest in an allied field, such as biochemistry, geochemistry, environmental chemistry, computational chemistry or education may elect a minor or concentration in the
appropriate field. Upon consultation with major advisers in both fields students may select three of the four core courses, 221, 222,231 and 242, and appropriate 300level electives.

A typical schedule for the standard chemistry major involves taking Chemistry 101 or 103 and 104 and Mathematics 101/102 in the first year; Chemistry 211 and 212, Mathematics 201, and Physics 103/104 or 101/102 in the sophomore year; Chemistry 221, 222, 231, 242, 251 and 252 in the junior year; and appropriate advanced courses in the senior year. Note that Mathematics 201 (a fall course) or its equivalent should be completed by the end of the sophomore year. Students contemplating a chemistry major are urged to consult with the major adviser as early as possible. Those planning an interdisciplinary chemistry major should consult advisers in both departments as soon as possible.

## Honors

The A.B. degree with honors in chemistry will be awarded to students who complete the major in chemistry and also meet the following further requirements: two semesters of supervised research in chemistry (Chemistry 403) with a grade of at least 3.3 in each semester; the submission of an acceptable paper describing the results of that research; an additional semester of work at the 300 level (or 500 level) in chemistry beyond the two advanced courses required for the standard chemistry major; and a grade point average, calculated at the end of the senior year, of at least 3.4 in all chemistry courses taken.

## Minor Requirements

A student may qualify for a minor in chemistry by completing a total of 6.5 courses in chemistry, one of which must be either Chemistry 221 or 222 with either Chemistry 251 or 252. Biology 341 or 343 may be counted as one of the required six courses. At least two of the six courses must be taken at Bryn Mawr.

## Minor in Computational Methods

Students may receive an A.B. degree in chemistry with a computational minor by fulfilling the core requirements in chemistry (Chemistry 101, 103, or 103L, 104, 211, 212, 251 and 252) and three courses selected from 221, 222, 231 and 242, two advanced courses including Chemistry 322 and Computer Science 376, and by completing Computer Science 110, 206, 231 and 225 or 245 . The courses selected to fulfill this minor must be approved by the major advisers in chemistry and computer science.

## Minor in Education

Students may receive an A.B. degree in chemistry with an education minor by fulfilling the core requirements in chemistry (Chemistry 101, 103 or 103L, 104, $211,212,251$ and 252) and three courses selected from $221,222,231$ and 242 , three advanced courses selected from Chemistry 403 or electives in chemistry or education, and by completing Education 200, 310, 311 and 240 or 250 . The courses selected to fulfill this minor must be approved by the major advisers in chemistry and education. Interested students are encouraged to
investigate the 5th-year certification option offered through the Education Program (see page 133).

## Concentration in Biological Chemistry

Students may receive an A.B. degree in chemistry with a concentration in biological chemistry by fulfilling the requirements for a major in chemistry, including Chemistry 345 as one of the two required advanced courses, and also by completing two semesters of work in biology selected from Biology 201, 340 or 372 or their Haverford equivalents. The two biology courses chosen to fulfill this requirement must be approved by the major adviser.

## Concentration in Environmental Studies

Students may receive an A.B. degree in chemistry with a concentration in environmental studies by fulfilling the core requirements in chemistry (Chemistry 101,103 or 103L, 104, 211, 212) and three courses selected from 221, 222, 231 and 242 , two laboratory courses selected from 251, 252 or Geology 302, two advanced courses including a chemistry elective and Geology 397, and by completing Biology 220 and Geology 103 and one course listed under "Humans in the Landscapes" and two courses listed under "Planning and Policy" (see page 151). The courses selected to fulfill this concentration must be approved by the major advisers in chemistry and environmental studies.

## Concentration in Geochemistry

Students may receive an A.B. degree in chemistry with a concentration in geochemistry by fulfilling the core requirements in chemistry (Chemistry 101, 103 or $103 \mathrm{~L}, 104,211,212$, ) and three courses selected from 221, 222, 231 and 242 , two laboratory courses selected from 251, 252 or Geology 302, one advanced course selected from Chemistry 322 or 332 , and by completing three geology courses selected from Geology 201, 202, 301 or 302 . The courses selected to fulfill this concentration must be approved by the major advisers in chemistry and geology.

## A.B./M.A. Program

To earn an M.A. degree in chemistry in the College's A.B./M.A. program, a student must complete the requirements for an undergraduate chemistry major and also must complete six units of graduate level work in chemistry. Of these six units, as many as two units may be undergraduate courses at the 300 level taken for a graduate credit (these same two courses may be used to fulfill the major requirements for the A.B. degree), at least two units must be graduate seminars at the 500 level, and two units must be graduate research at the 700 level leading to the submission of an acceptable M.A. thesis. Other requirements are a written final examination covering material in the candidate's special field and an oral examination.

## CHEM B100 The Stuff of Art

An introduction to chemistry through fine arts, this course emphasizes the close relationship of the fine arts, especially painting, to the development of chemistry and its practice. The historical role of the material in the arts, in alchemy and in the developing science of chemistry, will be discussed, as well as the synergy between these areas. Relevant principles of chemistry will be illustrated through the handling, synthesis and/or transformations of the material. This course does not count towards chemistry major requirements, and is not suitable for premedical programs. Lecture 90 minutes, laboratory three hours a week. Enrollment limited to 20. (Burgmayer, Division IIL; cross-listed as HART B 100)

## CHEM B101 Introduction to Chemistry

For students with little previous work in chemistry. Chemistry 101 covers the same topics as Chemistry 103, but with extra class hours to develop fundamental skills. Laboratory identical to Chemistry 103. Lecture three hours, recitation two hours and laboratory three hours a week. Prerequisite: math readiness or permission of instructor. (Division IIL and Quantitative Skills) Not offered in 2005-06.

## CHEM B103 General Chemistry

For students with some background in chemistry. Students with strong preparation are directed to consider Chemistry 103L. Sections usually have a maximum of 50 students. The atomic theory of matter; stoichiometry of chemical reactions; properties of gases, liquids and solids;
phase changes; the electronic structure of atoms; chemical bonding; introduction to thermodynamics; the chemistry of representative nonmetallic elements. Examples and laboratory will include environmental, materials and biological chemistry. Lecture three hours, recitation one hour and laboratory three hours a week. May include individual conferences, evening problem or peer-led instruction sessions. Prerequisite: math readiness or permission of instructor. (Porello, Goldsmith, Lukacs, Division IIL and Quantitative Skills)

## CHEM B103L General Chemistry

A half-unit course for students with strong preparation in chemistry, but who are not ready to take Chemistry 211 (Organic Chemistry). Topics include properties of solids, liquids and gases; the electronic structure of atoms and bonding; introduction to thermodynamics; and some chemical reactions. Recitation one hour, laboratory three hours a week. Enrollment limited to 25 first-year students. Prerequisite: Advanced Placement score of 3 (or International Baccalaureate equivalent), or satisfactory performance on Bryn Mawr's placement test given during first-year orientation, or permission of instructor. Does not meet Division II requirement by itself; students must continue with Chemistry 104. (Lukacs)

## CHEM B104 General Chemistry

A continuation of Chemistry 103, 103L or 101. Ionic equilibria; introduction to chemical kinetics. electrochemistry and radiochemistry; the chemistry of representative metallic elements. Lecture three
hours, recitation one hour and laboratory three hours a week. May include individual conferences, evening problem or peer-led instruction sessions. Prerequisite: Chemistry 103 or 101. (White, Francl, Lukacs, Division IIL and Quantitative Skills)

## CHEM B211 Organic Chemistry

An introduction to the principles of organic chemistry, including synthetic and spectroscopic techniques. Lecture three hours, recitation one hour and laboratory five hours a week. Prerequisite: Chemistry 104. (Mallory, Nerz-Stormes, Division IIL)

## CHEM B212 Organic Chemistry

A continuation of Chemistry 211 with an exploration of complex chemical reactions and syntheses utilizing structure reactivity principles. Lecture three hours, recitation one hour and laboratory five hours a week. Prerequisite: Chemistry 211. (Malachowski, Nerz-Stormes, Division IIL)

## CHEM B221 Physical Chemistry

Introduction to quantum theory and spectroscopy. Atomic and molecular structure; molecular modeling; rotational, vibrational, electronic and magnetic resonance spectroscopy. Lecture three hours. Prerequisites: Chemistry 104 and Mathematics 201. Corequisities: Chemistry 211 and Physics 101 or 103. (Francl, Division II)

## CHEM B222 Physical Chemistry

A continuation of Chemistry 221. Modern thermodynamics, with application to phase equilibria, interfacial phenomena and chemical equilibria; statistical mechanics; chemical dynamics. Kinetic theory
of gases; chemical kinetics. Lecture three hours. Corequisites: Chemistry 212 and Physics 102 or 104 (Goldsmith, Division II)

## CHEM B231 Inorganic Chemistry

Bonding theory; structures and properties of ionic solids; symmetry; crystal field theory; structures, spectroscopy, stereochemistry, reactions and reaction mechanisms of coordination compounds; acid-base concepts; descriptive chemistry of main group elements. Lecture three hours a week. Corequisite: Chemistry 221. (Burgmayer, Division II)

## CHEM B242 Biological Chemistry

The structure, chemistry and function of amino acids, proteins, lipids, polysaccharides and nucleic acids; enzyme kinetics; metabolic relationships of carbohydrates, lipids and amino acids, and the control of various pathways; protein synthesis. Lecture three hours a week. Prerequisites: Chemistry 212 and 221. Corequisite: Chemistry 222. (White, Division II)

## CHEM B251 Research Methodology in

 Chemistry IThis laboratory course integrates advanced concepts in chemistry from biological, inorganic, organic and physical chemistry. Students will gain experience in the use of departmental research instruments and in scientific literature searches, recordkeeping and writing. One hour of lecture and five hours of laboratory per week. Prerequisite: Chemistry 212. Corequisite: Chemistry 221 or 231.0 .5 credit/semester. (Francl, Malachowski, Division IIL)

## CHEM B252 Research Methodology in Chemistry II

This laboratory course integrates advanced concepts in chemistry from biological, inorganic, organic and physical chemistry. Students will gain experience in the use of departmental research instruments and in scientific literature searches, recordkeeping and writing. One hour of lecture and five hours of laboratory per week. Prerequisite: Chemistry 212. Corequisite Chemistry 222 or 242.0 .5 credit/semester. (White, Goldsmith, Division IIL)

## CHEM B311 Advanced Organic Chemistry

A survey of the methods and concepts used in the synthesis of complex organic molecules. Lecture three hours a week. Prerequisites: Chemistry 212 and 222. (Malachowski, Division II) Not offered in 2005-06.

## CHEM B312 Advanced Organic Chemistry

Principles of physical organic chemistry with emphasis on reaction mechanisms, reactive intermediates and stereochemistry. Lecture three hours a week. Prerequisites: Chemistry 212 and 222. (Mallory, Division II)

## CHEM B321 Advanced Physical

 Chemistry: Topics in NanoscienceTopics will include lithography and device fabrication, scanning probe microscopies and electrical characterization of nanodevices. The course will also explore recent literature relating to the fabrication and applications of nanodevices. Prerequisites:

Chemistry 212 and 222. Lecture/seminar three hours per week. (Goldsmith, Division II)

## CHEM B322 Advanced Physical Chemistry: Mathematical Modeling of Physical Phenomena

An interdisciplinary approach to computational models in fields ranging from biology to chemistry, physics and geology. Lecture three hours per week. Prerequisites: Mathematics 201 and at least junior-level standing in a science major or permission of the instructor. This course may be counted as a Mathematics elective. (Francl, Division II) Not offered in 2005-06.

## CHEM B332 Advanced Inorganic Chemistry

A) Organicmetallic chemistry, including discussion of structure and bonding, reaction types, and catalysis; B) Bioinorganic chemistry, illustrating structural, enzymatic and pharmaceutical applications of transition metals in biological chemistry. Lecture three hours per week. Prerequisites: Chemistry 231 and 242 or permission of the instructor. (Burgmayer, Division II) Not offered in 2005-06.

## CHEM B345 Advanced Biological

## Chemistry: Nucleic Acids

Physical biochemistry of nucleic acids and proteins that bind them; spectroscopic and other techniques for studying DNA and RNA. Applications to pathogenic organisms, genomics and bioinformatics. Textbook readings will be supplemented with articles from the recent literature. Lecture/ seminar three hours a week. Prerequisites:

Any course in biochemistry or permission of the instructor (White, Division II)

## CHEM B350 Selected Topics in Current Chemical Research

A combination lecture/seminar course on the physical, structural, chemical, photochemical, mechanistic and spectroscopic properties of novel organic compounds, including oral presentations by students on very recently published research articles. Lecture three hours a week. Prerequisites: Chemistry 211-212, Chemistry 221-222, and any 300/500 level course in organic, physical, inorganic or biological chemistry. (Mallory, Division II)

## CHEM B403 Supervised Research

Many individual research projects are available, each under the supervision of a member of the faculty. Laboratory at least 10 hours a week. Oral or written presentations are required at the end of each semester. Prerequisite: permission of faculty supervisor. (Burgmayer, Francl, Goldsmith, Malachowski, Mallory, White)

Graduate seminars in chemistry are open to qualified undergraduates with the permission of the department.

# Classical and Near Eastern Archaeology 

Students may complete a major or minor in classical and Near Eastern archaeology. Within the major, students may complete a concentration in geoarchaeology.

## Faculty

Mehmet Ali Ataç, Assistant Professor Geoffrey Compton, Instructor
Alice A. Donohue, Professor (on leave 2005-06)
Peter Magee, Assistant Professor and Major Adviser
Stella Miller-Collett, Professor and Acting Chair, semester II
Pamela A. Webb, Visiting Associate Professor
James C. Wright, Professor and Chair (on leave semester II)

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.

## Major Requirements

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

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 spending a junior year abroad are strongly advised to seek assistance in planning their major early in their sophomore year.

## Concentration in Geoarchaeology

The departments of anthropology, classical and Near Eastern archaeology, and geology offer a concentration in geoarchacology, which allows students majoring in these fields to explore how our human ancestors interacted with past environments, and how traces of human behavior are preserved in the physical environment. Please consult with Professor Magee regarding this program.

## Requirements for the Concentration:

A. Two 100-level units from anthropology, archaeology or geology, of which one must be from the dept outside the student's major. Possibilities include Classical and Near Eastern Archaeology 101, Anthropology 101, Geology 101, Geology 102 or Geology 103.
B. Anthropology/Classical and Near Eastern Archaeology/Geology 270: Geoarchaeology (Magee, Barber).
C. Biology/Classical and Near Eastern Archaeology/Geology 328: Geospatial Data Analysis and GIS (Compton).
D. Two elective courses, to be chosen in consultation with the major advisor, from among current offerings in anthropology, classical and Near Eastern archaeology and ceology. One of these two courses must be from outside the student's major. Suggested courses include but are not limited to Anthropology 203 (Human Ecology), Anthropology 220 (Methods and Theory), Anthropology 225 (Paleolithic Archaeology), Anthropology 240 (Traditional Technologies), Classical and Near Eastern Archaeology 308 (Ceramic Analysis), Classical and Near Eastern Archaeology 332 (Field Techniques), Geology 202 (Mineralogy), Geology 205 (Sedimentology), Geology 310 (Geophysics), and Geology 312 (Quaternary Climates).

## Honors

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

## Minor Requirements

The minor requires six courses. Core requirements are Classical and Near Eastern Archaeology 101 and 102 in addition to four other courses selected in consultation with the major adviser.

## 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 archaeology should study French and German.

## Fieldwork

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

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

Professor James Wright directs the Nemea Valley Archaeological Project in Greece. Currently a collaboration with the Ms. Eva Pappi of the Fourth Inspectorate of Prehistoric and Classical Antiquities of the Greek Ministry of Culture is focused on excavating a Mycenaean chamber tomb cemetery in the valley. Fieldwork is anticipated for the summers of 2006-08. Undergraduate and graduate students in archaeology participate in this project, which focuses on excavation techniques, skeletal analysis, and museum studies.

The department is collaborating with Professor Aslı Özyar of Bogaziçi University in Istanbul, in the Tarsus Regional Project, Turkey, sponsored by Bogaziçi University. This is a long-term investigation of the mound at Gözlü Küle at Tarsus, in Cilicia, which was first excavated by Hetty Goldman (Class of 1903). Both undergraduate and graduate students in archaeology participate in this project.

## Study Abroad

Study abroad is encouraged if the program is approved by the department. Students are advised to take only one semester abroad. 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.

## ARCH B101 The Uses of the Past: Introduction to Egyptian and Near Eastern Archaeology

A historical survey of the archaeology and art of the ancient Near East. Egypt and the prehistoric Aegean. Three hours of class, one hour of special topics a week. (Ataç, Division III)

## ARCH B102 The Uses of the Past: Introduction to Classical Archaeology

A historical survey of the archaeology and art of Greece, Etruria and Rome. Three hours of class, one hour of special topics each week. (Webb, Division III)

## ARCH B201 Preclassical Greek Art and Archaeology

The art and archaeology of Greece and its Mediterranean neighbors between the end of the Bronze Age and the Persian invasion (ca. 1100 to 480 B.C.E.), the period which saw the rise of the city-state, the introduction of democracy and the spread of Greek civilization by colonization and trade. The architecture, painting, sculpture and minor arts will be studied with attention to their historical and cultural contexts. (Donohue, Division III) Not offered in 2005-06.

## ARCH B203 Ancient Greek Cities and Sanctuaries

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. (Wright, Division III; cross-listed as CITY B203) Not offered in 2005-06.

## ARCH B205 Greek Sculpture

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. (Webb, Division III; cross-listed as HART B204) Not offered in 2005-06.

## ARCH B206 Hellenistic and Roman Sculpture

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. (Donohue, Division III; cross-listed as HART B206) Not offered in 2005-06.

## ARCH B209 Aegean Archaeology

The prehistoric cultures of the Aegean area concentrating on Minoan Crete, Troy, the Aegean Islands and Mycenaean Greece. (Wright, Division III) Not offered in 2005-06.

ARCH B220 Araby the Blest: The Archaeology of the Arabian Peninsula from 3000 to 300 B.C.E.
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. (Magee).

## ARCH B222 Alexander the Great

Alexander the Great achieved heroic status in his own time. This provided a basis for the Alexander mythology that endures to today in the popular media. This course uses archaeological and historical evidence through the centuries to reconstruct the life and afterlife of the figure of Alexander. (Miller-Collett, Division III) Not offered in 2005-06.

## ARCH B224 Women in the Ancient

 Near EastA 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 Gilgamesh epic; 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. (Magee, Division III) Not offered in 2005-06.

## ARCH B230 Archaeology and History of Ancient Egypt

The cultural, social and political development of Egypt from the beginning of settled communities in the Nile Valley to the end of the New Kingdom (ca. 5000 to 1100 B.C.E.), in both the African and the wider Near Eastern contexts. Emphasizes archaeological remains, but also makes use of documentary evidence. (Ataç, Division III) Not offered in 2005-06.

## ARCH B233. Great Empires

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

## ARCH B238 Land of the Buddha

This course uses archaeological evidence to reconstruct social and economic life in South Asia from ca. 1200 to 0 B.C.E. We examine the roles of religion, economy and foreign trade in the establishment of powerful kingdoms and empires that character-
ized this region during this period. (Magee, Division III) Not offered in 2005-06.

## ARCH B270 Geoarchaeology

Societies in the past depended on our human ancestors' ability to interact with their environment. Geoarchaeology analyzes these interactions by combining archaeological and geological techniques to document human behavior while also reconstructing the past environment. Course meets twice weekly for lecture, discussion of readings and hands on exercises. Prerequisite: one course in anthropology, archaeology or geology. (Magee, Barber; cross-listed as ANTH B270 and GEOL B270)

ARCH B302 Greek Architecture
The Greek architectural tradition and its historical development. (Webb, Division III; cross-listed as CITY B302 and HART B301) Not offered in 2005-06.

## ARCH B303 Classical Bodies

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. (Donohue, Division III; cross-listed as HART B305) Not offered in 2005-06.

## ARCH B305 Ancient Athens:

## Monuments and Art

Detailed analysis of the monuments, archaeology and art of ancient Athens - the home of such persons as Pericles, Sophocles and Plato. The course considers the art and monuments of ancient Athens against the historical background of the city, and is a case study in understanding the role of archaeology in reconstructing the life and culture of the Athenians. (Miller-Collett; cross-listed as CITY B305)

## ARCH B308 Ceramic Analysis

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. (Magee, Division I or III)

## ARCH B321 The Archaeology of

 Magna GraeciaSicily and southern Italy, lying at the center of the Mediterranean, were visited, invaded and colonized by various cultures from the Bronze Age through the Roman Imperial period. The course will examine the native cultures, Mycenaean remains, Phoenician settlements, Greek colonizations and cities, and the Roman conquest. Prerequisite: Classical and Near Eastern Archaeology 102 or equivalent. (Webb)

## ARCH B324 Roman Architecture

(Scott, Division III; cross-listed as CSTS B324, CITY B324 and HART B324) Not offered in 2005-06.

## ARCH B327 Spatial Analysis in Archaeology

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

## ARCH B328 Analysis of Geospatial Data

(Compton, Division II and Quantitative Skills; cross-listed as BIOL B328 and GEOL B328)

## ARCH B332 Archaeological Field

## Techniques

Learning to excavate, survey and understand resultant information is an important skill for field archaeologists. In this course we review advances in field techniques, conduct mock-surveys and excavations, and analyze data. We also examine how field techniques have affected (or been in response to) shifts in archaeological theo-
ry. (Magee, Division I or III) Not offered in 2005-06.

## ARCH B351 The Phoenicians

Study of the origins of the Phoenicians in the Late Bronze-early Iron Age and their dispersal throughout the Mediterranean, with special attention to the interactions in the West through the period of the Punic Wars. Prerequisite: Classical and Near Eastern Archaeology 204 or permission of the instructor. (Compton, Division III; cross-listed as CITY B351)

## ARCH B398, B399 Senior Seminar

A weekly seminar on common topics with assigned readings and oral and written reports. (Magee, Webb)

ARCH B403 Independent Supervision (staff)

## Comparative Literature

Students may complete a major or minor in Comparative Literature.

## Directors

Elizabeth C. Allen
Israel Burshatin, at Haverford College

## Faculty

Sooyong Kim, Andrew W. Mellon
Foundation Postdoctoral Fellow in
Islamic Culture
Advisory Committee at Bryn Mawr:
Elizabeth C. Allen
Francis Higginson
Maria Cristina Quintero
Bethany Schneider
Azade Seyhan
Advisory Committee at Haverford:
Israel Burshatin
Maud McInerney
Deborah Roberts
Roberto Castillo Sandoval
Ulrich Schoenherr
David Sedley
The study of comparative literature situates literature in an international perspective; examines connections among 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
anthropology, philosophy, history, religion, classical studies, Africana studies, gender studies and cultural studies, as well as other arts.

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.

## Major Requirements

Requirements for the comparative literature major are: Comparative Literature 200: Introduction to Comparative Literature (normally taken in the sophomore year); six literature courses 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 national literature) must be at the 300 level or above, or its equivalent as approved in advance by the adviser; one course in critical theory; two electives; Comparative Literature 398 and 399: Senior Seminar in Comparative Literature.

## Honors

Students who, in the judgment of the advisory committee, have done distinguished work in their courses and in the senior seminar will be considered for departmental honors.

## Minor Requirements

Requirements for the minor are: Comparative Literature 200 and 398, plus four additional courses - two each in the literature of two languages. At least one of these four courses must be at the 300 level. Students who minor in comparative literature are encouraged to choose their national literature courses from those with a comparative component.

Both majors and minors are encouraged to work closely with the chairs and members of the advisory committee in shaping their programs.

## COML B155 Islamic Civilization, A

 Literary IntroductionThis course surveys major political, social, religious and cultural developments in the Islamic world, from Spain to India, as represented in the works of Arabic, Persian and Turkish literature in translation, with some attention to art and architecture. We cover the period from the rise of Islam to early modern times (roughly 600 to 1500 ). (Kim, Division III; cross-listed as GNST B155)

## COML B200 Introduction to Comparative Literature

This course explores a variety of approaches to the comparative or transnational study of literature through readings of several kinds: texts from different cultural traditions that raise questions about the nature and function of storytelling and literature; texts that comment on, respond to and rewrite other texts from different
historical periods and nations; translations; and readings in critical theory. (Quintero, Sedley, Seyhan, Division III)

COML B202 Culture and Interpretation
(Krausz, Division III; cross-listed as PHIL B202)

COML B209 Introduction to Literary Analysis: Philosophical Approaches to Criticism
(Seyhan, Division III; cross-listed as GERM B209 and PHIL B209) Not offered in 2005-06.

COML B211 Primo Levi, the Holocaust and Its Aftermath
(Patruno, Division III; cross-listed as HEBR B211 and ITAL B211)

COML B212 Borges y sus lectores
(Sacerio-Garí, Division III; cross-listed as SPAN B211)

COML B213 Approches critiques et théoriques
(Mahuzier, Division III; cross-listed as FREN B213)

COML B215 "Memoria negra": la literatura afro-hispánica en África y las Américas
(Lima, Division III; cross-listed as SPAN B215)

COML B220 Writing the Self
(Conybeare, Division III; cross-listed as CSTS B220) Not offered in 2005-06.

COML B222 Aesthetics: The Nature and Experience of Art
(Krausz, Division III; cross-listed as PHIL B222)

COML B226 Cine y sociedad en la
Espana contemporanea
(Arribas, Division III; cross-listed as SPAN B226) Not offered in 2005-06.

COML B229 Movies and Mass Politics
(Tratner, Division III; cross-listed as
ENGL B229) Not offered in 2005-06.
COML B230 Poetics of Desire in the Lyric Poetry of Renaissance Italy and Spain
(Quintero, Division III; cross-listed as ITAL B230 and SPAN B230) Not offered in 2005-06.

COML B231 Cultural Profiles Modern Exile
(Seyhan, Division III; cross-listed as ANTH B231 and GERM B231)

COML B234 Postcolonial literature in English
(Tratner, Division III, cross-listed as ENGL B234) Not offered in 2005-06.

COML B236 The Ancient Novel
(Walker; cross-listed as CSTS B236)
COML B245 Women's Narratives on Modern Migrancy, Exile, and Diasporas
(Seyhan, Division III; cross-listed as ANTH B246, GERM B245 and CITY B246) Not offered in 2005-06.

COML B251 Romantic Prose Fiction
This seminar studies representative works of Romantic poetry's "poor relation" - prose fiction. Readings include novels from England, France, Germany and Russia, such as The Sorrows of Young Werther, Frankenstein, Wuthering Heights, A Hero of Our Time and The Red and the Black, as well as short stories. Discussions include such topics as national varieties of Romanticism, the Romantic ideals of nature, love and the self, and the impact of the revolutionary era on art. Illustrative examples of Romantic painting and music are also considered. All readings and discussions in English. (Allen, Division III) Not offered in 2005-06.

## COML B257 The Realist Novel

## Revisited

This seminar undertakes the study of a deceptively simple cultural and literary historical concept - realism - by closely reading well-known 19th-century novels by George Eliot, Gustave Flaubert, Theodor Fontane, Henry James, Stendhal, Leo Tolstoy and Ivan Turgenev, all of which have traditionally been placed within realism's parameters. Critical essays exploring the nature of realism, either in general or in a particular author's works, are also discussed. The ethical implications of the realist enterprise and, more broadly, the possible relations between art and life receive special scrutiny. (Allen, Division III) Not offered in 2005-06.

COML B260 Ariel/Caliban y el discurso americano
(Sacerio-Garí, Division III; cross-listed as SPAN B260) Not offered in 2005-06.

## COML B265 The Islamic Literary Tradition

This course focuses on the major poetic genres and figures in Islamic literature. Selected works from Arabic, Persian, and Turkish are read in translation, and each is situated in its historical, social, and cultural context. We will not engage in extensive comparisons among the three literatures, but questions of continuities and ruptures will inform the course. (Kim, Division III; cross-listed as GNST B265)

## COML B270 Classical Heroes and

 Heroines(Gaisser, Division III; cross-listed as CSTS B270) Not offered in 2005-06.

COML B271 Litertura y delincuencia: explorando la novela picaresca (Quintero, Division III; cross-listed as SPAN B270) Not offered in 2005-06.

COML B275 Interpreting Mythology (Edmonds, Division III; cross-listed as CSTS B275) Not offered in 2005-06.

COML B279 Introduction to African Literature
(Beard, Division III; cross-listed as ENGL B279)

## COML B285 Contemporary

 International Films(Mazaj, Division III; cross-listed as ENGL B285)

COML B299 Cultural Diversity and Its Representations
(Seyhan, Division III; cross-listed as GERM B299 and HART B298)

COML B302 Le printemps de la parole féminine: femmes écrivains des débuts (Armstrong, Division III; cross-listed as FREN B302) Not offered in 2005-06.

COML B306 Film Theory
(staff, Division III; cross-listed as ENGL B306 and HART B306)

COML B308 El teatro del Siglo de Oro
(Quintero, Division III; cross-listed as SPAN B308)

COML B320 Topics in German Literature
(Meyer. Schönherr, Seyhan, Division III; cross-listed as GERM B320) Not offered in 2005-06.

COML B323 Culture and Interpretation
(Krausz, Division III; cross-listed as PHIL B323)

COML B325 Symptoms of the
Imagination: Illness and Genius in 19th-Century France
(Marcus, Division III; cross-listed as FREN B325)

COML B326 Etudes avancées de civilisation
(Lee, Mahuzier, Division III; cross-Tisted as FREN B326) Not offered in 2005-06.

COML B340 Topics in Baroque Art (McKim-Smith, Quintero, Division III; cross-listed as HART B340 and SPAN B340) Not offered in 2005-06.

COML B350 Voix médiévales et échos modernes
(Armstrong, Division III; cross-listed as FREN B350)

COML B348 Cinema and Popular Memory
(Mazaj, Division III; cross-listed as ENGL B348)

COML B354 Topics in Art Criticism (Levine, Division III; cross-listed as HART B354) Not offered in 2005-06.

COML B359 Sacrifice, Identity and Law
(Elkins, Division III; cross-listed as PHIL B359 and POLS B359) Not offered in 2005-06.

COML B364 Irony and Inquiry: Plato and Nietzsche
(Elkins, Salkever, Division III; cross-listed as PHIL B364 and POLS B364) Not offered in 2005-06.

COML B370 Psychoanalytic Theory (Forbes, Division III; cross-listed as ENGL B370)

COML B398 Theories and Methods in Comparative Literature
This course, required of all senior comparative literature majors in preparation for writing the senior thesis in the spring semester, explores both theoretical and applied, or practical, literary criticism, in which literary theories are put to work. often in combination, to elucidate particular texts. Throughout the semester, students collect and review theoretical and applied critical materials bearing on their
own comparative thesis topics in order to situate those topics in an appropriate critical context. (Allen, Seyhan)

COML B403 Supervised Work (staff)

Haverford College currently offers the following courses in Comparative Literature:

COML H105B Anthropology and Creativity
COML H200B Introduction to Comparative Literature
COML H203A Writing the Jewish Trajectories in Latin America
COML H208B Mythology
COML H210B Spanish and Spanish American Film Studies
COML H211A Introduction to Postcolonial Literature
COML H220B The English Epic
COML H243B 18th Century Literature: Trans-Atlantic Exchanges
COML H250B Music in the Literary Imagination, 1800-1949
COML H258A Vienna at the Turns of Centuries: Art, Politics and Culture
COML H263A The Middle East Love Lyric
COML H290A History of Literary Theory
COML H301A Sex and Gender in the Middle Ages
COML H303A Seminar in Religion, Literature and Representation
COML H315A Novísima literatura hispanoamericana
COML H317B Novels of the Spanish American

COML H320A Spanish American Colonial Writings
COML H332A Topics in 20th Century Continental Philosophy:
COML H359B Hearing-Writing-Silence: Music, Politics, and Gender in German Literature (1800-2000)
COML H382A On the Sublime
COML H389B Problems in Poetics: The Interpretation of Lyric
COML H399B Senior Seminar

## Computer Science

Students may complete a minor in computer science or a minor in computational methods within selected majors. Students may submit an application to major in computer science through the independent major program.

## Faculty

Douglas S. Blank, Assistant Professor
John Dougherty, Assistant Professor at
Haverford College
Deepak Kumar, Professor and Coordinator
Steven Lindell, Associate Professor and Coordinator at Haverford College
David G. Wonnacott, Associate Professor at Haverford College
Dianna Xu, Assistant Professor
Computer Science is the science of algorithms - their theory, analysis, design and implementation. As such it is an interdisciplinary field with roots in mathematics and engineering and applications in many other academic disciplines. The program at Bryn Mawr is founded on the belief that computer science should transcend from being a subfield of mathematics and engineering and play a broader role in all forms of human inquiry.

The Computer Science Program is supported jointly by faculty at both Bryn Mawr and Haverford Colleges. The program welcomes students who wish to pursue a major in computer science. Additionally, the program also offers a minor in computer science, a concentration in
computer science (at Haverford College) and a minor in computational methods (at Bryn Mawr College). The program also strives to facilitate evolving interdisciplinary majors. For example, students can propose a major in cognitive science by combining coursework from computer science and disciplines such as psychology and philosophy.

All majors, minors and concentrations offered by the program emphasize foundations and basic principles of information science, rather than engineering or dataprocessing applications. The aim is to provide students with skills that transcend short-term trends in computer hardware and software.

## Independent Major in Computer

 ScienceStudents who wish to major in computer science do so by declaring an independent major (see page 20). Students are encouraged to prepare a major course plan in consultation with their academic adviser in computer science. A typical course plan includes three introductory courses (110 or 205,206 and 231), three core courses (240, 245 and one of 330,340 or 345 ), six electives of a student's choosing and a senior thesis. Students declare an independent major in the spring semester of their sophomore year. Such students should ensure that they have completed at least three courses in computer science by the end of their sophomore year (we highly recommend 110, 206 and 231).

## Minor in Computer Science

Students in any major are encouraged to complete a minor in computer science. Completing a minor in computer science enables students to pursue graduate studies in computer science, in addition to their own major. The requirements for a minor in computer science at Bryn Mawr are 110 or $205,206,23$ I , any two of $240,245,246$, 330,340 or 345 , and two electives chosen from any course in computer science, approved by the student's adviser in computer science. As mentioned above, these requirements can be combined with any major, depending on the student's interest and preparation.

## Minor in Computational Methods

This minor is designed to enable students majoring in any of the sciences (biology, chemistry, geology, physics, psychology), classical and Near Eastern archaeology, economics, growth and structure of cities, mathematics, philosophy, and sociology, to learn computational methods and applications in their major area of study. The requirements for a minor in computational methods at Bryn Mawr are 110 or 205, 206, 231 ; one of $212,225,245,246,330,340$ or 361 ; any two computational courses depending on a student's major and interests (there are over 35 such courses to choose from in biology, chemistry, computer science, economics, geology, mathematics, physics, psychology and sociology).

Students can declare a minor at the end of their sophomore year or soon after. Students should prepare a course plan and have it approved by at least two faculty ad-
visers. Students minoring in computational methods are encouraged to propose senior projects/theses that involve the application of computational modeling in their major field of study.

## CMSC H101B Fluency with Information Technology

A study of the skills, concepts and capabilities involved in the design, implementation and effective use of information technology. Using a variety of quantitative techniques, we will explore a range of uses of information technology in various fields. (Dougherty)

## CMSC B110 Introduction to Computing

An introduction to the nature, subject matter and branches of computer science as an academic discipline, and the nature, development, coding, testing, documenting and analysis of the efficiency and limitations of algorithms. Also includes the social context of computing (risks, liabilities, intellectual property and infringement). (Blank, Kumar, Division II and Quantitative Skills)

## CMSC B120 Visualizing Information

An introduction to visualization of complex data through computer manipulation. Explores the tools necessary to allow the human mind to make sense of vast amounts of data collected in many fields of study. Topics: 2D/3D representations, programming techniques, data conversion principles, color representation and introduction to virtual reality. (Xu, Quantitative Skills)

## CMSC H130 Foundations of Rigorous

 ThinkingDevelops rigorous thinking skills through the linguistic foundations of mathematics: logic and sets. Emphasis on using symbology to represent abstract objects and the application of formal reasoning to situations in computer science. (Lindell) Not offered in 2005-06.

## CMSC H187B Computing Across the Sciences

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

## CMSC H205A Introduction to Computer Science

A rigorous year-long introduction to the fundamental concepts of computer science intended for students interested in doing more advanced work in technical and scientific fields. Includes the fundamental data structures of computer science and their algorithms. Examples and exercises will stress the mathematical aspects of the discipline, with a strong emphasis on programming and analytical problem-solving skills. Students without a strong (secondary school) mathematics or programming
experience should take Computer Science 100 instead. (Wonnacott, Dougherty, Division II and Quantitative Skills)

## CMSC B206 Introduction to Data

 StructuresIntroduction to the fundamental algorithms and data structures of computer science: sorting, searching, recursion, backtrack search, lists, stacks, queues, trees, graphs, dictionaries. Introduction to the analysis of algorithms. Prerequisite: Computer Science 205 or 110 , or permission of instructor. (Xu, Blank, Dougherty, Wonnacott, Division II and Quantitative Skills)

## CMSC H210A Linear Optimization and Game Theory

Covers in depth the mathematics of optimization problems with a finite number of variables subject to constraints. Applications of linear programming to the theory of matrix games and network flows are covered, as well as an introduction to nonlinear programming. Emphasis is on the structure of optimal solutions, algorithms to find them, and the underlying theory that explains both. (Butler, Division II and Quantitative Skills)

## CMSC B212 Computer Graphics

Presents the fundamental principles of computer graphics: data structures for representing objects to be viewed, and algorithms for generating images from representations. Prerequisite: Mathematics 203 or 215 , or permission of instructor. (Xu) Not offered in 2005-06.

## CMSC H225A Fundamentals of Database Systems

An introduction to the principles of relational database design and use, including the entity/relationship data model and the logical algebra/calculus model behind query languages. An integrated laboratory component covers declarative programming using the international standard SQL. Prerequisites: Computer Science 206 and 231. (Lindell, Division II) Not offered in 2005-06.

## CMSC B231 Discrete Mathematics

An introduction to discrete mathematics with strong applications to computer science. Topics include set theory, functions and relations, propositional logic, proof techniques, difference equations, graphs, and trees. (Weaver, Division II and Quantitative Skills; cross-listed as MATH B23I and PHIL B230)

## CMSC H235A Information and Coding Theory

Covers the mathematical theory of the transmission (sending or storing) of information. Included are encoding and decoding techniques, both for the purposes of data compression and for the detection and correction of errors. (Lindell) Not offered in 2005-06.

## CMSC B240 Computer Organization

A lecture/laboratory course studying the hierarchical design of modern digital computers. Combinatorial and sequential logic elements; construction of microprocessors; instruction sets; assembly language programming. Lectures cover the theoretical
aspects of machine architecture. In the laboratory, designs discussed in lecture are constructed in software. Prerequisite: Computer Science 206 or permission of instructor. (Kumar, Division II)

## CMSC B245 Principles of Programming Languages

An introduction to a wide range of topics relating to programming languages with an emphasis on abstraction and design. Design issues relevant to the implementation of programming languages are discussed, including a review and in-depth treatment of mechanisms for sequence control, the ruu-time structure of programming languages and programming in the large. The course has a strong lab component where students get to construct large programs in at least three different imperative programming languages. (Wonnacott, Division II and Quantitative Skills)

CMSC B246 Programming Paradigms
Topics course; course content varies. Topic for 2005-06 is Programming in UNIX and C. Provides an in-depth introduction to C and $\mathrm{C}++$, as well as programming principles such as abstraction, encapsulation and modularization. Another focus of the class is to gain proficiency in the UNIX operating system. Assumes familiarity with conditionals, loops, functions and arrays and will focus on C-specific topics such as pointer manipulations, dynamic memory allocation and abstract data types. An excellent preparation for classes such as operating systems and software engineering principles and programming techniques to facilitate medium-scaled development
projects. Prerequisite: Computer Science 205a or 110. (Xu, Division II and Quantitative Skills)

## CMSC B250 Computational Models in

 the SciencesIntroductory survey of theoretical methods in the sciences. Design, implementation, interpretation, evaluation of models. Conceptual, analytical, computational models; simulations; evolutionary algorithms; optimality models; role of theory in science. Case studies from a variety of natural and social sciences. (Wong, Division II and Quantitative Skills; cross-listed as BIOL B250 and GEOL B250)

## CMSC B325 Computational

## Linguistics

Introduction to computational models of understanding and processing human languages. How elements of linguistics, computer science, and artificial intelligence can be combined to help computers process human language and to help linguists understand language through computer models. Topics covered: syntax, semantics, pragmatics, generation and knowledge representation techniques. Prerequisite: some background in linguistics or computer science. (Kumar)

## CMSC B330 Algorithms: Design and Practice

This course examines the applications of algorithms to the accomplishments of various programming tasks. The focus will be on understanding of problem-solving methods, along with the construction of algorithms, rather than emphasizing formal proving methodologies. Topics include
divide and conquer, approximations for NP-Complete problems, data mining and parallel algorithms. Prerequisites: Computer Science 206 and 231. (Kumar, Division II and Quantitative Skills)

CMSC H340B Analysis of Algorithms Qualitative and quantitative analysis of algorithms and their corresponding data structures from a precise mathematical point of view. Performance bounds, asymptotic and probabilistic analysis, worstcase and average-case behavior. Correctness and complexity. Particular classes of algorithms such as sorting and searching are studied in detail. Prerequisites: Computer Science 206 and some additional mathematics at the 200 level, or permission of instructor. (Lindell) Not offered in 2005-06.

## CMSC H345B Theory of Computation

 Introduction to automata theory, formal languages and complexity. Introduction to the mathematical foundations of computer science: finite state automata, formal languages and grammars, Turing machines, computability, unsolvability and computational complexity. Prerequisites: Computer Science 206, and some additional mathematics at the 200 level, or permission of instructor. (Lindell)CMSC B350 Compiler Design: Theory and Practice
An introduction to compiler and interpreter design, with emphasis on practical solutions, using compiler-writing tools in UNIX and the C programming language. Topics covered include lexical scanners, context-free languages and pushdown
automata, symbol table design, run-time memory allocation, machine language and optimization. (Wonnacott)

## CMSC B355 Operating Systems

A practical introduction to modern operating systems, using case studies from UNIX, VMS, MSDOS and the Macintosh. Lab sessions will explore the implementation of abstract concepts, such as resource allocation and deadlock. Topics include file systems, memory allocation schemes, semaphores and critical sections, device drivers, multiprocessing and resource sharing. (Xu)

## CMSC B361 Emergence

A multidisciplinary exploration of the interactions underlying both real and simulated systems, such as ant colonies, economies, brains, earthquakes, biological evolution, artificial evolution, computers and life. These emergent systems are often characterized by simple, local interactions that collectively produce global phenomena not apparent in the local interactions. (Blank; cross-listed as BIOL B361)

## CMSC B371 Cognitive Science

Cognitive science is the interdisciplinary study of intelligence in mechanical and organic systems. In this introductory course, we examine many topics from computer science, linguistics, neuroscience, mathematics, philosophy and psychology. Can a computer be intelligent? How do neurons give rise to thinking? What is consciousness? These are some of the questions we will examine. No prior knowledge or experience with any of the subfields is assumed or necessary. Prerequisite: permis-
sion of instructor. (Blank) Not offered in 2005-06.

## CMSC B372 Artificial Intelligence

Survey of Artificial Intelligence (AI), the study of how to program computers to behave in ways normally attributed to "intelligence" when observed in humans. Topics include heuristic versus algorithmic programming; cognitive simulation versus machine intelligence; problem-solving; inference; natural language understanding; scene analysis; learning; decision-making. Topics are illustrated by programs from literature, programming projects in appropriate languages and building small robots. (Kumar, Division II and Quantitative Skills; cross-listed as PHIL B372) Not offered in 2005-06.

## CMSC B380 Recent Advances in Computer Science

A topical course facilitating an in-depth study on a current topic in computer science. Prerequisite: permission of instructor. (staff, Division II) Not offered in 2005-06.

CMSC H392A Advanced Topics: High Performance Scientific Computing Prerequisite: permission of instructor. (Dougherty)

CMSC H394B Advanced Topics in Discrete Mathematics and Computer Science
(Lindell) Not offered in 2005-06.
CMSC B403 Supervised Work/ Independent Study

## East Asian Studies

Students may complete a major or a minor in East Asian studies.

## Faculty

Tz’u Chiang, Lecturer
Alexei Ditter, Instructor
Youngmin Kim, Assistant Professor (on leave semester II)
Pauline Lin, Assistant Professor, in residence as of Fall 2006
Suzanne Spain, Associate Provost, Cochair
Changchun Zhang, Instructor

## At Haverford College:

Hank Glassman, Assistant Professor
Shizhe Huang, C. V. Starr Professor of Asian Studies and Associate Professor of Chinese and Linguistics, Co-chair
Yoko Koike, Senior Lecturer (on leave semester I)
Paul Jakov Smith, John R. Coleman
Professor of Social Sciences and
Professor of History and East Asian
Studies (on leave 2005-06)
Yukino Tanaka, Lecturer
Takanobu Tsuji, Visiting Instructor
Hai Lin Zhou, Visiting Assistant
Professor
The Bi-College Department of East Asian Studies links rigorous language training to the study of East Asian, and particularly Chinese and Japanese, culture and society. In addition to our intensive programs in Chinese and Japanese languages, departmental faculty offer courses in East Asian philosophy, linguistics, literature, religion
and social and intellectual history. The East Asian Studies program also incorporates courses on East Asia by affiliated Bi-College faculty on East Asian anthropology, cities, economics, philosophy and sociology, as well as additional courses on East Asian culture and society by faculty at Swarthmore.

The intellectual orientation of the Department of East Asian Studies 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 $\mathrm{Bi}-\mathrm{Co}$ 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. East Asian studies majors are encouraged to take advantage of these programs to supplement their East Asian studies coursework. Students who wish to combine the study of East Asia and its languages with a major in another discipline are invited to consider the East Asian studies minor, described more fully below.

## Major Requirements

Requirements for the major are:

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 Asian Studies 200b (Sophomore Seminar: Methods and Approaches to East Asian Studies), which highlights the emergence of East Asia as a coherent cultural region and introduces students to basic bibliographic skills and research approaches. Required of East Asian studies majors and minors; open to history majors and others with permission of the instructors. This course should be taken in the second semester of the sophomore year.
3. Five additional courses in East Asian cultures, as follows: one 100-level Introduction (from among East Asian Studies 120, 129, 131 or 132); two 200-level courses; and two 300-level seminars.
4. A one-semester senior conference (East Asian Studies 398) in the Fall, culminating in the completion of a senior thesis by the end of that semester.

## Minor Requirements

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

## Language Placement Tests

Placement tests for first-time students at all levels are conducted in the first week of the fall semester. To qualify for third-year language courses students need to have a 3.0 average in second-year language study or take a placement test in the beginning of the third-year course. In the event that students do not score 3.0 or above at the end of the second-year language study, they must consult with the director of the respective language program and work out a summer study plan that may include, but is not limited to, taking summer courses or studying on their own under supervision.

## Honors

Honors in East Asian studies will be awarded by the departmental faculty on the basis of superior performance in two areas: coursework in major-related courses (including language classes), and the senior thesis. A 3.7 average in major-related
coursework is considered the minimum necessary for consideration for honors.

## Study Abroad

The Department of East Asian Studies strongly recommends study abroad to maximize language proficiency and cultural familiarity. Because study abroad provides an unparalleled opportunity to study a culture from the inside, students spending a semester or year in China, Japan or Korea will be required to prepare an essay of 10 pages on significant issues confronting their host country, based on information from local newspapers or magazines, television or personal interviews. No departmental credit will be granted for study abroad without satisfactory completion of this assignment, whose details should be worked out with the student's adviser.

Formal approval is required by the study abroad adviser prior to the student's travel. Without this approval, credit for courses taken abroad may not be accepted by the East Asian studies program.

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

## EAST H120 Chinese Perspectives on the Individual and Society

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. (Smith, Division III) Not offered in 2005-06.

## EAST H129 The Lotus Sutra: Text, Image, and Practice

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. (H. Glassman, Division III)

## EAST B131 Chinese Civilization

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. (Kim, Division I or III; cross-listed as HIST B 131)

## EAST H132 Japanese Civilization

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. (Glassman, Division I or III) Not offered in 2005-06.

## EAST H200 Sophomore Seminar:

Methods and Approaches in East Asian Studies
This course introduces current and prospective majors to the scope and methods of East Asian studies. It employs readings on East Asian history and culture as a platform for exercises in critical analysis, bibliography, cartography and the formulation of research topics and approaches. It culminates in a substantial research essay. A prerequisite for East Asian Studies majors, the course should be taken in the second semester of the sophomore year; in some circumstances it may be taken in the second semester of the junior year. The course is required for East Asian Studies minors and open to other interested students. (Glassman, Division III)

## EAST H201 Introduction to Buddhism

 Focusing on the East Asian Buddhist tradition, the course examines Buddhist philosophy, doctrine and practice as textual traditions and as lived religion. (Glassman, Division III) Not offered in 2005-06.
## EAST B205 Enlightenment and Decadence in Modern Chinese Literature and Film <br> Not offered in 2005-06.

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

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

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

This course introduces Chinese literature from its beginnings through the late-18th century, via the greatest masterpiece of traditional Chinese fiction, the Dream of the Red Chamber. Nearly every significant literary genre in the pre-modern Chinese tradition is represented within the novel's descriptions of daily life in a great Chinese household. By studying relevant aspects of the literary tradition alongside each section of the novel, we will learn to appreciate China's pre-modern literary tradition from our contemporary perspeciive and to see it through the eyes of the 18th-century characters for whom the literary tradition was a part of their daily lives. (Ditter, Division III)

## EAST H216 Invaded Ideology and Translated Modernity: Modern Chinese and Japanese Literatures Not offered in 2005-06.

## EAST 225 Topics in Modern Chinese

 Literature: Modern Chinese Literature in the Republican Period (1911-49)We will study Chinese literature written between 1911 and 1949, when Chinese literature went through a dramatic period of change and self-evaluation. Focusing primarily on fiction (and to a lesser degree, prose and film), we will examine how writ-
ers in this period struggled not only with formal concerns (new literary idioms and modes of expression), but also with larger questions of Chinese identity and the role of modern Chinese literature. By examining literature and its historical and cultural contexts, we will learn what they can teach us about the experience of living in a world perceived as undergoing radical change. (Ditter, Division III)

## EAST B226 Introduction to Confucianism

An introduction to Confucianism, arguably the most influential intellectual and cultural tradition in East Asia. In the first half, this course will train students to read the condensed style of the Confucian canons - the Analects, the Book of Mencius, the Great Learning and the Doctrine of the Mean - by examining different commentators' explanations of select passages. In the second half, we will analyze Confucianism in light of contemporary discussions of issues such as human rights, virtue ethics, women's history, economic development and political authority. This course has no prerequisites and assumes no background in East Asian culture. (Kim, Division III; cross-listed as PHIL B226 and POLS B226) Not offered in 2005-06.

## EAST H228 The Logos and the Tao

(Wright, Division III; cross-listed as PHIL H228) Not offered in 2005-06.

EAST H228 Musical Voices of Asia (Freedman, Division III; cross-listed as MUSC H228) Not offered iit 2005-06.

## EAST B229 Comparative Urbanism

(McDonogh, Division I; cross-listed as
ANTH B229 and CITY B229)

## EAST B234 Introduction to Korean Culture

This course examines the dynamics of Korean cultural and intellectual history from the perspective of cultural identity. How did Korea negotiate its position in the traditional Asian cultural sphere? What is the significance of the so-called "Confucianization" of Choson Korea? What events and conditions shaped Korea in the 20th century? What was the impact of Japanese colonialism on Korea's modern transformation? This course explores these questions through a variety of literary works as well as historical writing, philosophical debates and the arts. No knowledge of Korean language or history is required. (Kim, Division III; cross-listed as HIST B252) Offered at Swarthmore, not Bryn Mawr, in 2005-06.

## EAST H240 Economic Development and Transformation: China vs. India

 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. (Jilani, Division I; cross-listed as ECON H240)
## EAST H242 Chinese Language in Culture and Society

An examination of the use and function of the Chinese language in culture and society, both within mainland China and in the Chinese diaspora. Topics include: language standardization, language planning, language and dialects, language and ethnicity, language and politics, and linguistic construction of self and community. (Huang, Division I) Not offered in 2005-06.

## EAST H242 Buddhist Philosophy

(Gangadean, Division III; cross-listed as PHIL H242) Not offered in 2005-06.

## EAST H244 Anthropology of China

(Gillette, Division I; cross-listed as ANTH H244) Not offered in 2005-06.

EAST H250 Religion in Modern Japan Not offered in 2005-06.

EAST H251 Gender and Power in East Asia
(Gillette; cross-listed as ANTH H251) Not offered in 2005-06.

## EAST H256 Zen Thought, Zen Culture, Zen History

Introduction to the intellectual and cultural history of the style of Buddhism known as Zen in Japanese. The development and expression of this religious movement in China, Korea, Japan and Vietnam will be examined. (Glassman, Division III)

## EAST H260 Mid-Imperial China

Surveys the fundamental transformation of Chinese society between the ninth and 16th centuries. (Smith, Division I or III;
cross-listed as HIST H260) Not offered in 2005-06.

## EAST H262 Chinese Social History: Gods, Ghosts and Ancestors in Traditional Chinese Society <br> Surveys a rotating series of topics in the Chinese social and cultural history. (Smith, Division III; cross-listed as HIST H262) Not offered in 2005-06.

## EAST H263 The Chinese Revolution

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. (Smith, Division III; cross-listed as HIST H263) Not offered in 2005-06

## EAST H264 The Social History of Chinese Religions

This course surveys the place of religion in China's social, cultural and political history during the imperial and modern eras. The main goals of the course are: [1] to introduce the interdependent world of gods, ghosts. and ancestors and the ways they are worshipped - or kept at bay; [2] to underscore the importance of religious institutions in China's past and present; [3] to explore the scholarly literature in what is one of the most robust subfields in Chinese studies; and [4] to sample some of the sources available for the study of religion in Chinese society. (Smith, Division III; cross-listed as HIST H264) Not offered in 2005-06

## EAST H265 Modern Japan

Explores selected topics in the rise of modern Japan from the late-16th century to the Pacific War, including the creation of the centralized Tokugawa state, the urban culture of the 17th and 18th centuries, the Meiji Restoration and modernization in the late-19th and early-20th centuries, and the sources and consequences of Japanese imperialism. (Smith, Division III; cross-listed as HIST H265) Not offered in 2005-06

## EAST B267 The Development of the

 Modern Japanese Nation(Takenaka, Division I; cross-listed as ANTH B267 and SOCL B267)

EAST B270 Japanese Architecture and Planning
(Hein, Division III; cross-listed as CITY B270 and HART B270) Not offered in 2005-06.

EAST H275 Romancing/Passing
Not offered in 2005-06.

## EAST H282 Structure of Chinese

This course is designed to acquaint students with both the syntactic and semantic structures of Mandarin Chinese and the theoretical implications they pose to the study of natural language. Students will have an opportunity to further their understanding of linguistic theories and to develop skills in systematically analyzing a non-Indo-European language. Prerequisite: General Programs 262 or consent of the instructor. (Huang, Division I)

## EAST H299 Agnes Chen Memorial Lectureship in East Asian Studies

 Established in honor of his sister by Francis J. Chen '40, the course for fall 2005 is "Fertile Soil: Modern Japanese Literature and its Encounter with the West" (Zhou)
## EAST H310 Religion and Gender in Premodern Japanese Literature

Examination of the intersection of religion and gender in Japanese literature from the eighth through the 16 th centuries; from Japanese creation myths to Lady Murasaki's courtly Tale of Genji and the homoerotic Buddhist literature of the late medieval period. The course assumes no prior academic experience in gender studies, literature, religion or Japanese culture. All sources are in English translation. (Glassman, Division III; cross-listed as RELG H310) Not offered in 2005-06.

EAST H315 Cultural Interchange in 19th- to 20th-Century East Asia
Not offered in 2005-06.

## EAST B325 Topics in Chinese History and Culture

Topic to be determined for spring 2006.
EAST H330 Cinema Nostalgia
Not offered in 2005-06.

## EAST B335 East Asian Development

(Rock, Division I; cross-listed as ECON B335)

EAST H342 Topics in Asian
Philosophy: Buddhism in a Global Context
(cross-listed as PHIL H342) Not offered in 2005-06.

## EAST H347 Topics in East Asian

 History(Smith) Not offered in 2005-06.

## EAST H349 Topics in Comparative History

Seminar meetings, reports and papers. May be repeated for credit with change of topic. (Smith, Division III) Not offered in 2005-06.

## EAST B354 Identity, Ritual and

 Culture in Vietnam(Pashigian, Division I; cross-listed as ANTH B354) Not offered in 2005-06.

EAST B381 Topics in Japanese Art (Easton, Division III; cross-listed as HART B381) Not offered in 2005-06.

## EAST B398 Senior Conference

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

## EAST B403 Supervised Work

## EAST H415 Theory and Experience

This advanced research seminar is about Chinese material culture in its historical and contemporary manifestations. Particular attention will be paid to Chinese ceramics. Students will design and complete individual research projects centered on objects, architectural installations and other manifestations of Chinese material culture available in the Philadelphia area. (Gillette; cross-listed as ANTH H415)

## East Asian Languages

The East Asian Studies Program welcomes students who wish to combine their interests in East Asian languages with the study of an East Asian culture. These students are urged to consult the coordinator of East Asian studies on either campus, who will advise them on creating individual plans of study in appropriate departments.

## Chinese Language

Shizhe Huang, Chinese Language
Program Director
Tz'u Chiang
Changchun Zhang
The Chinese Language Program offers a full undergraduate curriculum of courses in Mandarin Chinese. Students who will combine language study with focused work on East Asian society and culture may wish to consider the major or minor in East Asian studies. Information about study abroad programs can be found under the East Asian studies heading in this catalog.

CNSE B001, B002 First-year Chinese
Offered in an intensive section ( 1.5 credits) for students new to the language, which meets for six hours for lecture and oral practice. Also offered in a nonintensive section (l credit) for students who can speak but not read or write the language, which meets three hours a week. (Chiang)

## CNSE H003, H004 Second-year Chinese

Language skills in speaking, listening, reading, and writing are further developed through carefully designed practices. Oral
proficiency is enhanced by dramatization of situational topics, and written skills by regular composition writing. Both reading and writing are in Chinese characters only. Three hours a week of classes and two hours of drills. Prerequisite: First-year Chinese or equivalent. (Huang)

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

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

## CNSE B201, B202 Fourth-year

 Chinese: Readings in the Humanities Development of language ability by readings in modern Chinese literature, history and/or philosophy. Speaking and reading skills are equally emphasized through a consideration of the intellectual, historical and social significance of representative works. Prerequisite: Third-year Chinese or permission of instructor. (Chiang)
## Japanese Language

Yoko Koike, Director, (on leave semester I)
Hank Glassman
Yukino Tanaka
Takanobu Tsuji

JNSE H001, H002 First-year Japanese (Intensive)
An introduction to the four basic skills (reading, writing, speaking and listening), with special emphasis on the development of conversational fluency in sociocultural contexts. Six hours per week of lecture and oral practice. This is a year-long course; both semesters are required for credit. (Tsuji, Koike)

## JNSE H003, H004 Second-year

 JapaneseA 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. (Tanaka)

## JNSE H101, H102 Third-year

 JapaneseA 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. (Tanaka)

## JNSE H201, H202 Fourth-year Japanese

Advanced study of written and spoken Japanese utilizing texts and audiovisual materials. Prerequisite: Third-year Japanese or equivalent and consent of the instructor. (Glassman, Koike)

## Economics

Students may complete a major or minor in economics. Within the major, students may complete a concentration in environmental studies.

## Faculty

Janet Ceglowski, Associate Professor Harriet B. Newburger, Associate

Professor (on leave semester II)
Scott Redenius, Assistant Professor (on leave 2005-06)
Michael Rock, Professor and Chair
David R. Ross, Associate Professor
The economics curriculum consists of courses given at Bryn Mawr and Haverford. It is designed to provide an understanding of economic processes and institutions and the interactions among economic, political and social structures. The curriculum assists undergraduates in mastering the methods used by economists to analyze those processes and institutions and it enables students to make reasoned assessments of alternative public policies in a wide range of fields.

Economics 105 (or 101 and 102 at Haverford) introduces the theories and operating characteristics of modern economies that an educated person should understand; it also prepares students for further work in economics and its policy and business applications. Subsequent courses in economics build on the principles and analytical tools learned in Economics 105. Courses in the 130 series apply the theories and
tools learned in Economics 105 to current issues in economic policy and analysis.

Courses at the 200 level serve majors by providing gateways to the major subfields of economics and offer other students a range of topics that complement their studies in other disciplines. Two intermediate theory courses (Economics 300 and 302) examine in depth the workings of the price system in allocating economic resources and the aggregate processes that determine employment, inflation and growth. When combined with the tools of quantitative empirical analysis (Economics 203 and 304), these courses supply a methodological and theoretical foundation for those planning to use economics in their professional careers. Advanced seminars provide a critical appreciation for the process of economic research through careful evaluation of professional journal articles and written work, including the senior research paper.

## Major Requirements

Requirements for the major are 10 semester courses in economics, including Economics 105: Principles of Economics; Economics 203: Statistical Methods in Economics; Economics 300: Intermediate Microeconomics; Economics 302: Intermediate Macroeconomics; plus at least two additional semester courses of 300level work. At least eight of the 10 required courses must be taken above the 100 level and have Economics 105, or Economics 101 or 102 at Haverford, as a prerequisite. At least one 300-level course that requires a substantial research paper must be taken, preferably in the senior year. Economics

304, 306, 313, 314, 320, 322, 324326 and 335 either require or can incorporate such a paper.

Students should carefully consult individual course descriptions for prerequisites, which can differ between Bryn Mawr and Haverford. In most cases, Economics 101 and 102 at Haverford may substitute for Economics 105 at Bryn Mawr; while 105 and an additional elective substitute for 101 and 102 at Haverford. Depending on the topics covered, Economics 100 with a grade of 3.0 or higher may substitute for Economics 101 or 102. Mathematics 101 (or equivalent) is a prerequisite for Economics 300, 302 and 304 at Bryn Mawr; Mathematics 102 (or equivalent) is a prerequisite for Economics 300 and 302 at Haverford.

Prospective majors in economics are advised to take Economics 105 (or 101 and 102 at Haverford) by the end of the first semester of sophomore year. Economics 203, Economics 300 and Economics 302 must be completed by the end of the junior year. Students whose grade in Economics 105 (or Economics 101 and 102 at Haverford) is 2.3 or below are advised not to major in economics. Students planning to spend junior year studying abroad must complete Economics 105 (or 101 and 102) and 203, and at least one other 200-level course, by the end of sophomore year. It is suggested that two or three 200-level courses be taken as background for 300level courses. Members of the department should be consulted about desirable sequences of courses.

Students intending to pursue graduate work in economics are strongly urged to enroll in Economics 304. Those intending to pursue graduate work in economics should also strongly consider a minor or double major in mathematics. Math courses that are particularly appropriate are Math 101 and 102, Calculus with Analytical Geometry; Math 201, Multivariable Calculus; Math 203, Linear Algebra; Math 205, Theory of Probability and Applications; Math 210, Differential Equations with Applications; and Math 301 and 302, Introduction to Real Analysis. Students considering graduate school are strongly urged to consult with members of the department of mathematics no later than the end of the sophomore year.

## Honors

An economics major with a GPA of 3.7 in economics or higher, including economics courses taken in the second semester of the senior year graduate with honors in economics.

## Minor Requirements

Requirements for the minor in economics include Economics 105 (or 101 and 102), 203 and a coherent selection of four or more additional courses approved in advance by the department chair.

## Concentration in Environmental Studies

The Department of Economics participates with other departments in offering a concentration within the major in environmental studies (see page 15I).

## ECON B105 Principles of Economics

An introduction to micro- and macroeconomics: opportunity cost, supply and demand; consumer choice, the firm and output decisions; market structures; efficiency and market failure; the determination of national income, including government spending, money and interest rates; unemployment, inflation and public policy. (staff, Division I)

## ECON B136 Working with Economic Data

Applies selected principles of economics to the quantitative analysis of economic data; uses spreadsheets and other tools to collect and judge the reliability of economic data. Topics may include measures of income inequality and poverty; unemployment, national income and other measures of economic well-being; cost-benefit of public and private investments; construction of price indices and other government statistics; and evaluating economic forecasts. Prerequisite: Economics 105 or 102, or permission of instructor. (Ross, Division I and Quantitative Skills; cross-listed as CITY B136) Not offered in 2005-06.

## ECON B203 Statistical Methods in Economics

An introduction to econometric terminology and reasoning. Topics include descriptive statistics, probability and statistical inference. Particular emphasis is placed on regression analysis and on the use of data to address economic issues. The required computational techniques are developed as part of the course. Prerequisites: Economics 105 , or 101 and 102 , and a 200 -level
elective or permission of instructor. (Redenius, Ross, Quantitative Skills; crosslisted as CITY B206)

## ECON B204 Economics of Local

 Government ProgramsElements of state and local public finance are combined with policy analysis. The course focuses on areas such as education, housing, local taxes and interaction between central city and suburban governments. Each is examined from the standpoint of economic theory, then in terms of actual programs that have been carried out. Relevance of the economic theory is evaluated in light of lessons learned from program implementation. Examples are drawn from the Philadelphia area. Prerequisite: Economics 105 or 101. (staff, Division I) Not offered in 2005-06.

## ECON B206 International Trade

Study of the major theories offered to explain international trade. Includes analyses of the effects of trade barriers (tariffs, quotas, nontariff barriers), trade liberalization and foreign investment by multinational corporations on growth, poverty, inequality and the environment. Prerequisite: Economics 105 or 101 and 102. (Rock, Division I)

## ECON B207 Money and Banking

Analysis of the development and present organization of the financial system of the United States, focusing on the monetary and payment systems, financial markets and financial intermediaries. Prerequisites: Economics 105, or 101 and 102. (Redenius, Division I). Not offered in 2005-06.

## ECON B213 Taming the Modern Corporation

Introduction to the economics of industrial organization and regulation, focusing on policy options for ensuring that corporations enhance economic welfare and the quality of life. Topics include firm behavior in imperfectly competitive markets; theoretical bases of antitrust laws; regulation of product and occupational safety, environmental pollution and truth in advertising. Prerequisite: Economics 101 or 105. (Ross, Division I; cross-listed as CITY B213)

## ECON B214 Public Finance

Analysis of government's role in resource allocation, emphasizing effects of tax and expenditure programs on income distribution and economic efficiency. Topics include sources of inefficiency in markets and possible government responses; federal budget composition; social insurance and antipoverty programs; U.S. tax structure and incidence. Prerequisites: Economics 105 or 101. (Newburger, Division I; cross-listed as CITY B214) Not offered in 2005-06.

## ECON B216 International Macroeconomics and International Finance

Introduction to the theory of and current issues in international macroeconomics and international finance. Examination of the role of international factors in macroeconomic performance; policymaking in an open economy; exchange rate systems and exchange rate behavior; international financial integration; and international
financial crises. Prerequisite: Economics 102 or 105. (Ceglowski, Division I)

## ECON B221 U.S. Economic History

Study of the evolution of the economy of what is today the United States from the period of European settlement through the Great Depression. The course examines the roles played by technology, the environment, government and the nation's evolving economic institutions on the course of its economic development. Prerequisites: Economics 105, or 101 and 102. (Redenius, Division I; cross-listed as CITY B221)

## ECON B225 Economic Development

Examination of the issues related to and the policies designed to promote economic development in the developing economies of Asia, Africa, the Middle East and Latin America. Focus is on why some developing economies grow faster than others and why some growth paths are more equitable, poverty reducing and environmentally sustainable than others. Includes consideration of the impact of international trade and investment policy, macroeconomic policies (exchange rate, monetary and fiscal policy) and sector policies (industry, agriculture, education, population and environment) on development outcomes in a wide range of political and institutional contexts. Prerequisite: Economics 105, or 101 and 102. (Rock, Division I)

## ECON B234 Environmental

## Economics

Introduction to the use of economic analysis to explain the underlying behavioral causes of environmental and natural
resource problems and to evaluate policy responses to them. Topics may include air and water pollution; the economic theory of externalities, public goods and the depletion of resources; cost-benefit analysis; valuing nonmarket benefits and costs; economic justice; and sustainable development. Prerequisites: Economics 105. or 101 and 102. (Ross, Rock Division I; cross-listed as CITY B234)

## ECON B236 The Economics of Globalization

An introduction to international economics through theory, policy issues and problems. The course surveys international trade and finance, as well as topics in international economics. It investigates why and what a nation trades, the consequences of such trade, the role of trade policy, the behavior and effects of exchange rates, and the macroeconomic implications of trade and capital flows. Topics may include the economics of free trade areas, world financial crises, outsourcing, immigration and foreign investment. Prerequisites: Economics 105 (or Economics 101 and 102). The course is not open to students who have taken Economics 206, 216 or 348a.

## ECON B300 Intermediate

## Microeconomics

Systematic development of the analytical framework economists use to explain the behavior of consumers and firms. Determination of price; partial and general equilibria; welfare economics. Application to current economic problems. Prerequisites: Economics 105, or 101 and 102, Mathematics 101 (or equivalent), junior standing, or sophomore standing and one 200 -level
applied microeconomics elective. (Ross, Division I)

## ECON B302 Intermediate Macroeconomics

The goal of this course is to provide a thorough understanding of the behavior of the aggregate economy and the likely effects of government stabilization policies. Models of output, inflation, unemployment and interest rates are developed, along with theories of consumption, investment, economic growth, exchange rates and the trade balance. These models are used to analyze the likely macroeconomic effects of fiscal and monetary policies and to explore current macroeconomic issues and problems. Prerequisites: Economics 105, or 101 and 102, Mathematics 101 or equivalent, and sophomore standing or permission of the instructor. (Ceglowski, Division I)

## ECON B304 Introduction to

## Econometrics

The econometric theory presented in Economics 203 is further developed and its most important empirical applications are considered. Each student does an empirical research project using multiple regression and other statistical techniques. Prerequisites: Economics 203, 300, or both 302 and Mathematics 201. (Ross, Newburger Division I)

## ECON B306 Research Seminar: International Economics

Thesis seminar. Each student does a se-mester-long research project on a relevant topic of interest. Research topics in international trade or trade policy, international finance, international macroeconomics
and international economic integration are appropriate. Prerequisites: Economics 206 and 300 or Economics 216 and 302, or permission of instructor. (Ceglowski, Division I)

## ECON B313 Industrial Organization and Public Policy

Thesis seminar focusing on the ways that property rights, market structure, firm behavior and public policies interact to determine the impact of industries on economic welfare. Prerequisites: Economics 203,300 and 213 or 234 , or permission of instructor. (Ross, Division I)

## ECON B314 Research Seminar: Topics in Social Policy

Thesis course for students with a background in one or more of the applied microeconomic fields concerned with social policy, including public finance, labor, urban economics and state and local economics. Each student does a semester-long research project on a relevant topic of interest. Examples of research topics include differences in resources and expenditures among communities; income distribution; the results of government programs to alleviate poverty; and discrimination. Prerequisites: Economics 203, 300 and at least one course from among 204, 208, 214,215 or 324 , or permission of instructor. (Newburger, Division I; cross-listed as CITY B314)

## ECON B320 Research Seminar on the Financial System

Thesis seminar. Each student does a se-mester-long research project on a relevant topic of interest. Research topics may in-
clude the monetary and payment systems, financial markets and financial intermediaries from a microeconomic perspective. Group meetings will involve presentation and discussion of research in progress. Prerequisites: Economics 207, 300 and permission of instructor. (Redenius, Division I)

## ECON B322 Issues in <br> Macroeconomics: Theory, Policy, History

Several timely issues in macroeconomic theory and policy-making are examined in depth. Possible topics include the implications of chronic deficit spending, the effectiveness of fiscal and monetary policies, growth and productivity. Prerequisites: Economics 203 and 302. (staff, Division I) Not offered in 2005-06.

## ECON B324 Seminar on the

Economics of Poverty and

## Discrimination

Typically includes three modules covering topics in poverty and discrimination, two of which are chosen by the instructor; the third is chosen jointly by the instructor and the students. Examples include housing and labor market discrimination; distributional issues in educational finance; growth of inequality in the United States. Prerequisites: for economics majors, Economics 203 and 300 and at least one course among Economics 204, 208, 214 or 215; for nonmajors, a statistics course and at least one course among 204, 208, 214 or 215 ; or permission of instructor. (Newburger, Division I; cross-listed as CITY B334) Not offered in 2005-06.

ECON B335 East Asian Development
Identifies the core economic and political elements of an East Asian newly industrializing economies (NIEs) development model. Assesses the performance of this development model in Northeast (Korea and Taiwan) and Southeast Asia (Indonesia, Malaysia and Thailand) in a comparative perspective. Considers the debate over the impact of interventionist and selective development policies associated with this model on the development successes and failures of the East Asian NIEs. Prerequisites: Economics 300 or 302, or permission of instructor. (Rock, Division I; cross-listed as EAST B335)

## ECON B403 Supervised Work

An economics major may elect to do individual research. A semester-long research paper is required; it satisfies the 300 -level research paper requirement. Students who register for 403 must submit an application form before the beginning of the semester (the form is available from the department chair). The permission of both the supervising faculty member and department chair is required.

The Haverford Department of Economics is expected to offer the following courses during the 2005-06 academic year:

ECON H100 Economics of Public Policy
ECON H101 Introduction to Microeconomics
ECON H102 Introduction to Macroeconomics
ECON H203 Statistical Methods in Economics
ECON H205 Corporate Finance

ECON H209 Law and Economics
ECON H211 The Soviet System and Its Demise
ECON H240 Economic Development and Transition: China vs. India
ECON H247 Financial Accounting ECON H300 Intermediate Microeconomic Analysis
ECON H302 Intermediate macroeconomic Analysis
ECON H304 Introduction to Econometrics
ECON H348 Global Economy: Theory and Policy

## Education

Students may complete a sequence of courses leading to Pennsylvania state certification to teach at the secondary level, complete requirements for certification in a fifth-year program or complete a minor in educational studies.

## Faculty

Ann Brown, Program Administrator, Haverford Adviser and Concentration Coordinator
Jody Cohen, Lecturer
Alison Cook-Sather, Associate Professor and Director
Barbara Hall, Lecturer
Alice Lesnick, Senior Lecturer
Kristine Lewis, Lecturer
Robyn Newkumet, Field Placement
Coordinator and Bryn Mawr Adviser
The Bryn Mawr/Haverford Education Program is built around three mutually informing pursuits: the interdisciplinary study of learning as a central human and cultural activity; the investigation of the politics of schooling as a powerful source of personal and societal development; and the preparation of lifelong teachers, learners and researchers. Students who complete one of the Education Program options are prepared to become leaders and change agents in whatever professional and human activities they pursue.
The Bryn Mawr/Haverford Education Program offers the following options to students interested in education: students may (1) take courses that are open to all interested students, (2) pursue a minor
in educational studies, (3) complete a sequence of courses leading to certification to teach at the secondary (grades 7-12) level in Pennsylvania as part of the fouryear undergraduate program, or (4) complete certification requirements begun as undergraduates in a fifth year at reduced tuition.

The certification sequence and the minor are described below. Students seeking certification or wishing to complete a minor should meet with the field placement coordinator and adviser as early as possible for advice on scheduling, preferably by the sophomore year. Once enrolled in either program, students must meet with the appropriate adviser at preregistration time each semester.

## Requirements for Certification

The Bryn Mawr/Haverford education program is accredited by the state of Pennsylvania to prepare candidates for secondary certification (grades 7-12) in 14 fields: biology, chemistry, Chinese, citizenship education, English, French, German, Latin, mathematics, physics, Russian, social science, social studies and Spanish. Pursuit of certification in Chinese, German, Latin and Russian is subject to availability of student-teaching placements.
Students becoming certified in a foreign language have K-12 certification. Certain interdisciplinary majors and double majors (e.g., romance languages, comparative literature, East Asian studies) may also be eligible for certification provided they meet the Pennsylvania standards in one of the subject areas listed above.

To qualify for a teaching certificate, students must complete an academic major (listed above), college distribution requirements and the courses listed below:

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

Furthermore, in order to comply with the Pennsylvania certification regulations, there are courses within the academic major that are required for those becoming certified. Again, students should consult with the program administrator regarding course selection and sequencing.

Students preparing for certification must take two courses in English and two courses in math prior to being admitted to the certification program and must attain a grade point average of 3.0 or higher. They must attain a GPA of 2.7 or higher in Education 200 (Critical Issues in Education) and Education 301 (Curriculum and Pedagogy Seminar) in order to practice teach. They must have received a positive evaluation from their cooperating teacher
in Critical Issues in Education and be recommended by the director of the education program and the chair of their major department. (Students should check with the field placement coordinator and Bryn Mawr adviser regarding admission to the certification program as requirements change periodically.)

Critical Issues in Education should be taken by the end of the sophomore year if at all possible. The Curriculum and Pedagogy Seminar 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.

## Requirements for the Minor in Educational Studies

The Bi-College minor in educational studies is designed for students with educationrelated interests, such as plans for graduate study in education, pursuit of elementary certification after graduation or careers that require educational expertise. A variety of management and training positions. positions in research, administration and policy, as well as professions in social work, health and law, involve using skills as an educator and knowledge about education. Because students interested in these or other education-related professions major in different subject areas and have different aspirations, they are encouraged
to design a minor appropriate both to their major area of study and to their anticipated futures.

All minors in educational studies must consult with the field placement coordinator and Bryn Mawr adviser to design a coherent course of study that satisfies the requirements below:

- Education 200 Critical Issues in Education (Bryn Mawr and Haverford).
- Required education course (Education 210, 225, 240, 250, 260, 266 - see course descriptions below).
- Two education-related electives (see program administrator for options)
- Education 310a Defining Educational Practice (Haverford).
- Education 311b Field Work Seminar (Haverford).


## 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 Field Work Seminar (minor) or the Practice Teaching Seminar (certification). The portfolio consists of a series of artifacts, each accompanied by a one-page analysis of the significance of the piece of work.

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 adviser, Bryn Mawr/ Haverford Education Program, by e-mail at abrown@haverford.edu or phone at (610) 896-1491.

## EDUC B200 Critical Issues in

## Education

An examination of major issues concerning educational reform through readings, discussions, writing and visits to a school context. Among the issues to be explored are the complexity of U.S. education's history and politics; the meaning of childhood, culture, freedom and difference; learning theories and pedagogical approaches; and the possibilities for educational reinvention and empowerment. Two hours a week of field work are required. Enrollment is limited to 25 students per section with priority given first to those pursuing certification or a minor in educational studies and then to seniors planning to teach. All sections of the course are writing intensive. (Cohen, Cook-Sather, Hall, Lewis, Lesnick, Division I)

## EDUC B210 On the Margins:

## Language, Power and Advocacy in Education

The course explores the schooling experiences, strengths and needs of student populations frequently marginalized by their differences from the mainstream. We use a cultural perspective as well as contacts
with educators, parents and students to address issues such as labeling, how (different) children learn and teachers teach, and how policies intersect with practice. Students conduct field research in school placements. Enrollment is limited to 25 with priority given to students pursuing certification or the minor in educational studies. (Cohen, Division I) Not offered in 2005-06.

## EDUC B219 Writing in Theory/

 Writing in Practice(Hemmeter, Division III; cross-listed as ENGL B220)

## EDUC B220 Changing Pedagogies in Math and Science Education

This praxis course will examine new pedagogies being used in math and science education and the issues that arise in successfully implementing these new pedagogies. Students will have a placement (4-6 hours/ week) with a local teacher who is undertaking some type of pedagogical change in math or science education. The course is being offered jointly by Bryn Mawr College and Arcadia University: several of the weekly sessions will take place at Arcadia. (Donnay, Pomeroy, Division II)

## EDUC B225 Empowering Learners: <br> Theory and Practice of ExtraClassroom

This course is designed for students who occupy learning support roles. Students study and contribute to theory building in the field of extra-classroom, informal education, joining the professional conversation concerning the nuanced types and purposes of such educational endeavors.

Ongoing Praxis field placements serve as sources of experiential learning, crosssetting inquiry and challenge as students develop as reflective, effective practitioners. Enrollment is limited to 20 with priority given to those already serving or engaged to serve as tutors (in contexts such as America Counts/America Reads and Haverford's MAST Program) and those pursuing certification or a minor in educational studies. (Lesnick)

## EDUC 240 Qualitative Research:

## Theories, Texts and Practices

An examination of the theory and practice of qualitative research, including the epistemological and ethical questions it addresses and occasions. While qualitative methodologies and traditions vary, they converge on the goal of understanding and representing the meanings that people give their experiences within the contexts of their lives. The purpose of this Praxis I course is to prepare students - through a field placement (three hours per week) and the study of linked topics in human development as it intersects with schooling - to read qualitative research critically and to begin to conduct and write such research themselves. (Cohen, Lesnick)

## EDUC H250B Literacies and Education

A critical exploration of what counts as literacy, who decides, and what the implications are for teaching and learning. Students explore theoretical and historical perspectives on literacy, individual experiences and constructions of literacy, literacy in different communities, and literacies that work within and against the structures
of schooling. Enrollment is limited to 25 with priority given to students pursuing certification or the minor in Educational Studies. This is a Praxis I course. (Cohen, Cook-Sather, Lesnick, Division I)

## EDUC B251 Arts Teaching in

 Educational and Community Settings (Cantor, Division III; cross-listed as ARTA B251, ARTD B256 and ARTT B256)
## EDUC H260B Multicultural

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

## EDUC B266 Schools in American Cities

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 pursuing certification or the minor in educational studies and to majors in sociology and growth and structure of cities. This is a Praxis I course. (Cohen,

Division I; cross-listed as CITY B266 and SOCL B266)

## EDUC B301 Curriculum and Pedagogy Seminar

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. (Cook-Sather, Lesnick, Division I)

## EDUC B302 Practice Teaching

Seminar
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. (Cook-Sather, Lesnick, Division I)

## EDUC B303 Practice Teaching in

## Secondary Schools

Supervised teaching in secondary schools ( 12 weeks). Two units of credit are given for this course. Open only to students preparing for state certification. (Cook-Sather, Lesnick)

## EDUC B310 Defining Educational

 PracticeAn interdisciplinary inquiry into the work of constructing professional identities and roles in education-related contexts. Three to five hours a week of field work are required. Enrollment is limited to 20
with priority given to students pursuing the minor in Educational studies. (Hall, Lesnick, Division I)

## EDUC B311 Fieldwork Seminar

Drawing on the diverse contexts in which participants complete their fieldwork - from Special Education to English as a Second Language classrooms to research organizations and social service agencies, kindergarten to high school - this seminar invites exploration and analysis of ideas, perspectives and different ways of understanding what each person experiences and observes at her/his site. Five to eight hours a week of fieldwork are required. Enrollment is limited to 20 . Open only to students completing the minor in educational studies. (Hall, Lesnick, Division I)

## EDUC B403 Supervised Work

## English

Students may complete a major or minor in English. Within the major, students may complete a concentration in creative writing or environmental studies.

## Faculty

Linda-Susan Beard, Associate Professor
Peter M. Briggs, Professor
Anne F. Dalke, Senior Lecturer
Aileen Forbes, Lecturer
E. Jane Hedley, Professor and Interim Chair
Gail Hemmeter, Senior Lecturer
Jennifer Horne, Visiting Assistant Professor

Jonathan Kahana, Assistant Professor (on leave 2005-06)
Meta Mazaj, Lecturer
Ray Ricketts, Instructor
Katherine A. Rowe, Professor and Chair (on leave 2005-06)
Bethany Schneider, Assistant Professor (on leave 2005-06)
Kate Thomas, Assistant Professor (on leave 2005-06)
Karen M. Tidmarsh, Associate Professor
Michael Tratner, Professor (on leave semester I)

The Department of English offers students the opportunity to develop a sense of initiative and responsibility for the enterprise of interpretation. Through its course offerings, individual mentoring and intense conversations in and out of class, the department provides rigorous intellectual training in the history, methods and theory of the discipline.

With their advisers, English majors design a program of study that expands their knowledge of diverse genres, literary traditions and periods. We encourage students to explore the history of cultural production and critical reception and also to interrogate the presuppositions of literary study. A rich variety of courses allows students to engage with all periods and genres of literatures in English, including modern forms such as film and contemporary digital media.

The department stresses critical thinking, incisive written and oral analysis of texts, and the integration of imaginative, critical and theoretical approaches. The major culminates in an independently written essay, in which each student synthesizes her creative and critical learning experience.

## Major Requirements

The English major requires at least 11 course selections, including three required courses: English 250, 398 and 399. Students generally begin by taking 200 -level courses and then, in their sophomore or junior year, enroll in English 250 (Methods of Literary Study). Starting in their sophomore year, students will select from a range of courses that will total at least eight elective English courses, including two at the 300 level (courses other than English 398 and 399). One of the 200-level courses may be a unit of creative writing. In their senior year, students enroll in English 398 (Senior Conference) in the fall and English 399 (Senior Essay) in the spring.

As students construct their English major, they should seek to include:

- Historical depth/construction of traditions.
- Breadth, to include more than one genre, more than one cultural tradition.
- Courses that build on one another.
- Exposure to several approaches, theories or models of interpretation.


## Minor Requirements

Requirements for an English minor are English 250 and five second-year or advanced units in English literature. At least one unit must be at an advanced (300) level.

## Concentration in Creative Writing

Students may elect a concentration in creative writing. This option requires that, among the eight course selections besides English 250, 398 and 399, three units will be in creative writing; one of the creative writing units will be at the 300 level and may count as one of the two required 300level courses for the major.

## Concentration in Environmental Studies

The Department of English participates with other departments in offering a concentration within the major in environmental studies (see page 151).

## ENGL B125 Writing Workshop

This course offers students who have already taken College Seminar 001 an opportunity to develop their skills as college writers. Through frequent practice, class discussion and in-class collaborative activity, students will become familiar with all aspects of the writing process and will develop their ability to write for an academic audience. The class will address a number of writing issues: formulating questions; analyzing purpose; generating ideas; structuring and supporting arguments; marshalling evidence; using sources effectively; and developing a clear, flexible academic voice. Students will meet regularly with the course instructor, individually and in small groups, to discuss their work. (Hemmeter, staff)

## ENGL B126 Writing Workshop for Non-Native Speakers of English

This course offers non-native speakers of English a chance to develop their skills as college writers. Through frequent practice, class discussion and in-class collaborative activity, students will become familiar with the writing process and will learn to write for an academic audience. Student writers in the class will be guided through the steps of composing and revising college essays: formulating questions; analyzing purpose; generating ideas; structuring and supporting arguments; marshalling evidence; using sources effectively; and developing a clear, flexible academic voice. Writers will receive frequent feedback from peers and the instructor. (staff)

## ENGL B204 Literatures of American

Expansion
This course will explore the relationship between U.S. narratives that understand national expansion as "manifest destiny" and narratives that understand the same phenomenon as imperial conquest. We will ask why the ingredients of such fictions - dangerous savages, empty landscapes, easy money and lawless violence - often combine to make the master narrative of "America," and we will explore how and where that master narrative breaks down. Critical readings will engage discourses of nation, empire, violence, race and sexuality. Texts will include novels, travel narratives, autobiographies, legal documents and cultural ephemera. (Schneider, Division III) Not offered in 2005-06.

## ENGL B205 Introduction to Film

This course is intended to provide students with the tools of critical film analysis. Through readings of images and sounds, sections of films and entire narratives, students will cultivate the habits of critical viewing and establish a foundation for focused work in film studies. The course introduces formal and technical units of cinematic meaning and categories of genre and history that add up to the experiences and meanings we call cinema. Although much of the course material will focus on the Hollywood style of film, examples will be drawn from the history of cinema. Attendance at weekly screenings is mandatory. (Horne, Division III; cross-listed as HART B205)

## ENGL B207 Big Books of American

## Literature

This course focuses on the "big books" of mid-19th-century American literature, viewed through the lenses of contemporary theory and culture. Throughout the course, as we explore the role that classics play in the construction of our culture, we will consider American literature as an institutional apparatus, under debate and by no means settled. This will involve a certain amount of antidisciplinary work: interrogating books as naturalized objects, asking how they reproduce conventional categories and how we might re-imagine the cultural work they perform. We will look at the problems of exceptionalism as we examine traditional texts relationally, comparatively and interactively. (Dalke, Division III) Not offered in 2005-06.

## ENGL B210 Renaissance Literature: Performances of Gender

Readings chosen to highlight the construction and performance of gender identity during the period from 1550 to 1650 and the ways in which the gender anxieties of 16 th- and 17 th-century men and women differ from, yet speak to, our own. Texts will include plays, poems, prose fiction, diaries and polemical writing of the period. (Hedley, Division III) Not offered in 2005-06.

## ENGL B211 Renaissance Lyric

Both the continuity of the lyric tradition that begins with Wyatt and the distinctiveness of each poet's work are established. Consideration is given to the social and literary contexts in which lyric poetry was
written. Poets include Donne, Herbert, Jonson, Shakespeare, Sidney, Spenser and Wyatt. (Hedley, Division III)

## ENGL B212 Thinking Sex:

## Representing Desire and Difference

In this class we will examine our ability to put sexual experience into language. As we look at the various ways in which sexuality can be expressed linguistically, we will ask whether (and if so, why) it is "necessary" to "put sex into" language and explore what various scientific, social-scientific and literary discourses of desire look and sound like. What are the capacities and limitations of each? What other languages might be used? Can we imagine a curriculum to do this work? Can we teach such a curriculum? Praxis I course. (Dalke, Division III) Not offered in 2005-06.

## ENGL B214 Here and Queer: Placing Sexuality

The power of the marching-cry "We're here. We're queer. Get used to it." emanates from the ambiguity of the adverb "here." Where is "here?" In the face of exclusion from civic domains, does queerness form its own geography or nationality? This course will ask what it means to imagine a queer nation, and will work towards theorizing relations between modern constructions of sexuality, nationality and ethnicity. We will pay particular attention to the ways in which assertion of queer presence can cut both ways: both countering discourses of displacement and functioning as vehicles for colonial or racial chauvinism. (Thomas, Division III) Not offered in 2005-06.

## ENGL B220 Writing in Theory/ Writing in Practice

This course is designed for students interested in tutoring college or highschool writers or teaching writing at the secondary-school level. Readings in current composition studies will pair texts that reflect writing theory with those that address practical strategies for working with academic writers. To put pedagogic theory into practice, the course will offer a praxis dimension. Students will spend a few hours a week working in local public school classrooms or writing centers. Inclass collaborative work on writing assignments will allow students to develop writing skills and share their insights into the writing process with others. (Hemmeter, Division III; cross-listed as EDUC B219)

## ENGL B223 The Story of Evolution and the Evolution of Stories

In this course we will experiment with two interrelated and reciprocal inquiries - whether the biological concept of evolution is a useful one in understanding the phenomena of literature (in particular, the generation of new stories), and whether literature contributes to a deeper understanding of evolution. We will begin with several science texts that explain and explore evolution and turn to stories that (may) have grown out of one another, asking where they come from, why new ones emerge, and why some disappear. We will consider the parallels between diversity of stories and diversity of living organisms. Lecture three hours a week. (Dalke, Grobstein, Division II or III; cross-listed as BIOL B223) Not offered in 2005-06.

## ENGL B225, B226 Shakespeare

This two-semester sequence creates a space for the student who wishes to experience Shakespeare's theatrical works in breadth and depth. However, each course will have its own integrity (i.e., different foci; different syllabus) and B225 is not a prerequisite for B226. B225 will explore the "erotics" of Shakespearean drama (among other matters); B226 will focus on "the redemption of time." (staff, Division III) Not offered in 2005-06.

## ENGL B229 Movies and Mass Politics

This course will trace in the history of movie forms a series of debates about the ways that nations can become mass societies, focusing mostly on the ways that Hollywood movies countered the appeals of Communism and Fascism. (Tratner, Division III; cross-listed as COML B229) Not offered in 2005-06.

## ENGL B231 Modernism in AngloAmerican Poetry

The purpose of this course will be to familiarize students with the broad outlines of that movement in all the arts known as Modernism, and in particular to familiarize them with Modernism as it was evolved in Anglo-American poetry - both from its American sources (Marianne Moore, Wallace Stevens, William Carlos Williams) and from its European sources (T.S. Eliot, Ezra Pound, Gertrude Stein). The course is intended to prepare students for English 232, American Poetry Since World War II; together, these courses are intended to provide an overview of American poetry in the 20th century. (Kirchwey, Division III)

## ENGL B232 Voices In and Out of School: American Poetry Since World War II

This course will survey the main developments in American poetry since 1945, both as made manifest in "movements" (whether or not self-consciously identified as such) and in highly original and distinctive poetic voices. The course will consider the work of the Beats, Black Mountain poets, Confessional poets, New York School, political-engagement poets, post-New Criticism poets, Poundians, Surrealists, Whitmanians, Zen and the environment poets, and other individual and unaffiliated voices. (Kirchwey, Division III) Not offered in 2005-06.

## ENGL B234 Postcolonial Literature in English

This course will survey a broad range of novels and poems written while countries were breaking free of British Colonial rule. Readings will also include cultural theorists interested in defining literary issues that arise from the postcolonial situation. (Tratner, Division III; cross-listed as COML B234) Not offered in 2005-06.

## ENGL B238 Silent Film: International

Film to 1930
This course surveys the history of cinema as commercial product and specific cultural form, from the years surrounding the technological advent of moving images to just before the commercial addition of synchronous sound. An overview of the rise of national cinemas in the silent era, we will discuss the aesthetic movements and traditions of the period as they pertain to changes in social and cultural contexts
of cinema. This course will incorporate accounts of cinema presented in audience ethnographies, the documentary history of the cinema and film publicity. Past topics included: DeMille, Griffith, Micheaux and the Birth of Film Art. (Horne, Division III; cross-listed as HART B238)

## ENGL B239 Women and Cinema

This course explores the wide range of roles played by women throughout the 100year history of filmmaking. If the representation of women on the silver screen has tended to be narrow and damaging, these images are only part of the larger picture of women's involvement in cinema. The course examines the spectrum of generic images of women in feature films. It also locates where else women have been represented in the industry and examines the impact women have had on film culture as writers, editors, directors, publicity agents, technical artists and as film exhibitors and critics. (Horne, Division III; cross-listed as HART B239) Not offered in 2005-06.

## ENGL B240 Readings in English Literature 1660-1744

The rise of new literary genres and the contemporary efforts to find new definitions of heroism and wit, good taste and good manners, sin and salvation, individual identity and social responsibility, and the pressure exerted by changing social, intellectual and political contexts of literature. Readings from Defoe, Dryden, early feminist writers, Pope, Restoration dramatists and Swift. (Briggs, Division III) Not offered in 2005-06.

ENGL B242 Historical Introduction to English Poetry I
This course traces the development of English poetry from 1360 to 1700 , emphasizing forms, themes and conventions that have become part of the continuing vocabulary of poetry, and exploring the strengths and limitations of different strategies of interpretation. Featured poets: Chaucer, Donne, Jonson, Milton and Shakespeare. (Briggs, Division III)

## ENGL B243 Historical Introduction to

 English Poetry IIThe development of English poetry from 1700 to the present. This course is a continuation of English 242 but can be taken independently. Featured poets: Browning, Seamus Heaney, Christina Rossetti, Derek Walcott and Wordsworth. (Briggs, Division III)

## ENGL B246 Scribbling Sisters: PanAfrican Women Writers

An intensive study of seven works by six artists representing constructed experiences in the Caribbean, Africa and the United States. We will focus primarily on intertextual conversations between and among these works, the use of memory as subject as well as intellectual idea, differences between and among works created in different centuries and cultural settings, and the reshaping of genre(s) on the part of these artists. Featured works: The Salt Eaters (Toni Cade Bambara), Parable of the Talents and Parable of the Sower (Butler), Maru (Bessie Head), Contending Forces (Hopkins), The Chosen Place, The Timeless People (Marshall) and Paradise (Morrison). (Beard. Division III) Not offered in 2005-06.

ENGL B249 Beauty: A Conversation Between Chemistry and Culture
This course will explore the topic of "beauty," ranging from the molecular to the political levels, with considerable time spent on aesthetics. The conversation will occur in four stages - Exploring Form: What Is Beautiful; Apprehending the Physical World: The Structures of Nature; Appreciating Beautiful Objects: What Moves Us, How and Why; and The Shaping Work of Politics or The Ethical Turn: On Beauty and Being Just. The class will draw heavily on the work of John Dewey (whose Art as Experience will be a guiding text). There will be aesthetic objects on-and-about which we will conduct our analysis of beauty. (Dalke, Division III) Not offered in 2005-06.

## ENGL B250 Methods of Literary Study

Through course readings, we will explore the power of language in a variety of linguistic, historical, disciplinary, social and cultural contexts and investigate shifts in meaning as we move from one discursive context to another. Students will be presented with a wide range of texts that explore the power of the written word and provide a foundational basis for the critical and creative analysis of literary studies. Students will also refine their faculties of reading closely, writing incisively and passionately, asking speculative and productive questions, producing their own compelling interpretations and listening carefully to the textual readings offered by others. (staff, Division III)

## ENGL B251 Eating Culture: Britain and Food 1789-1929

This class will explore British culinary culture across the long 19th century, paying particular attention to the relationship of food to the 19th-century colonial and imperial discourse. We will also work towards theorizing the materiality of food. Units may include: sugar and slavery; industrialization and chocolate: corn laws, potato famine and rebellion; vegetarianism and socialism; cannibalism and vampirism. (Thomas, Division III) Not offered in 2005-06.

## ENGL B254 Subjects and Citizens in

 American Literature, 1750-1900This course traces the changing representation of the citizen in U.S. literatures and cultural ephemera of the 18th and 19th centuries. We will explore the ideal of American civic masculinity as it developed alongside discourses about freedom and public virtue. The course will focus on the challenges to the ideals of citizenship produced by conflicts over slavery, women's suffrage, homosexuality and Native-white relations. In addition to critical articles, legal and political documents, and archival ephemera, texts may include works by Henry Adams, Margaret Fuller, Thomas Jefferson, Herman Melville, Catharine Maria Sedgwick, Harriet Beecher Stowe and Harriet Wilson. (Schneider, Division III) Not offered in 2005-06.

ENGL B255 Counter-Cinema: Radical, Revolutionary and Underground Film
This course explores a global variety of practices and theories of film, linked by their attitude of opposition to mainstream
or dominant institutions - political, social and cinematic. Film studies are drawn from: Soviet cinema; left documentary; anti- and postcolonial cinemas of Africa, Latin America and Asia; experimental and queer cinema of the 1960s and after; Black American cinema; and feminist film and video. Readings include works by filmmakers central to these movements as well as by critics and historians who illuminate the political and formal stakes of each particular mode of opposition. Attendance at weekly screenings is mandatory. (Kahana, Division III; cross-listed as HART B259) Not offered in 2005-06.

## ENGL B262 Survey in African

 American Literature: Laughin' to Keep from Cryin'A study of African American representations of the comedic in literary and cinematic texts, in the mastery of an inherited deconstructive muse from Africa, and in lyrics that journey from African insult poetry to Caribbean calypso to contemporary rap. We will examine multiple theories about the shape and use of comedy, and decide what amendments and emendments to make to these based on the central texts of our analysis. (Beard, Division III) Not offered in 2005-06.

## ENGL B263 Toni Morrison and the

 Art of Narrative ConjureAll of Morrison's primary imaginative texts, in publication order, as well as essays by Morrison, with a series of critical lenses that explore several vantages for reading a conjured narration. (Beard, Division III)

## ENGL B273 From Chivalry to Civility

 This course will examine images and concepts of masculinity as represented in a wide variety of texts in English. Beginning in the early modern period and ending with our own time, the course will focus on texts of the "long" 18 th century to contextualize the relationships between masculinity and chivalry, civility, manliness and femininity. (Ricketts, Division III)
## ENGL B274 Romantic Love

This course aims to critique the sentimentalism and idealism associated with "romantic love" by centering on a core body of Romantic literature that includes Shelley and Byron, looking back to earlier romance models - as in Tristan and Isolde and Adam and Eve - and looking forward to modern romance, as in Nabokov's Lolita. (Forbes, Division III)

ENGL B277 Nabokov in Translation
(Harte, Division III; cross-listed as RUSS B277) Not offered in 2005-06.

## ENGL B279 Introduction to African Literature

Taking into account the oral. written, aural and visual forms of African "texts" over several thousand years, this course will explore literary production, translation and audience/critical reception. Representative works to be studied include oral traditions, the Sundiata Epic, Chinua Achebe's Anthills of the Savannah, Ayi Kwei Armah's Fragments, Mariama Bâ's Si Longe une Lettre. Tsitsi Danga-rembga's Nervous Conditions, Bessie Head's Maru, Sembène Ousmane's Xala, plays by Wole Soyinka and his Burden of History, The Muse of

Forgiveness and Ngugi wa Thiong'o's A Grain of Wheat. We will address the "transliteration" of Christian and Muslim languages and theologies in these works. (Beard, Division III; cross-listed as COML B279)

## ENGL B285 Contemporary International Films

This course will focus on world cinema or non-Hollywood cinemas, which means films that are made geographically far from Hollywood and films which have adopted different aesthetic models from those used in Hollywood. Such films have formed, as we will see, a major part of the national history and culture in countries around the world: (Mazaj, Division III; cross-listed as COML B285)

## ENGL B287 Media Culture and

## Movies

What happens when the media see themselves in the mirror? This question is the premise of this course, a study of how films have become Media Movies, a strange but powerful body of films that make us think of the media culture. This self-critique, it turns out, is a healthy preoccupation of quite a few films, which embody the philosophical crises in our media culture, and which reflect thoughtfully on the nature of our lives, the structure of our values and the spirit of our culture. (Mazaj, Division III)

## ENGL B291 Documentary Film and Media

This course will explore the history and theory of the documentary mode in cinema and other audiovisual media. Readings and weekly screenings will survey the inter-
national history and development of the documentary genre, from the actualities and newsreels of the early years of cinema to the reality TV and amateur video of the present. This range of materials will help us pose critical questions about the aesthetics, politics and ethics of documentary in all its guises: as knowledge; as artifact, souvenir or memory; as propaganda or social activism; and as entertainment. (Kahana, Division III; cross-listed as HART B291) Not offered in 2005-06.

## ENGL B299 History of Narrative

 Cinema(King, Division III; cross-listed as HART B299) Not offered in 2005-06.

All courses at the 300 -level are limited in enrollment and require permission of the instructor to register.

## ENGL B306 Film Theory

This course is an introduction to major developments in film theory and criticism. Topics covered include: the specificity of film form; cinematic realism; the cinematic "author"; the politics and ideology of cinema; the relation between cinema and language; spectatorship, identification and subjectivity; archival and historical problems in film studies; the relation between film studies and other disciplines of aesthetic and social criticism. Each week of the syllabus pairs critical writing(s) on a central principle of film analysis with a cinematic example. Class will be divided between discussion of critical texts and attempts to apply them to a primary cinematic text. (staff, Division III; cross-listed as COML B306 and HART B306)

## ENGL B309 Native American

## Literature

This course focuses on late-20th-century Native literatures that attempt to remember and redress earlier histories of dispersal and genocide. We will ask how various writers with different tribal affiliations engage in discourses of humor, memory, repetition and cultural performance to refuse, rework or lampoon inherited constructions of the "Indian" and "Indian" history and culture. We will read fiction. film and contemporary critical approaches to Native literatures alongside much earlier texts, including oral histories, political speeches, law and autobiography. Readings may include works by Sherman Alexie, Diane Glancy, Thomas King, N. Scott Momaday, Leslie Marmon Silko and Gerald Vizenor. (Schneider, Division III) Not offered in 2005-06.

## ENGL B310 Victorian Media

This course proposes that the Victorian era was an information age - an age in which the recording, transmission and circulation of language was revolutionized. The railroad, the postal system, the telegraph, the typewriter and the telephone were all 19thcentury inventions. These communication technologies appeared to bring about "the annihilation of time and space" and we will examine how they simultaneously located and dislocated the 19th-century British citizen. We will account for the fears, desires and politics of the 19th-century "mediated" citizen and analyze the networks of affiliation that became "intermediated": family, nation, community, erotics and empire. (Thomas, Division III) Not offered in 2005-06.

## ENGL B316 Spenserian Allegory

This course will focus on Edmund Spenser's allegorical epic, The Faerie Queene, which will be read in its entirety to gain access to the rich resources of the allegorical mode as it was understood and practiced in the Middle Ages and the Renaissance: resources for staging self-confrontation, constructing and reconstructing the experience of falling in love, and probing the mysteries of life and death, good and evil. The course will also explore the allegorical mode in the 19th and 20th centuries, as it appears in works such as Ralph Ellison's Invisible Man and Nathaniel Hawthorne's The Scarlet Letter. (Hedley. Division III)

ENGL B317 Exhibition and Inhibition: Movies, Pleasure and Social Control
This course is a wide-ranging exploration of what it means to go to the movies. In it, we investigate the changing nature of the cinema in society - including all cinematic modes of display and exhibition, spanning pre-cinematic visual technologies to more recent film and video practices. Topics covered include audience segregation, film censorship and the reform movement, the Hollywood production code, movie theatre architecture, fan cultures of various kinds, journalistic and narrative accounts of moviegoing, and the shift from analog to digital images. Readings from film and cultural theory on mass spectacle, the observer, the spectator and the mass audience will shape our discussion and guide our individual research. (Horne, Division III; cross-listed as HART B317)

## ENGL B321 Early Stages: Strange <br> Passions in Medieval and Renaissance Drama

A thematic survey of English medieval and Renaissance drama, from the early comic allegory, Mankynde, through Shakespeare's tragedies and romances, to bloody Jacobean revenge tragedies. The course will have three goals: to study a central critical problem in the context of this early drama, drawing on current criticism; to introduce students to advanced research techniques; to take students through the process of writing a long, analytic essay. Prerequisite: at least one course in medieval or Renaissance drama, theater or history. (Rowe, Division III) Not offered in 2005-06.

## ENGL B322 Love and Money

This course focuses on literary works that explore the relationship between love and money. We will seek to understand the separate and intertwined histories of these two arenas of human behavior and will read, along with literary texts, essays by influential figures in the history of economics and sexuality. The course will begin with The Merchant of Venice, proceed through Pride and Prejudice to The Great Gatsby, and end with Hollywood movies. (Tratner, Division III) Not offered in 2005-06.

## ENGL B327 Feminist Film Theory and Practice

(King, Division III; cross-listed as HART B327) Not offered in 2005-06.

## ENGL B330 Writing Indians: <br> Sidekicking the American Canon

How have written Indians - the Tontos,
Fridays, Pocahontases and Queequegs
of the American canon - been adopted, mimicked, performed and undermined by Native American authors? This course will examine how canonical and countercanonical texts invent and reinvent the place of the Indian across the continuing literary "discovery" of America from 1620 to the present. Readings include The Last of the Mohicans, The Lone Ranger and Tonto Fistfight in Heaven, Moby Dick and Robinson Crusoe. Critical texts, research presentations, written assignments and intensive seminar discussion will address questions of cultural sovereignty, mimesis, literacy versus orality, literary hybridity, intertextuality and citation. (Schneider, Division III) Not offered in 2005-06.

## ENGL B348 Cinema and Popular Memory

This course is a broad and eclectic introduction to the relationship between cinema, history and popular memory. It explores a diverse range of films which claim to show that film can express and also shape popular memory, and pays special attention to the manner in which films write and rewrite history by articulating and shaping such memory. The course will be based on a premise that cinema shapes or negotiates the vision of who we are as individuals, groups and larger collectivities. (Mazaj, Division III; cross-listed as COML B348)

ENGL B349 Theories of Authorship in the Cinema
(King, Division III; cross-listed as HART B349) Not offered in 2005-06.

## ENGL B356 Topics in Victorian

 LiteratureENGL B362 African American
Literature: Hypercanonical Codes
Intensive study of six 18th-21st century hypercanonical African American written and visual texts (and critical responses) with specific attention to the tradition's long use of speaking in code and in multiple registers simultaneously. Focus on language as a tool of opacity as well as transparency, translation, transliteration, invention and resistance. Previous reading required. (Beard. Division III)

ENGL B369 Women Poets: Gwendolyn Brooks, Adrienne Rich, Sylvia Plath In this seminar we will be playing three poets off against each other, all of whom came of age during the 1950s. We will plot each poet's career in relation to the public and personal crises that shaped it, giving particular attention to how each poet constructed "poethood" for herself. (Hedley, Division III) Not offered in 2005-06.

ENGL B370 Psychoanalytic Theory
This course examines psychoanalysis as a critical strategy. We will read Freud to engage key psychoanalytic paradigms, including the "Oedipal complex," paranoia, mourning, the "uncanny," fetishism and trauma. We will also consider post-Freudian theory in Irigaray, Kristeva and Lacan, as well as in contemporary debates regarding identification and ethics. (Forbes, Division III; cross-listed as COML B370)

## ENGL B379 The African Griot(te)

A focused exploration of the multi-genre productions of Southern African writer Bessie Head and the critical responses to such works. Students are asked to help construct a critical-theoretical framework for talking about a writer who defies categorization or reduction. (Beard, Division III) Not offered in 2005-06.

## ENGL B385 Problems in Satire

An exploration of the methodological and theoretical underpinnings of great satire in works by Blake, Dryden, Pope, Rabelais, Smiley, Swift, Wilde and others. (Briggs, Division III) Not offered in 2005-06.

## ENGL B398 Senior Seminar

Required preparation for English 399
(Senior Essay). Through weekly seminar meetings and regular writing and research assignments, students will explore a senior essay topic or topics of their choice, frame exciting and practical questions about it, and develop a writing plan for its execution. Students will leave the course with a departmentally approved senior essay prospectus, an annotated bibliography on their chosen area of inquiry, and 10 pages of writing towards their senior essay. Students must pass the course to enroll in English 399. (Hedley, Hemmeter, Ricketts)

## ENGL B399 Senior Essay

Supervised independent writing project required of all English majors. Students must successfully complete English 398 (Senior Conference) and have their senior essay prospectus approved by the department before they enroll in English 399. (staff)

## ENGL B403 Supervised Work

Advanced students may pursue independent research projects. Permission of the instructor and major adviser is required. (staff)

Bryn Mawr currently offers the following courses in Creative Writing:

ARTW B159 Introduction to Creative Writing
ARTW B251 Travel Writing
ARTW B260 Writing Short Fiction
ARTW B261 Writing Poetry I
ARTW B262 Playwriting I
ARTW B268 Writing Literary Journalism
ARTW B364 Approaches to the Novel
ARTW B382 Poetry Master Class

## Environmental Studies

Students may complete an environmental studies concentration as an adjunct to a major in any of the participating departments or programs: anthropology, biology, chemistry, economics, English, geology, growth and structure of cities, or political science.

## Director

Maria Louisa Crawford

## Steering Committee

Donald C. Barber, Geology
Peter Briggs, English
Sharon Burgmayer, Chemistry
Richard Davis, Anthropology
Karen Greif, Biology
Carol Hager, Political Science
Krynn Lukacs, Chemistry
Gary McDonogh, Growth and Structure of Cities
Michael Rock, Economics
David Ross, Economics
Bethany Schneider, English
Neal Williams, Biology
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 Director, Maria Luisa Crawford
(mcrawfor@brynmawr.edu). The listed contact persons on the environmental studies steering committee can answer questions pertaining to the concentration in their departments.

The concentration consists of six courses, three of which are fixed, and three 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 enroll in GEOL/CITY B 103 Earth Systems and the Environment, followed by BIOL B220 Ecology. 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 also must choose three courses outside the natural sciences. Two of these choices should address issues of planning and policy, and one other course 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. In addition to checking with her department environmental studies contact, each student's coursework plan for the concentration must be reviewed by the environmental studies director.

Planning and Policy (two are required) ANTH B210 Medical Anthropology ECON B234 Environmental Economics CITY/ANTH B 190 Form of the City CITY B2I7 Research in Policy Methods CITY B229 Comparative Urbanism 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 B 101 Intro. to Anthropology
ANTH B203 Human Ecology
ANTH H263 Anthropology and Architecture
CITY B227 Topics in Modern Planning
CITY B270/370 Japanese Architecture \& Planning
HIST/CITY B237 Urbanization in Africa
ENGL B204 Literatures of American Expansion
ENGL B213 Nature Writing, Environ. Concern
ENGL B309 Native American Literature

Note: Some classes shown below have prerequisites; some are not offered every year. College divisions and how often each course is offered are shown (subject to change).

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

In her 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 adviser 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. These include special environmental programs like the University of Kansas Costa Rica programs and the programs sponsored by Swarthmore in Eastern Europe.

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.

## Film Studies

Students may complete a minor in film studies.

## Faculty

Jennifer Horne, Visiting Assistant Professor and Acting Coordinator Meta Mazaj, Lecturer

## Steering Committee

Timothy Harte, Department of Russian Jonathan Kahana, Department of English Homay King, Department of History of Art
Imke Meyer, Department of German Katherine Rowe, Department of English Lisa Saltzman, Department of History of Art
Michael Tratner, Department of English Sharon Ullman, Department of History

Film studies is an interdisciplinary field of inquiry bringing a range of analytical methods to bear upon films, film audiences and the social and industrial contexts of film production, promotion and consumption. The courses that comprise the film studies minor 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 culture add both breadth and depth to this program of study.

Currently, film studies is a Bryn Mawr College minor: students must take a majority
of courses on the Bryn Mawr campus. Minors are, however, encouraged to consider courses offered in the Tri-College consortium and at the University of Pennsylvania. Students should consult the coordinator of film studies before they declare the film studies minor to ensure that their course selections will be approved.

## Minor Requirements

In consultation with the coordinator, students design a program of study that includes a range of film genres, styles, national cinemas, eras and disciplinary and methodological approaches. The minor consists of a total of six courses and must include the following:

1. One introductory course in the formal analysis of film (e.g., ENGL/HART 205 Introduction to Film; ENGL/ HART 299 Introduction to Narrative Cinema)
2. One course in film history or an area of film history (e.g., ENGL/HART 238 Silent Film; RUSS 110 Soviet and East European Cinema of the 1960s: War, Politics and Gender)
3. One course in film theory or an area of film theory (e.g., ENGL/HART 306 Film Theory; ENGL/HART 349 Theories of Authorship in Cinema; ENGL/HART 327 Feminist Film Theory and Practice)
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 require-
ment simultaneously. Final approval is at the discretion of the coordinator of the Film Studies Program.

Film studies courses currently offered at Bryn Mawr include:

ARTW B266 Screenwriting I
ENGL/HART B205 Introduction to Film Studies
ENGL B238 Silent Cinema: International Film to 1930
ENGL B291 Documentary Film and Media
ENGL B306 Film Theory
ENGL B317 Exhibition and Inhibition: Movies, Pleasure and Social Control ENGL/HART B329 Screen Melodrama GERM/COML B245 Sexualities and Gender in 20th-Century German Literature and Film
GERM B321/CITY B319 Berlin in the 1920s
HART B327 Feminist Film Theory and Practice
HART B349 Theories of Authorship in the Cinema: Alfred Hitchcock
RUSS B252 Soviet Cinema: The Masterpieces of Russian and Soviet Cinema

## Fine Arts

Students may complete a major in fine arts at Haverford College.

## Faculty

Gerald Cyrus, Visiting Assistant
Professor
Hee Sook Kim, Assistant Professor
Ying Li, Associate Professor and
Chairperson
Deborah Masters, Visiting Assistant
Professor
William E. Williams, Professor
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.

## Major Requirements

Fine arts majors are required to concentrate in either painting, drawing, sculpture, photography or printmaking: Fine Arts 101-123, two different 200-level courses outside the area of concentration; two 200-level courses and one 300-level course within that area; three art history courses to be taken at Bryn Mawr College, and Senior Departmental Studies 499.

For majors intending to do graduate work, it is strongly recommended that they take
an additional 300-level studio course within their area of concentration and an additional art history course at Bryn Mawr College.

## ARTS H101 Fine Arts Foundation Program

Students are introduced to at least three different disciplines from the five presently offered by the department: drawing, painting, photography, sculpture and printmaking. Each subject is an introductory course, dealing with the formal elements characteristic of the particular discipline as well as the appropriate techniques. Part of the work is from life model in drawing, painting and sculpture. These subjects are offered as half-semester courses; students may choose four for two course credits in any two semesters, not necessarily consecutive, or any three to receive one and one-half credits. For example: you may take two sections in one semester in one year, and one or two sections in another year. The course is structured so that the student experiences the differences as well as the similarities between the various expressions in studio art, thus affording a "perspective" insight into the visual process as a basis for artistic expression. For those intending to major, Art 101 consists of taking four of the five disciplines from each of the staff. (staff, Division III)

## ARTS H120 Foundation Printmaking: Silkscreen

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. (Kim, Division III) Not offered in 2005-06.

## ARTS H121 Foundation Printmaking: Relief Printing

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. (Kim, Division III)

## ARTS H122 Foundation Printmaking:

## Lithography

A seven-week course covering various techniques and approaches to lithography, including stone and plate preparation, drawing materials, editioning, black-andwhite printing. Emphasizing the expressive potential of the medium to create a personal visual statement. (Kim, Division III)

## ARTS H123 Foundation Printmaking: Etching

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. (Kim, Division III)

## ARTS H124 Foundation Printmaking: Monotype

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 two-dimensional format will be explored. Individual and group critiques will be employed. (Kim, Division III)

## ARTS H216 History of Photography from 1839 to the Present

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. (Williams, Division III)

## ARTS H223 Printmaking: Materials and Techniques: Etching

Concepts and techniques of black-andwhite and color intaglio. Line etching, aquatint, soft and hard ground, chin-colle techniques will be explored as well as visual concepts. Developing personal statements will be encouraged. Individual and group critiques will be employed. Prerequisite: Permission of instructor by review of portfolio. (Kim, Division III) Not offered in 2005-06.

## ARTS H224 Computer and Printmaking

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

## ARTS H225 Lithography: Material and Techniques <br> (Kim, Division III)

ARTS H231 Drawing (2-D): All Media Various drawing media such as charcoal, cont, pencil, ink and mixed media; the relationship between media, techniques and expression. The student is exposed to problems involving space, design and composition as well as "thinking" in two dimensions. Part of the work is from life model. May be repeated for credit. Prerequisite: Fine Arts 101 or consent of instructor. (staff, Division III)

## ARTS H233 Painting: Materials and

## Techniques

Problems of (1) form, color, texture and their interrelationships; (2) influences of the various painting techniques upon the expression of a work; (3) the characteristics and limitations of the different media; (4) control over the structure and composition of a work of art; (5) the relationships of form and composition, and color and composition. Media are primarily oils, but acrylics, watercolor and pastels are explored. Part of the work is from life models. May be repeated for credit. Prerequisite: Fine Arts 101 or consent of instructor. (Li, Division III)

ARTS H241 Drawing (3-D): All Media In essence the same problems as in Fine Arts 231a or b. However, some of the drawing media are clay modeling in half-hour sketches; the space and design concepts solve three-dimensional problems. Part of the work is done from life model. May be repeated for credit. Prerequisite: Fine Arts 101 or consent of instructor. (Cairns, Swords, Division III)

## ARTS H243 Sculpture: Materials and Techniques

The behavior of objects in space, the concepts and techniques leading up to the form in space, and the characteristics and limitations of the various sculpture media and their influence on the final work; predominant but not exclusive use of clay modeling techniques: fundamental casting procedures. Part of the work is done from life model. May be repeated for credit. Prerequisite: Fine Arts 101 or consent of instructor. (staff, Division III)

## ARTS H251 Photography: Materials and Techniques

Students are encouraged to develop an individual approach to photography. Emphasis is placed on the creation of black-and-white photographic prints that 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. Prerequisite: Fine Arts 103 or equivalent. (Williams, Division III)

## ARTS H321 Experimental Studio:

## Etching

Concepts and techniques of color intaglio. Combined printmaking methods as well as solid foundations in printmaking techniques will be encouraged. Personal statements and coherent body of works will be produced during the course. Individual and group critiques will be employed. Prerequisite: Permission of instructor by review of portfolio. (Kim, Division III)

## ARTS H322 Printmaking: Experimental Studio Lithography

Concepts and techniques of color lithography. Combined printmaking methods as well as solid foundations in printmaking techniques will be encouraged. Personal statements and coherent body of works will be produced during the course. Individual and group critiques will be employed. Prerequisite: One course in printmaking or permission of instructor. (Kim, Division III) Not offered in 2005-06.

ARTS H326 Experimental Studio:

## Lithography

(Kim, Division III)
Not offered in 2005-06.

## ARTS H331 Experimental Studio (Drawing)

In this studio course the student is encouraged to experiment with ideas and techniques with the purpose of developing a personal expression. It is expected that the student will already have a sound
knowledge of the craft and aesthetics of drawing and is at a stage where personal expression has become possible. May be repeated for credit. Prerequisite: Fine Arts 231a or b, or consent of the instructor. (Li, Division III)

## ARTS H333 Experimental Studio (Painting)

In this studio course the student is encouraged to experiment with ideas and techniques with the purpose of developing a personal expression. It is expected that the student will already have a sound knowledge of the craft and aesthetics of painting and is at a stage where personal expression has become possible. May be repeated for credit. Prerequisite: Fine Arts 223a or b, or consent of instructor. (Armstrong, Division III)

## ARTS H341 Experimental Studio (Drawing)

Prerequisite: Fine Arts 241a or bor consent of instructor. (staff, Division III)

## ARTS H343 Experimental Studio (Sculpture)

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. (Cairns, Swords, Division III)

## ARTS H351 Experimental Studio

(Photography)
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. (Williams, Division III)

## ARTS H460 Teaching Assistant (staff)

## ARTS H480 Independent Study

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. (staff)

## ARTS H499 Senior Departmental Studies

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 her or his work. Prerequisite: consent of the instructor. (Kim, Li, Williams)

## French and French Studies

Students may complete a major or minor in French and French studies. Within the major, student may complete the requirements for secondary education certification. Students may complete an M.A. in the combined A.B./M.A. program.

## Faculty

Koffi Anyinefa, Professor at Haverford College
Grace M. Armstrong, E. M. Shenck 1907
Professor of French and Major Adviser
Roseline Cousin, Senior Lecturer
Janet Doner, Senior Lecturer
Florence Echtman. Instructor at Bryn Mawr and Haverford Colleges
Francis Higginson, Assistant Professor
Duane Kight, Assistant Professor at
Haverford College
Brigitte Mahuzier, Associate Professor and Chair; Director of the Avignon Institute
Nathalie Marcus, Lecturer
David L. Sedley, Associate Professor at Haverford College
Nancy J. Vickers, Professor
The Departments of French at Bryn Mawr and Haverford Colleges offer a unified program and a variety of courses and major options. The purpose of the major in French is to lay the foundation for an understanding and appreciation of French culture through its literature and language, the history of its arts, its thought and its institutions. Course offerings are intended
to serve both those with particular interest in French literature, literary theory and criticism, as well as those with particular interest in French and French-speaking countries from the perspective of history, culture and political science. A thorough knowledge of French is a common goal for both orientations, and texts and discussion in French are central both to the program focusing on French history and culture (interdisciplinary concentration) and to the literary specialization (literature concentration).

In the 100 -level courses, students are introduced to the study of French and Francophone literatures and cultures, and special attention is given to the speaking and writing of French. Courses at the 200 level treat French literature and civilization from the beginning to the present day. Four 200-level courses are devoted to advanced language training, with practice in spoken as well as in written French. Advanced (300-level) courses offer detailed study either of individual authors, genres and movements (literature concentration) or of particular periods, themes and problems in French culture (interdisciplinary concentration). In both tracks, 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 Bryn Mawr and Haverford. Those students who begin French have two options: intensive study of the language in the intensive sections offered (the sequence 001-002 Intensive

Elementary; 005 Intensive Intermediate and 102 Textes, Images, Voix II, or 005 and 105 Directions de la France contemporaine), or nonintensive study of the language in the nonintensive sequence (001002; 003-004; 101-102 or 101-105; 103102 or 103-105). In either case, students who pursue French to the 200 level often find it useful to take as their first 200-level course either 212 Grammaire avancée or 260 Stylistique et traduction. Although it is possible to major in French using either of the two sequences, students who are considering doing so and have been placed at the 001 level are encouraged to take the intensive option.

The Department of French also cooperates with the Departments of Italian and Spanish in the Romance Languages major (see page 275).

## Major Requirements

Requirements in the major subject are:

1. Literature concentration: French 005102 or 005-105; 101-102 or 101-105; 103-102 or 103-105, French 212 or 260 , four semesters of 200 -level literature courses, two semesters of 300 -level literature courses, and the two-semester Senior Conference.
2. Interdisciplinary concentration: French 005-102 or 005-105; 101-102 or 101105, 103-102 or 103-105; French 212 or 260 ; French 291 and 294 , the core courses; a minimum of two civilization courses to be chosen among 246, 248, 251, 255, 296, 298, 299, 325, 326 , with at least one course at the 300 level; two 200- or 300-level French
literature courses, with one of these courses chosen at the 300 level; and the two-semester Senior Conference.
3. Both concentrations: all French majors are expected to have acquired fluency in the French language, both written and oral. Unless specifically exempted by the department, they are required to take French 212 or 260. Students may wish to continue from 212 to 260 to hone their skills further. Students placed at the 200 level by departmental examinations are exempted from the 100 -level requirements. Occasionally, students may be admitted to seminars in the graduate school.

## Honors

Undergraduates who have excelled in French by maintaining a minimum grade of 3.6 may, if invited by the department, write an honors thesis during one or two semesters of their senior year. However, the invitation and the subsequent writing of such a thesis do not guarantee the award. Departmental honors may also be awarded for excellence in both the oral and written comprehensive examinations at the end of the senior year.

## Minor Requirements

Requirements for a French minor are French $005-102$ or $005-105,101-102$, 101-105, 103-102 or 103-105; French 212 or 260 ; and four 200 -level or 300 -level courses. At least one course must be at the 300 level.

## Teacher Certification

The Department of French offers a certification program in secondary teacher education. For more information, see the description of the Education Program on page 133.

## 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, the Undergraduate Curriculum Committee and of the dean of the Graduate School of Arts and Sciences (see page 35 ).

## Study Abroad

Students majoring in French may, by a joint recommendation of the deans of the Colleges and the Departments of French, be allowed to spend their junior year in France under one of the junior year plans approved by their respective college: some programs are approved by both Bryn Mawr and Haverford (e.g., Sweet Briar); other programs are accepted separately by Bryn Mawr and Haverford.

Students wishing to enroll in a summer program may apply for admission to the Institut d'Etudes Françaises d’Avignon, held under the auspices of Bryn Mawr. The institute is designed for selected undergraduates with a serious interest in French and Francophone literatures and cultures, most particularly for those who anticipate professional careers requiring a knowledge of the language and civilization
of France and French speaking countries. The curriculum includes general and advanced courses in French language, literature, social sciences, history and art. The program is open to students of high academic achievement who have completed a course in French at the third-year level or the equivalent.

## FREN B001, B002 Elementary French

The speaking and understanding of French are emphasized particularly during the first semester. The work includes regular use of the Language Learning Center and is supplemented by intensive oral practice sessions. The course meets in intensive (nine hours a week) and nonintensive (five hours a week) sections. This is a year-long course; both semesters are required for credit. (Cousin, Doner, Echtman, Kight,)

## FREN B003, B004 Intermediate

 FrenchThe emphasis on speaking and understanding French is continued; texts from French literature and cultural media are read; and short papers are written in French. Students use the Language Learning Center regularly and attend supplementary oral practice sessions. The course meets in nonintensive (three hours a week) sections that are supplemented by an extra hour per week with an assistant. This is a year-long course; both semesters are required for credit. (Cousin, Echtman, Kight, Marcus, Sedley, staff)

## FREN B005 Intensive Intermediate French

The emphasis on speaking and understanding French is continued; literary and cul-
tural texts are read and increasingly longer papers are written in French. In addition to three class meetings a week, students develop their skills in group sessions with the professors and in oral practice hours with assistants. Students use the Language Learning Center regularly. This course prepares students to take 102 or 105 in semester II. Open only to graduates of Intensive Elementary French or to students placed by the department. Students who are not graduates of Intensive Elementary French must take either 102 or 105 to receive credit. (Armstrong, Doner, Echtman)

## FREN B101 Textes, Images, Voix I

Presentation of essential problems in literary and cultural analysis by close reading of works selected from various periods and genres and by analysis of voice and image in French writing and film. Participation in discussion and practice in written and oral expression are emphasized, as are grammar review and laboratory exercises. (Higginson, Mahuzier, Marcus, Sedley, Division III)

FREN B102 Textes, Images, Voix II Continued development of students' expertise in literary and cultural analysis by emphasizing close reading as well as oral and written analyses of increasingly complex works chosen from various genres and periods of French and Francophone works in their written and visual modes. Readings begin with comic theatre of the 17th and 18th centuries and build to increasingly complex nouvelles, poetry and novels of the 19th and 20th centuries. Participation in guided discussion and practice in oral/ written expression continue to be empha-
sized, as are grammar review. Prerequisite: French 005,101 or 103. (Armstrong, Echtman, Division III)

## FREN 103 De Sedan à la Belle Epoque (1870-1914)

In this course, students will be introduced to events, personalities and issues whose effects are still felt in contemporary France. The course will be structured around thematic clusters such as "Napoléon III et Victor Hugo" and "La Commune de 1871." Readings will be drawn from literary and nonliterary texts of the period, as well as from theoretical, historical, sociological and anthropological analyses. The complexities of French grammar covered in French 101 will be reviewed. Students will gain an understanding of the period that will ground further study either of contemporary French culture or of 19thand 20th-century French literature. (Kight, Division III)

## FREN B105 Directions de la France contemporaine

An examination of contemporary society in France and Francophone cultures as portrayed in recent documents and film. Emphasizing the tension in contemporary French-speaking societies between tradition and change, the course focuses on subjects such as family structures and the changing role of women, cultural and linguistic identity, an increasingly multiracial society, the individual and institutions (religious, political, educational), and les loisirs. In addition to the basic text and review of grammar, readings are chosen from newspapers, contemporary literary texts and magazines, complemented by
video materials. Prerequisite: French 005, 101 or 103. (Cousin, Kight, Division III)

## FREN B201 Le chevalier, la dame et le prêtre: littérature et publics du Moyen Age

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. (Armstrong, Division III)

## FREN B202 Crises et identités: La

## Renaissance

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 Marat, Scève, the Pléiade and d'Aubigné. (Sedley, Division III)

## FREN B204 Le Siècle des lumières

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 Diderot, Montesquieu, Rousseau and Voltaire. (staff, Division III) Not offered in 2005-06.

FREN B205 Le Temps des prophètes: de Chateaubriand à Baudelaire (1800-60)
From Chateaubriand and Romanticism to Baudelaire, a study of selected poems, novels and plays. (staff, Division III) Not offered in 2005-06.

FREN B206 Le Temps des virtuoses: Symbolisme, Naturalisme et leur progéniture, (1860-1930)
A study of selected works by Claudel, Gide, Proust, Rimbaud, Valéry, Verlaine and Zola. (staff, Division III) Not offered in 2005-06.

FREN B207 Missionnaires et cannibales: de Malraux à Modiano (1930-1995)
A study of selected works illustrating the principal literary movements from 1930 to the present. (Higginson, Division III)

## FREN B212 Grammaire Avancée: Composition et conversation

A general review of the most common difficulties of the French language. Practice in composition and conversation. (Echtman, Division III)

FREN B213 Approches critiques et théoriques
This course provides exposure to influential 20th-century French theorists while bringing these thinkers to bear on appropriate literary texts. It hones students' critical skills while expanding their knowledge of French intellectual history. The explicitly critical aspect of the course will also serve students throughout their coursework, regardless of field. (Mahuzier, Division III; cross-listed as COML B213)

FREN B231 De la page à l'écran: Romans français et adaptations cinématographiques
This course proposes to examine different genres of French novels and their cinematographic adaptations. We will focus on close readings of novels, including discussion of literary genres and techniques. We will then study the films based on these novels not simply as "translations," but as independent works that illustrate different methods of story telling. How does the medium influence the telling of the story, including the relationship between reader and book, spectator and film? The purpose of the course is to expose students to different types of narratives, constructed through a wide range of literary and cinematographic techniques. (Marcus, Division III)

## FREN 255 Cinéma français/

francophone et (post-)colonialisme
A study of cinéastes from France, Africa, North and South of the Sahara, and the Caribbean whose films treat the colonial and postcolonial experience. (Anyinefa, Division III) Not offered in 2005-6.

## FREN B260 Stylistique et traduction

 Intensive practice in speaking and writing. Conversation, discussion, advanced training in grammar and stylistics, translation of literary and nonliterary texts, and original composition. (Cousin, Doner)FREN B262 Débat, discussion, dialogue
Intensive oral practice intended to bring non-native French speakers to the highest level of proficiency through the develop-
ment of debating and discussion skills. (Cousin)

## FREN B291 La Civilisation française

 A survey of French cultures and society from the Revolution to De Gaulle's Republic. Serves as one of the core courses for the interdisciplinary concentration. (Mahuzier, Division III; cross-listed as HIST B291) Not offered in 2005-06.FREN B299 Littérature, histoire et société de la Révolution à la Première Guerre mondiale
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. (Mahuzier, Division III) Not offered in 2005-06.

FREN B302 Le printemps de la parole féminine: femmes écrivains des débuts This study of selected women authors from the French Middle Ages, Renaissance and Classical periods - among them, Marie de France, the trobairitz, 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 sociopo-
litical engagement. (Armstrong, Division III; cross-listed as COML B302) Not offered in 2005-06.

## FREN B320 La France et ses Orients

This course introduces students to the concept of Orientalism, as proposed by Edward Saïd, through readings of a number of canonical writers of the 19th and 20th centuries from North Africa, the Middle East and France. In the process, students will learn how to read diachronically and cross-culturally. (Higginson, Division III) Not offered in 2005-06.

## FREN B325 Symptoms of the Imagination: Illness and Genius in 19th-Century France

This course will examine the embodiment of the imagination in 19th-century France, with special focus on authors who explored the link between creative genius and malady. We will examine themes such as the feminization of the male artist and the gender of genius, in addition to the stereotypes of the poète maudit and the mad genius. In particular, we will focus on the nervous diseases, melancholy, hysteria and synesthesia, exploring how writers turned to them in their attempt to capture the essence of the creative process. (Marcus, Division III; cross-listed as COML B325)

## B326 Etudes avancées de civilisation

An in-depth study of a particular topic. event or historical figure in French civilisation. 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 socioculturelle des arts du manger en France du Moyen Age à nos jours. (Mahuzier, staff, Division III; cross-listed as COML B326) Not offered in 2005-06.

FREN B350 Voix médiévales et échos modernes
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 Anouilh, Bonnefoy, Claudel, Flaubert, Genevoix, Gracq, Hugo and Yourcenar. (Armstrong, Division III; cross-listed as COML B350)

FREN B354 Ecrivains/théoriciens engagés
(Mahuzier, Division III) Not offered in 2005-06.

FREN B355 Variations sur le récit moderne: ruses et ressources
(Higginson, Division III)

FREN B398, B399 Senior Conference A weekly seminar examining representative French and Francophone literary texts and cultural documents from all periods, and the interpretive problems they raise. Close reading and dissection of texts, complemented by extensive secondary readings from different schools of interpretation, prepare students to analyze other critical stances and to develop their own. In addition to short essays and oral presentations, students write a long paper each semester and end the year with Senior Comprehensives, which consist of an oral presentation of one of the long papers and a fcur-hour written examination. (Armstrong, Sedley)

FREN B403 Supervised Work

## Gender and Sexuality

Students may complete a minor or concentration in the study of gender and sexuality. Students may submit an application to major in gender and sexuality through the independent major program.

## Coordinators:

Anne Dalke

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

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

## Minor and Concentration

 RequirementsSix courses distributed as follows are required for the concentration:

1. An introductory course (including equivalent offerings at Swarthmore College or the University of Pennsylvania).
2. The junior seminar: Interdisciplinary Perspectives on Sex and Gender (taught in alternate years at Bryn Mawr and Haverford).
3. Four additional approved courses from at least two different departments, two of which are normally at the 300 level. Units of Independent Study (480) may be used to fulfill this requirement.
4. Of the six courses, no fewer than two and no more than three will also form part of the student's major.

Requirements for the minor are identical to those for 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 or minor; however, with the permission of the major department, a student may choose to count toward the concentration a senior thesis with significant content in gender and sexuality. Students wishing to construct an independent major in gender and sexuality will have to make a proposal to the Committee on Independent Majors (see page 20).

Courses in the Program in Gender and Sexuality change from year to year. Students are advised to check the course guide at the beginning of each semester.

Courses in gender and sexuality currently offered at Bryn Mawr:

ARTD B240 Dance History I: Roots of Western Theater Dance
BIOL B222 Psychobiology of Sexual Differences
CITY B205 Social Inequality
ENGL B210 Performances of Gender
ENGL B263 Toni Morrison and the Art of Narrative Conjure
ENGL B317 Exhibition and Inhibition
FREN B201 Le Chevalier, la dame, le prêtre
GERM B321 Picturing Gender in German Cinema
GNST B290 Interdisciplinary Perspectives on Sex and Gender
HART B108 Women, Feminism and History of Art
HART B317 Exhibiton and Inhibition
HART B348 Picturing Gender in German Cinema
HIST B303 Topics in American History
HIST B335 "Nifty Fifties"
PHIL B221 Ethics
PHIL B252 Feminist Theory
POLS B374 Gender and Power in Comparative Context
PSYCH B323 Psychobiology of Sexual Differences
SOCL B201 The Study of Gender in Society
SOCL B205 Social Inequality
SOCL B350 Movements for Social Justice

SPAN B265 Escritoras espanolas
SPAN B309 La mujer en la lit Siglo Oro
SPAN B329 Brown Affect: Narrating Latina/Latino Lives

Courses in gender and sexuality currently offered at Haverford:

ANTH H345 Love and the Market: Anthropological Explorations in Gender, Economy, and Morality
ECON H100 The Economics of Public Policy
ENGL H254 Victorian Sexualities
ENGL H301 Sex and Gender in the Middle Ages
ENGL H363 John Brown’s Body: Violence, National Fantasy and Bodies That Matter
HIST H354 Libertinage and Modernity PHIL H106 The Philosophy of Consciousness and the Problem of Embodiment
PHIL H258 Philosophy of the Body
PHIL H332 Foucault on Sex and Power
PHIL H356 Feminist Epistemology
POLS H123 American Politics: Difference and Discrimination
POLS H229 Latino Politics in the United States
POLS H263 Women and Politics
RELG H221 Women and Gender in Early Christianity
RELG H301 Images of Mary Magdalene

## General Studies

Certain courses focus on areas that are not usually covered in the Bryn Mawr curriculum and provide a supplement to the areas more regularly covered; these are called general studies courses and are listed in the Tri-Co Course Guide under this heading. Courses that cut across a number of disciplines and emphasize relationships among them are cross-listed and described under the departments that sponsor them.

Many general studies courses are open, without prerequisite, to all students. With the permission of the major department, they may be taken for major credit.

GNST B101 African Civilizations: An Interdisciplinary Introduction to Africana Studies
The required course introduces students to African societies, cultures and political economies with an emphasis on change and response among African people in Africa and outside. (Hucks, staff, Division I)

GNST B103 Introduction to Swahili
Language and Culture I
(Mshomba, Division I or III)
GNST B104 Learning Foreign
Languages
Not offered in 2005-06.
GNST B105 Introduction to Swahili
Language and Culture II
(Mshomba, Division I or III)

GNST B112 The Great Questions of Russian Literature
(Allen, Division III)
COML B155 Islamic Civilization, A Literary Introduction
(Kim, Division III; cross-listed as COML B155)

GNST B213 Introduction to Mathematical Logic
(Weaver, Division II; cross-listed as PHIL B213)

GNST B215 Introduction to Set
Theory: Cardinals and Ordinals
Study of the theory of cardinal and ordinal numbers in the context of Gödel-Bernaysvon Neumann set theory. Topics include equivalents of the axiom of choice and basic results in infinite combinatorics. Prerequisites: Philosophy 103 and Mathematics 231. (Weaver, Division II and Quantitative Skills) Not offered in 2005-06.

GNST B225 Healing, Harming and Humanism
Not offered in 2005-06.
GNST B239 Introduction to
Linguistics
(Raimy, Division I) Not offered in 200506.

GNST B265 The Islamic Literary Tradition
(Kim, Division III; cross-listed as COML B265)

## GNST B290 Interdisciplinary

 Perspectives on Gender and SexualityThis course explores the variety of ways in which we "do" sex and gender, by looking at the inevitability of our making categories, play as a way of unsettling them and politics as a way of making them useful, as we put them into action in the world. (Dalke, Patico) Alternates between Bryn Mawr and Haverford; 2005-06 at Bryn Mawr.

GNST B303 Advanced Mathematical Logic
(Weaver; cross-listed as PHIL B303)

## Geology

Students may complete a major or minor in geology. Within the major, students may complete concentrations in environmental studies, geoarchaeology or geochemistry.

## Faculty

Donald C. Barber, Assistant Professor
Maria Luisa B. Crawford, Professor (on leave 2005-06)
Blythe L. Hoyle, Lecturer and Laboratory Coordinator
Catherine Riihimaki, Keck Postdoctoral Fellow
W. Bruce Saunders, Professor and Chair Arlo B. Weil, Assistant Professor

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 of which the Earth is made; of the physical processes which have formed the Earth, especially near the surface; of the history of the Earth and its organisms; and of the various techniques necessary to investigate Earth processes and history.

Each introductory course is designed to cover a broad group of topics from a different perspective. Students may elect any of the 100 -level courses. Fieldwork is an essential part of geologic training and is part of all introductory courses, most other classes and most independent research projects.

## Major Requirements

Thirteen courses are required for the major: Geology 101 and 102 or 103; 202, 203, 204, and 205; Math 101 and 102 , or alternates approved by the adviser; a twosemester sequence of Chemistry (101/103104) or Physics (101-102); Geology 403; 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 (Geology 403) in the senior year. Most students complete a one-semester project in the fall semester; a two-semester project may be undertaken with approval of the department.

## 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.

## 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.

## Concentration in Environmental Studies

The environmental studies concentration allows students to explore the interactions among the geosphere, biosphere and human societies. The concentration represents interdisciplinary cooperation among the departments of anthropology, biology, economics, English, geology, political science and growth and structure of cities. and is open to students majoring in any of these departments.

The environmental concentration in geology consists of Geology 101 and 103, 202 and two other 200 -level geology courses, 302 or 328,397 , another 300-level geology course and 403; Chemistry 101 or 103, and 104; two semesters of math, statistics or computational methods; Biology 220; and three additional environmental courses outside of the natural sciences, two of which should address issues of planning and policy, and one of which should address issues of humans in the environment. The environmental studies Web site (http://www. brynmawr.edu/es/core.htm) lists approved courses in these last two categories.

## Concentration in Geoarchaeology

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

## Concentration in Geochemistry

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

## GEOL B101 How the Earth Works

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. (Weil, Division IIL)

## GEOL B102 Earth History

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 field trip is taken in the late spring. An extra fee is collected for this trip. (Saunders, Division IIL)

## GEOL B103 Earth Systems and the Environment

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 lab per week, plus a mandatory two-day field trip for which an extra fee is collected. (Barber, Division IIL; cross-listed as CITY B103)

## GEOL B201 Crystallography and Optical Mineralogy

Crystallography involves the study of the external forms and symmetry of crystalline solids, as well as an introduction to the study of crystals using x-ray diffraction. Optical mineralogy introduces the effects of the interaction of light with crystalline substances, and use of the polarizing microscope for mineral identification. Lecture three hours, laboratory at least three hours a week. Prerequisites: Geology 101 or Chemistry 101 or 103, and 104. (staff, Division IIL) Not offered in 2005-06.

## GEOL B202 Mineralogy and Crystal

 ChemistryThe 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). (staff, Division IIL)

GEOL B203 Invertebrate Paleobiology 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 introducing computer-aided morphometric analysis will be based on material collected on a three-day trip to the Tertiary deposits of the Chesapeake Bay. (Saunders, Division IIL)

GEOL B204 Structural Geology
Three lectures and three hours of laboratory a week, plus weekend field trips. Recognition and description of deformed rocks, map reading and an introduction to the mechanics and patterns of deformation. Prerequisites: Geology 101 and Mathematics 101. (Weil, Division ILL)

## GEOL B205 Sedimentary Materials and Environments

An introduction to the principles of sedimentology, depositional processes, facies analysis and stratigraphy, including inter-
pretation of sedimentary sequences and techniques for reconstructing past environmental conditions. Three lectures and one lab a week, with at least one day-long field trip. Prerequisite: Geology 101, 102 or 103 or instructor permission. Recommended: Geology 202 and 203. (Barber, Division IIL)

## GEOL B206 Energy Resources and Public Policy

An examination of issues concerning the supply of energy and raw materials required by humanity. This includes an investigation of requirements and supply of energy and of essential resources, of the geological framework that determines resource availability, and of the social, economic and political considerations related to energy production and resource development. Two 90 -minute lectures a week. Prerequisite: one year of college science. (staff, Division II) Not offered in 2005-06.

## GEOL B209 Natural Hazards

Discussion of Earth processes that occur on human time scales and their impact on humanity both past and present. We quantitatively 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 in which geologic processes become geologic 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. (Weil, Division II and Quantitative Skills; crosslisted as CITY B209)

GEOL B236 Evolution
(Davis, Gardiner, Saunders, Division II; cross-listed as ANTH B236 and BIOL B236)

## GEOL B250 Computational Models in

 the Sciences(staff, Division II and Quantitative Skills; cross-listed as BIOL B250 and CMSC B250)

GEOL B255 Problem Solving in the Environmental Sciences
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. (Riihimaki, Division II and Quantitative Skills)

## GEOL B270 Geoarchaeology

(Barber, Magee, Division II; cross-listed as ANTH B270 and ARCH B270)

## GEOL B301 Geochemistry of

 Crystalline RocksPrinciples and theory of various aspects of geochemistry including elementary thermodynamics and phase diagrams, an introduction to isotopes, and the applications of chemistry to the study of igneous and metamorphic rocks. Three lectures per week augmented by occasional fieldwork.

Prerequisites: Geology 202, Chemistry 101 or 103 and 104 or consent of the instructor. (staff) Not offered in 2005-06.

## GEOL B302 Low-Temperature

 GeochemistryThe 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. Two hours of lecture a week and problem sessions. Prerequisites: Chemistry 103, 104 and Geology 202 or two 200-level chemistry courses, or permission of instructor. (Hoyle)

## GEOL B303 Advanced Paleontology

 Principles, theory and application of various aspects of paleobiology such as evolution. Seminar-based, with a semester-long research project. Three lectures, three hours of laboratory a week (with occasional fieldwork). Prerequisite: Geology 203 or permission of instructor. (Saunders)
## GEOL B304 Tectonics

Three hours of lecture and a problem session a week. Plate tectonics and continental orogeny are reviewed in light of the geologic record in selected mountain ranges and certain geophysical data. Prerequisite: Geology 204. (Weil)

## GEOL B305 Igneous and Metamorphic

## Petrology

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. Prerequisites: Geology 202 and Chemistry 101 or 103, and 104. (staff)

## GEOL B310 Introduction to Geophysics

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: Geology 101 and Physics 101, 102. (Weil) Not offered in 2005-06.

## GEOL B312 Quaternary Geology

The Quaternary Period comprises the last 1.5 million years of Earth history, an interval dominated by climate fluctuations and the waxing and waning of large northern hemisphere ice sheets. This course covers the many types of geological evidence, from glacial geomorphology to deep-sea geochemistry, used to reconstruct ocean and atmospheric conditions emphasizing Quaternary climate variability. Three class hours a week, including hands-on data analysis. Prerequisite: Geology 101, 102 or 103. (Barber)

## GEOL B314 Marine Geology

An introduction to the structure and tectonics of ocean basins, their sedimentary
record and the place of marine systems in the geologic record. Includes an overview of physical and chemical oceanography, and a review of how paleoceanographic research has shaped our knowledge of Earth's climate history. Meets twice weekly for a combination of lecture, discussion and hands-on exercises, including one day-long field trip. Prerequisite: Geology 101, 102 or 103. (Barber) Not offered in 2005-06.

## GEOL B328 Analysis of Geospatial Data Using GIS

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. (Compton, Wright, Division II and Quantitative Skills; cross-listed as BIOL B328 and ARCH B328)

## GEOL B336 Evolutionary Biology:

 Advanced Topics(Gardiner, Saunders, Murphy; cross-listed as ANTH B336 and BIOL B336) Not offered in 2005-06.

## GEOL B350 Advanced Topics in

 GeologyA seminar course offered occasionally covering topics on areas of geology not otherwise offered in the curriculum. Prerequisites: advanced standing in geology and consent of the instructor. (staff)

GEOL B397 Senior Seminar in Environmental Studies
A seminar course allowing environmental studies concentrators to explore topics of common interest from the various perspectives represented by student majors in the class. Students choose readings, lead discussion, and write papers. Collaborative research projects also are possible. Three hours per week. (Riihimaki; cross-listed as ANTH B397, BIOL B397 and CITY B397)

## GEOL B403 Independent Research

An independent project in the field. laboratory or library culminating in a written report and oral presentation. Required for all geology majors in the senior year. (staff)

## German and German Studies

Students may complete a major or minor in German and German studies.

## Faculty

David Kenosian, Lecturer
Imke Meyer, Associate Professor and Chair (on leave semester I)
Christopher Pavsek, Visiting Assistant
Professor at Haverford College
Ulrich Schönherr, Associate Professor at Haverford College
Azade Seyhan, Professor
The Department of German and German Studies 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 and German studies 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 and urban anthropology and folklore.

A thorough knowledge of German is a 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. German majors can and are encouraged to take courses in interdisciplinary areas, such as comparative literature, feminist and gender studies, growth and structure of cities, history, history of art, music, philosophy and political science, where they read works of criticism in these areas in the original German. Courses relating to any aspect of German culture, history and politics given in other departments can count toward requirements for the major or minor.

## Major Requirements

The German and German studies major consists of 10 units. All courses at the 200 or 300 level count toward the major requirements, either in a literature concentration or in a German studies concentration. A literature concentration normally follows the sequence 201 and/or 202; 209 or 212 , or 214,215 ; plus additional courses to complete the 10 units, two of them at the 300 level; and finally one semester of Senior Conference. A German studies major normally includes 223 and/or 224; one 200 - and one 300 -level course in German literature; three courses (at least at the 300 level) in subjects central to aspects of German culture, history or politics; and one semester of German 321 (Advanced Topics in German Cultural Studies). Within each concentration, courses need to 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 majors are encouraged, when possible, to take work in at least one foreign language other than German.

## Honors

Any student who has completed a senior thesis and whose grade point average in the major at the end of the senior year is 3.8 or higher qualifies for departmental honors. Students who have completed a thesis and whose major grade point average at the end of the senior year is 3.6 or higher, but not 3.8 , are eligible to be discussed as candi-
dates for departmental honors. A student in this range of eligibility must be sponsored by at least one faculty member with whom she has done coursework, 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.

## Minor Requirements

A minor in German and German studies consists of seven units of work. To earn a minor, students are normally required to take German 201 or 202, and four additional units covering a reasonable range of study topics, of which at least one unit is at the 300 level. Additional upper-level courses in the broader area of German studies may be counted toward the seven units with the approval of the department.

## Study Abroad

Students majoring in German are encouraged to spend some time in Germanspeaking 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.

## GERM B001, B002 Elementary

## German

Meets five hours a week with the individual class instructor, two hours with student drill instructors. Strong emphasis on com-
municative competence both in spoken and written German in a larger cultural context. (staff)

## GERM B101, B102 Intermediate German

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. (staff)

## GERM B201 Advanced Training: Language, Text, Context

Emphasis on the development of conversational, writing and interpretive skills through an introductory study of German political, cultural and intellectual life and history, including public debate, institutional practices, mass media, cross-cultural currents, folklore, fashion and advertising. Course content may vary. (Meyer, Pavsek, Schönherr, Seyhan, Division III) Not offered in 2005-06.

## GERM B202 Introduction to German Studies

Interdisciplinary and historical approaches to the study of German language and culture. Selected texts for study are drawn from autobiography, anthropology, Märchen, satire, philosophical essays and fables, art and film criticism, discourses of gender, travel writing, cultural productions of minority groups, and scientific and journalistic writings. Emphasis is on a critical understanding of issues such as linguistic imperialism and exclusion, language and
power, gender and language, and ideology and language. (Kenosian, Meyer, Pavsek, Schönherr, Seyhan, Division I or III)

## GERM B209 Introduction to Literary

 Analysis: Philosophical Approaches to CriticismA focus on applications and implications of theoretical and aesthetic models of knowledge for the study of literary works. (Seyhan, Division I or III; cross-listed as COML B209 and PHIL B209) Not offered in 2005-06.

## GERM B212 Readings in German Intellectual History

Study of selected texts of German intellectual history, introducing representative works of Theodor W. Adorno, Hannah Arendt, Walter Benjamin, Sigmund Freud, Jürgen Habermas, Georg W. F. Hegel, Martin Heidegger, Werner Heisenberg, Immanuel Kant, G. E. Lessing, Karl Marx, Friedrich Nietzsche, Friedrich Schiller and Ludwig Wittgenstein. The course aims to introduce students to an advanced cultural reading range and the languages and terminology of humanistic disciplines in German-speaking countries, and seeks to develop their critical and interpretive skills. (Meyer, Pavsek, Schönherr, Seyhan. Division III; cross-listed as PHIL B204)

## GERM B223 Topics in German Cultural Studies

Course content varies. Previous topic: Kafka's Prague. Topic for fall 2005: Decadent Munich 1890-1925. (Kenosian, Pavsek, Division I or III; cross-listed as HIST B247)

## GERM B231 Cultural Profiles in

 Modern ExileThis course investigates the anthropological, philosophical, psychological, cultural and literary aspects of modern exile. It studies exile as experience and metaphor in the context of modernity, and examines the structure of the relationship between imagined/remembered homelands and transnational identities, and the dialectics of language loss and bi- and multilingualism. Particular attention is given to the psychocultural dimensions of linguistic exclusion and loss. Readings of works by Julia Alvarez, Anita Desai, Sigmund Freud, Milan Kundera, Friedrich Nietzsche, Salman Rushdie and others. (Seyhan, Division III; cross-listed as ANTH B23I and COML B231)

## GERM B245 Interdisciplinary

Approaches to German Literature and Culture
Course content varies. Previous topics include: Women's Narratives on Modern Migrancy, Exile and Diaspora; Sexuality and Gender in German Literature and Film (1900-2000). (Meyer, Seyhan, Division III; cross-listed as COML B245, CITY B246 and HART B246) Not offered in 2005-06.

## GERM B299 Cultural Diversity and

 Its RepresentationsA focus on representations of "foreignness" and "others" in selected German works since the 18 th century, including works of art, social texts and film, and on the cultural productions of non-German writers and artists living in Germany
today. (Seyhan, Division III; cross-listed as COML B299 and HART B298)

GERM B305 Modern German Drama
Theory and practice of dramatic arts in selected plays by major German, Austrian and Swiss playwrights from the 18th century to the present. (Meyer, Seyhan, Division III) Not offered in 2005-06.

GERM B308 Political Transformation in Eastern and Western Europe: Germany and Its Neighbors
(Hager, Division I; cross-listed as POLS B308) Not offered in 2005-06.

## GERM B320 Topics in German

 LiteratureCourse content varies. Previous topics include: Romantic Literary Theory and Literary Modernity; Configurations of Femininity in German Literature; and Nietzsche and Modern Cultural Criticism. (Meyer, Schönherr, Seyhan, Division III; cross-listed as COML B320) Not offered in 2005-06.

GERM B321 Advanced Topics in German Cultural Studies
Course content varies. Previous topics include: Masculinity and Femininity in German Cinema; Berlin in the 1920s; Vienna 1900; and Gender in German Literature and Film, 1900-2000. (Hein, Meyer, Schönherr, Seyhan, Division III)

GERM B329 Wittgenstein
(Koggel, Division III; cross-listed as PHIL B329)

GERM B348 Topics in German Art: Picturing Gender
(Meyer, Division III; cross-listed as HART B348)

GERM B380 Topics in Contemporary Art: Visual Culture and the Holocaust (Saltzman. Division III; cross-listed as HEBR B380 and HART B380)

GERM B399 Senior Conference (staff)

GERM B403 Independent Study (staff)

Greek, Latin and Classical Studies

Students may complete a major in Greek, Latin, classical languages or classical culture and society. Students may conplete a minor in Greek, Latin or classical culture and society. Students may complete an M.A. in Latin in the combined A.B./M.A. program.

Faculty
Dobrinka Chiekova, Lecturer
Catherine Conybeare, Associate
Professor (on leave 2005-06)
Radcliffe Edmonds, Assistant Professor and Greek Major Adviser
Julia H. Gaisser, Professor (on leave semester II)
Richard Hamilton, Professor
Russell T. Scott, Professor, Chair and
Latin Major Adviser
Bryce Walker, Instructor
In collaboration with the Department of Classics at Haverford College, the department offers four concentrations in classics: Greek, Latin, classical languages, and classical culture and society. In addition to the sequence of courses specified for each concentration, all students must participate in the Senior Conference, a full-year course. In the first term students study various fields in classics (e.g., law, literary history, philosophy, religion, social history), while in the second term they write a long research paper and present their findings to the group. Senior essays of exceptionally
high quality may be awarded departmental honors at commencement.

Students, according to their concentrations, are encouraged to consider a term of study during junior year at the College Year in Athens or the Intercollegiate Center for Classical Studies in Rome.

## Greek

The sequence of courses in the ancient Greek language is designed to acquaint the students with the various aspects of Greek culture through a mastery of the language and a comprehension of Greek history, mythology, religion and the other basic forms of expression through which the culture developed. The works of poets, philosophers and historians are studied both in their historical context and in relation to subsequent Western thought. In addition, the department regularly offers one or more courses on Greek history, myth, literature or religion for which knowledge of the Greek language is not required.

## Major Requirements

Requirements in the major are, in addition to the classics Senior Conference: 016, 017, 101, 104, 201, 202 and either 305 or 306. Also required are three courses to be distributed as follows: one in Greek history, one in Greek archaeology and one in Greek philosophy. The major is completed with a comprehensive sight translation of Greek to English.

Prospective majors in Greek are advised to take Greek 016 and 017 in the first year. For students entering with Greek there is the possibility of completing the requirements for both A.B. and M.A. degrees in four years. Those interested in pursuing advanced degrees are advised to have a firm grounding in Latin.

## Minor Requirements

Requirements for a minor in Greek are: 016, 017, 101, 104, 201 and 202.

Courses for which a knowledge of Greek is not required are listed under Classical Culture and Society.

## GREK B010, B011 Traditional and

## New Testament Greek

The first part of this year-long course will focus on introducing standard (Classical) Greek grammar through the fall semester. Early in the spring semester the class will split into two sections, with one section reading classical Greek authors such as Xenophon and Plato, and the other reading sections of the New Testament. (Hamilton)

## GREK B016, B017 Reading Greek for the Golden Age

A grammar-based, "bottom-up" introduction to classical Greek, emphasizing mastery of individual letters, nouns and verbs, and finally single sentences supplemented by readings each week from a "top-down" introduction focusing on the paragraph, comprehension of context and Greek idiom, with the goal of reading a dialogue of Plato and a speech by Lysias.

This is a year-long course; both semesters are required for credit. (Hamilton) Not offered in 2005-06.

## GREK B101 Herodotus

Book I of Herodotus' History and weekly prose composition. (Edmonds, Division III)

## GREK B104 Homer

Several books of the Odyssey are read and verse composition is attempted. A short essay is required. (Chiekova, Division III) Not offered in 2005-06.

## GREK B201 Plato and Thucydides

The Symposium and the history of the Sicilian Expedition. (Edmonds, Division III)

## GREK B202 The Form of Tragedy (staff, Division III) Not offered in 200506.

GREK B398, B399 Senior Conference
(Scott, staff)

## GREK B403 Supervised Work

## Latin

The major in Latin is designed to acquaint the student with Roman literature and culture, which are examined both in their classical context and as influences on the medieval and modern world.

## Major Requirements

Requirements for the major are 10 courses: Latin 101, 102, two literature courses at the 200 level, two literature courses at
the 300 level, History 207 or 208, Senior Conference, and two courses to be selected from the following: Latin 205; classical archaeology or Greek at the 100 level or above; French, Italian or Spanish at the 200 level or above. Courses taken at the Intercollegiate Center for Classical Studies in Rome are accepted as part of the major. Latin 205 is required for those who plan to teach. By the end of the senior year, majors will be required to have completed a senior essay and a sight translation from Latin to English.

## Minor Requirements

Requirements for the minor are normally six courses, including one at the 300 level. For nonmajors, two literature courses at the 200 level must be taken as a prerequisite for admission to a 300 -level course. Students who place into 200 -level courses in their first year may be eligible to participate in the A.B./M.A. program. Those interested should consult the department as soon as possible.

Courses for which a knowledge of Latin is not required are listed under Classical Culture and Society.

LATN B001, B002 Elementary Latin
Basic grammar, composition and Latin readings, including classical prose and poetry. (Scott, Walker)

## LATN B003 Intermediate Latin

Intensive review of grammar, reading in classical prose and poetry. For students who have had the equivalent of two years of high school Latin or are not adequately
prepared to take Latin 101. This course meets three times a week with a required fourth hour to be arranged. (Gaisser)

LATN B102 Latin Literature: Livy and Horace
Prerequisite: Latin 101 or placement by the department. (Walker, Division III)

## LATN B201 Advanced Latin

Literature: Roman Comedy
(Gaisser, Division III) Not offered in 2005-06.

## LATN B202 Advanced Latin Literature: The Silver Age

Readings from major authors of the first and second centuries C.E. (Scott, Division III)

## LATN B203 Medieval Latin Literature

Selected works of Latin prose and poetry from the late Roman Empire through the Carolingian Renaissance. (Walker, Division III)

## LATN B205 Latin Style

A study of Latin prose style based on readings and exercises in composition. Offered to students wishing to fulfill the requirements for teacher certification in Latin or to fulfill one of the requirements in the major. Not offered in 2005-06.

## LATN B301 Vergil's Aeneid (Gaisser, Division III)

## LATN B302 Tacitus

(Scott, Division III) Not offered in 200506.

## LATN B303 Lucretius <br> (Conybeare, Division III) Not offered in 2005-06.

## LATN B304 Cicero and Caesar (staff, Division III) Not offered in 200506.

LATN B312 Roman Satire
(Walker, Division III)
LATN B398, B399 Senior Conference (Scott, staff)

## LATN B403 Supervised Work

Classical Languages

The major in classical languages is designed for the student who wishes to divide her time between the two languages and literatures.

## Major Requirements

In addition to the Senior Conference in classical culture and society, the requirements for the major are eight courses in Greek and Latin, including at least two at the 200 level in one language and two at the 300 level in the other, and two courses in ancient history and/or classical archaeology. There are two final examinations: sight translation from Greek to English, and sight translation from Latin to English.

## Classical Culture and Society

The major provides a broad yet individually structured background for students whose interest in the ancient classical world is general and who wish to pursue more specialized work in one or more particular areas.

## Major Requirements

The requirements for the major, in addition to the Senior Conference, are 10 courses distributed as follows:

- two courses in either Latin or Greek beyond the elementary level
- two courses in Greek and/or Roman history
- three courses, at least two of which are at the 200 level or higher, in one of the following concentrations - archaeology and art history, philosophy and religion, literature and the classical tradition, or history and society
- three electives, at least one of which is at the 200 level or higher, drawn from any course listed in or cross-listed with classical culture and society
- Senior Conference (Classical Culture and Society 398-399).


## Minor Requirements

For the minor, six courses drawn from the range of courses counted toward the major are required. Of these, two must be in Greek or Latin at the 100 level and at least one must be in classical culture and society at the 200 level.

## CSTS B110 The World Through Classical Eyes

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." (Donohue, Division III) Not offered in 2005-06.

CSTS B150 Scapegoats, Outlaws and Sinners in Fifth-Century Athens
A study of marginal figures in Athenian literature, religion and politics, emphasizing the context, causes and effects of the profanation of the Eleusinian mysteries in 415 B.C.E. and the trials for impiety of Androcles and Socrates in 400 and 399 B.C.E., and including a survey of the dramatic literature of the period. Topics include the "holy man," once polluted, now powerful; impiety trials; ostracism; beggars and exiles; pollution; sycophants and the court system. Authors include Andocides, Aristophanes, Euripides, Lysias, Sophocles, Thucydides and Xenophon. (Hamilton, Division III) Not offered in 2005-06.

CSTS B156 Roman Law in Action
(Scott, Division III)
CSTS B191 The World of the Greek Heroes: Icon and Narrative
An introduction to Greek mythology comparing the literary and visual representa-
tions of the major gods and heroes in terms of content, context, function and syntax. (Hamilton, Division III) Not offered in 2005-06.

## CSTS B193 The Routes of Comedy

A broad survey, ranging from the prehistory of comedy in such phenomena as monkey laughs and ritual abuse to the ancient comedies of Greece and Rome and their modern descendants, from the Marx Brothers and Monty Python to the Honeymooners and Seinfeld. (Hamilton, Division III) Not offered in 2005-06.

## CSTS B205 Greek History

A study of Greece down to the end of the Peloponnesian War (404 B.C.E.), with a focus on constitutional changes from monarchy through aristocracy and tyranny to democracy in various parts of the Greek world. Emphasis on learning to interpret ancient sources, including historians (especially Herodotus and Thucydides), inscriptions, and archaeological and numismatic materials. Particular attention is paid to Greek contacts with the Near East; constitutional developments in various Greekspeaking states; Athenian and Spartan foreign policies; and the "unwritten history" of nonelites. (Edmonds, Division I or III; cross-listed as HIST B205)

## CSTS B206 Society, Medicine and Law in Ancient Greece

An introduction to the social context of Greek history in the Classical and Hellenistic periods. Topics include the Greek household, occupations, slavery, literacy and education, sexuality, ancient medical practices, and the working of law in the
polis. Ancient sources are emphasized, including orators, technical writers, inscriptions and papyri. (Chiekova, Division III; cross-listed as HIST B206) Not offered in 2005-06.

## CSTS B207 Early Rome and the Roman Republic

The history of Rome from its origins to the end of the Republic with special emphasis on the rise of Rome in Italy, the Hellenistic world and the evolution of the Roman state. Ancient sources, literary and archaeological, are emphasized. (Scott, Division III; cross-listed as HIST B207) Not offered in 2005-06.

## CSTS B208 The Roman Empire

Imperial history from the principate of Augustus to the House of Constantine with focus on the evolution of Roman culture as presented in the surviving ancient evidence, both literary and archaeological. (Scott, Division I or III; cross-listed as HIST B208) Not offered in 2005-06.

## CSTS B209 Eros in Ancient Greek Culture

This course explores the ancient Greeks' ideas of love, from the interpersonal loves between people of the same or different genders to the cosmogonic Eros that creates and holds together the entire world. The course examines how the idea of eros is expressed in poetry, philosophy, history and the romances. (Edmonds)

CSTS B211 Masks, Madness and Mysteries in Greek Religion
A review of ancient evidence, both literary and archaeological, pertaining to the cults
of Demeter and Dionysus practiced in ancient Greece, followed by an examination of various modern theories that have been proposed to illuminate the significance of the rites. (Hamilton)

## CSTS B212 Ancient Magic

Bindings and curses, love charms and healing potions, amulets and talismans - from the simple spells designed to meet the needs of the poor and desperate to the complex theurgies of the philosophers, the people of the Greco-Roman world made use of magic to try to influence the world around them. This course will examine the magicians of the ancient world and the techniques and devices they used. We shall consider ancient tablets and spell books as well as literary descriptions of magic in the light of theories relating to the religious, political and social contexts in which magic was used. (Edmonds, Division III) Not offered in 2005-06.

## CSTS B220 Writing the Self

What leads people to write about their lives? Do women and men present themselves differently? Do they think different issues are important? How do they claim authority for their thoughts and experiences? Readings will include Abelard and Heloise's Letters, Augustine's Confessions, Guibert de Nogent's A Monk's Confession, Patrick's Confession, Perpetua's Passion, Radegund's Fall of Thuringia, and a collection. Medieval Writings on Female Spirituality. (Conybeare, Division III; cross-listed as COML B220) Not offered in 2005-06.

CSTS B236 The Ancient Novel
A survey of the Greek and Roman prose fiction commonly referred to as the ancient novel. Reading these works in translation we will examine issues surrounding the rise of the genre and its cultural context, compare methods of characterization and narrative structure, investigate the relationship between historicity and fictionality, and consider connections between the ancient novel and its successors. Authors include: Apuleius, Chariton, Heliodorus, Longus, Petronius and Achilles Tatius. (Walker; cross-listed as COML B236)

CSTS B270 Classical Heroes and Heroines
(Gaisser, Division III; cross-listed as
COML B270) Not offered in 2005-06.
CSTS B275 Interpreting Mythology
(Edmonds, Division III; cross-listed as COML B275) Not offered in 2005-06.

CSTS B324 Roman Architecture
(Scott, Division III; cross-listed as ARCH B324, CITY B324 and HART B324) Not offered in 2005-06.

CSTS B398 Senior Conference (staff)

CSTS B403 Supervised Work

## Growth and Structure of Cities

Students may complete a major or minor in growth and structure of cities. Within the major, students may complete a concentration in environmental studies. Students may enter the 3-2 Program in City and Regional Planning, offered in cooperation with the University of Pennsylvania.

## Faculty

Juan Manuel Arbona, Assistant Professor (on leave 2005-06)
Jeffrey A. Cohen, Senior Lecturer
Carola Hein, Associate Professor (on leave 2005-06)
Gary W. McDonogh, Professor and Director
Sam Olshin, Visiting Studio Critic
Daniela Sandler, Instructor
Daniela Holt Voith, Senior Lecturer
The interdisciplinary growth and structure of cities major challenges the student to understand the dynamic relationship of urban spatial organization and the built environment to politics, economics, cultures and societies. Core introductory classes present analytic approaches that explore the changing forms of the city over time and analyze the variety of ways through which men and women have recreated urban life through time and across cultures. With these foundations, students pursue their interests through classes in planning, architecture, urban social and economic relations, urban history and the environmental conditions of urban life.

Advanced seminars bring together these discussions by focusing on specific cities and topics.

## Major Requirements

A minimum of 15 courses ( 11 courses in Cities and four allied courses) are required to complete the major. Four introductory courses (185, 190, 229 and an architectural survey course - 253,254 or 255 ) balance formal and sociocultural approaches to urban form and the built environment, and introduce crosscultural and historical comparison of urban development. These courses should be completed as early as possible in the first and second years; at least two of them must be taken by the end of the first semester of the sophomore year.

In addition to these introductory courses, each student selects six elective courses within the Cities Program, including cross-listed courses. At least two must be at the 300 level. In the senior year, a third advanced course is required. Most students join together in a research seminar, 398. 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.

Finally, each student must select four courses that identify additional expertise to complement her work in the major. These may include special skills in design, language or regional interests. Any minor or second major also fulfills this requirement.

Both the Cities Program electives and the four or more related courses outside the program must be chosen in close consultation with the major advisers in order to create a strongly coherent sequence and focus. Note that those cities courses that are cross-listed with other departments or originate in them can be counted only once in the course selection, although they may be either allied or elective courses.

Students should also note that many courses in the program are given on an alternateyear basis. Many carry prerequisites in art history, economics, history, sociology and the natural sciences. Hence, careful planning and frequent consultations with the major advisers are particularly important. Special arrangements are made for double majors.

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

Architecture and Architectural History. Students interested in architectural and urban design should pursue the studio courses $(226,228)$ in addition to regular introductory courses. They should also select appropriate electives in architectural history and planning to provide a broad exposure to architecture over time as well as across cultural traditions. Affiliated courses in physics and calculus meet requirements of graduate programs in architecture; theses may also be planned to incorporate design
projects. Those students focusing more on the history of architecture should consider related offerings in the Departments of history of art and classical and Near Eastern archaeology, and should carefully discuss selections with regard to study abroad in the junior year. Those preparing for graduate work should also make sure that they develop the requisite language skills. These students should consult as early as possible with Carola Hein, Daniela Voith or Jeffrey Cohen, especially if they wish to pursue graduate study outside of the United States.

Planning and Policy. Students interested in planning and policy may wish to consider the 3-2 Program in City and Regional Planning offered with the University of Pennsylvania (see page 36). Their study plan should reflect a strong background in economics as well as relevant courses on social divisions, politics and policymaking, and ethics. As in other areas of interest, it is important that students also learn to balance their own experiences and commitments with a wider comparative framework of policy and planning options and implementation. This may include study abroad in the junior year as well as internships. Students working in policy and planning areas may consult with Juan Arbona or Gary McDonogh.

Additional trajectories have been created by students who coordinate their interests in cities with law, mass media, medicine, public health or the fine arts, including photography, drawing and other fields. The Cities Program recognizes that new issues and concerns are emerging in many areas.

These must be met with solid foundations in the data of urban space and experience, cogent choices of methodology and clear analytical writing and visual analysis. Early and frequent consultation with major advisers and discussion with other students in the major are an important part of the Cities Program.

## Minor Requirements

Requirements for the minor in the Cities Program are at least two out of the four required courses and four cities electives, of which two must be at the 300 level. Senior Seminar is not mandatory in fulfilling the cities minor.

## Concentration in Environmental Studies

The Cities Program participates with other departments in offering a concentration in environmental studies (see page 151). Students interested in environmental policy, action or design should take Geology 103 as a laboratory science and choose relevant electives such as Economics 234 or Political Science 222. They should also pursue appropriate science courses as affiliated choices and consider their options with regard to study abroad in the junior year. Consultation with Gary McDonogh and the director of environmental studies is advised early in the planning of courses.

## 3-2 Program in City and Regional Planning

Occasionally students 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 the major advisers early in their sophomore year (see page 36).

## Volunteerism and Internships

The Cities Program promotes student volunteer activities and student internships in architectural firms, offices of urban affairs and regional planning commissions. Students wishing to take advantage of these opportunities should consult with the advisers and the Praxis Office before the beginning of the semester.

## Study Abroad and Off Campus

Programs for study abroad or off campus are also encouraged, within the limits of the Bryn Mawr and Haverford rules and practices. In general, a one-semester program is preferred, but exceptions are made. The Cities Program regularly works with off-campus and study-abroad programs that are strong in architectural history, planning and design as well as those that allow students to pursue social and cultural interests. Students interested in spending all or part of their junior year away must consult with the major advisers and appropriate deans early in their sophomore year.

Haverford and Swarthmore courses may fulfill electives in the Cities Program. They may be identified in course listings and discussed with the major advisers. Courses at the University of Pennsylvania may sometimes be substituted for certain electives in the Cities Program; these should be examined in conjunction with the major advisers.

## CITY B103 Earth System Science and

 the Environment(Barber, Division IIL; cross-listed as GEOL B103)

## CITY B180 Introduction to Urban Planning

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. (staff, Division I) Not offered in 2005-06.

## CITY B185 Urban Culture and Society

 The techniques of the social sciences as tools for studying historical and contemporary cities. Topics include political-economic organization, conflict and social differentiation (class, ethnicity and gender), and cultural production and representation. Both qualitative and quantitative methods are explored. Philadelphia features prominently in discussion, reading and exploration. (McDonogh, Division I; cross-listed as ANTH B185)
## CITY B190 The Form of the City:

Urban Form from Antiquity to the Present
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. (Cohen, Sandler, Division I or III; cross-listed as ANTH B190 and HART B190)

## CITY B203 Ancient Greek Cities and

 Sanctuaries(Wright, Division III; cross-listed as ARCH B203.) Not offered in 2005-06.

## CITY B205 Social Inequality

(Karen, Division I; cross-listed as SOCL B205)

CITY B206 Statistical Methods in Economics
(Redenius, Ross, Quantitative Skills; cross-listed as ECON B203)

CITY B207 Topics in Urban Studies: Philadelphia Architecture
This course involves systematic intermedi-ate-level study of urban issues and topics aimed at polishing skills in data collection, analysis and writing. Such study may focus on particular cities, sets of institutions across cities or global issues such as development, immigration or mass media. In 2006, the class will focus on the urbanism and architecture of Philadelphia, from colonial origins to the present (Cohen, Division I or III)

## CITY B209 Medical Anthropology

(Pashigian, Division I; cross-listed as ANTH B210) Not offered in 2005-06.

CITY B212 Medieval Architecture
(Kinney, Division III; cross-listed as HART B212) Not offered in 2005-06.

CITY B213 Taming the Modern Corporation
(Ross, Division I; cross-listed as ECON B213)

CITY B214 Public Finance
(Newburger, Division I; cross-listed as ECON B214) Not offered in 2005-06.

## CITY B217 Research Design and

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

CITY B218 Globalization and the City 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. (Arbona, Division I) Not offered 2005-06.

CITY B221 U.S. Economic History (Redenius, Division I; cross-listed as ECON B221)

CITY B222 Introduction to Environmental Issues: Movements, Controversies and Policy-Making in Comparative Perspective (Hager, Division I; cross-listed as POLS B222) Not offered in 2005-06.

CITY B226 Introduction to Architectural and Urban Design
An introduction to the principles of architectural and urban design. Prerequisites: some history of art or history of architecture and permission of instructor. (Olshin, Voith, Division III)

CITY B227 Topics in Modern Planning An introduction to planning that focuses, depending on year and professor, on a general overview of the field or on specific cities or contexts. (Hein, Division I; crosslisted as HART B227)

## CITY B228 Problems in Architectural

 DesignA continuation of Cities 226 at a more advanced level. Prerequisites: Growth and Structure of Cities 226 or other comparable design work and permission of instructor. (Olshin, Voith, Division III)

## CITY B229 Comparative Urbanism

An examination of approaches to urban development that focuses on intensive study and systematic comparison of individual cities through an original research paper. Themes and cities vary from year to year, although a variety of cultural areas are examined in each offering. In 2006, for example, the class examines growth beyond cities - suburbs, "grand ensembles," new towns, gated communities, shantytowns and sprawl. Case materials will come from

Buenos Aires, Hong Kong, Los Angeles, Paris and Philadelphia (Levittown). (McDonogh, Division I; cross-listed as ANTH B229 and EAST B229)

CITY B230 Topics in German Cultural Series: Kafka's Prague
(Kenosian, Pavsek, Division I or III; cross-listed as GERM B223) Not offered in 2005-06.

## CITY B232 Latin American Urban

## Development

A theoretical and empirical analysis in a historical setting of the factors that have shaped the urban development of Latin America, with emphasis on the relationship between political and social change and economic growth. In 2006, the class will focus on Brazilian modernism in architecture, literature and other areas (Sandler, Division III)

CITY B234 Environmental Economics (Ross, Division I; cross-listed as ECON B234)

CITY B237 Urbanization in Africa
(Ngalamulume, Division I or III; crosslisted as HIST B237)

CITY B242 Urban Field Research Methods
(Takenaka, Division I; cross-listed as ANTH B242 and SOCL B242)

CITY B246 Women's Narratives on Modern Migrancy, Exile, and Diasporas
(Seyhan, Division III; cross-listed as ANTH B246, COML B245 and GERM B245) Not offered in 2005-06.

## CITY B248 Modern Middle Eastern

 Cities(Harrold; cross-listed as HEBR B248 and POLS B248)

CITY B249 Sociological Perspectives on Asian American Communities
(Takenaka, Division I; cross-listed as
ANTH B249 and SOCL B249)

## CITY B253 Survey of Western

Architecture
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. (Cast, Hein, Division III; cross-listed as ANTH B254, HIST B253 and HART B253) Not offered in 2005-06.

## CITY B254 History of Modern Architecture

A survey of the development of modern architecture since the 18th century, with principal emphasis on the period since 1890. (Sandler, Division III; cross-listed as HART B254)

## CITY B255 Survey of American

## Architecture

An examination of forms, figures, contexts and imaginations in the construction of the American built environment from colonial times to the present. Materials in and from Philadelphia figure as major resources. (Cohen, Division III; cross-listed as HART B255)

CITY B266 Schools in American Cities (Cohen, Division I; cross-listed as EDUC B266 and SOCL B266)

CITY B267 Philadelphia, 1763 to

## Present

(Shore, Division I or III; cross-listed as HIST B267)

CITY B270 Japanese Architecture and Planning
The built environment in Japan does not resemble its American or European counterparts, leading visitors to characterize it as visually chaotic even as recent observers praise its lively traditional neighborhoods. This course explores characteristics of Japanese cities, their history and presence, and examine the particular cultural, political, economic and social contexts of urban form in Japan. (Hein, Division III; cross-listed as EAST B270 and HART B270) Not offered in 2005-06.

CITY B302 Greek Architecture
(Wright, Division III; cross-listed as ARCH B302 and HART B301) Not offered in 2005-06.

CITY B305 Ancient Athens:
Monuments and Art
(Miller-Collett; cross-listed as ARCH B305)

CITY B306 Advanced Fieldwork Techniques: Places in Time
A seminar and workshop for research into the history of place, with student projects presented in digital form on the Web. Architectural and urban history, research methods and resources for probing the history of place, the use of tools for creating

Web pages and digitizing images, and the design for informational experiences are examined. (Cohen, Division I or III)

CITY B312 Medieval Cities
(Easton, Division III; cross-listed as HART B311)

CITY B314 Topics in Social Policy (Newburger, Division I; cross-listed as ECON B314)

CITY B316 Trade and Transport in the Ancient World
(staff, Division III; cross-listed as ARCH B316) Not offered in 2005-06.

CITY B319 Advanced Topics in German Cultural Studies
(Meyer, Division I; cross-listed as GERM B321)

CITY B321 Technology and Politics (Hager; cross-listed as POLS B321)

CITY B324 Roman Architecture (Scott, Division III; cross-listed as ARCH B324, CSTS B324 and HART B324) Not offered in 2005-06.

CITY B325 Topics in Social History: Comparative History of Advertising in the U.S. and Europe Between 1850 and 1920
(Shore, Division I or III; cross-listed as HIST B325) Not offered in 2005-06.

CITY B330 Comparative Economic Sociology: Societies of the North and South
(Osirim; cross-listed as SOCL B330) Not offered in 2005-06.

CITY B331 Palladio and NeoPalladianism
(Cast; cross-listed as HART B331) Not offered in 2005-06.

CITY B334 Seminar on the Economics of Poverty and Discrimination
(Newburger, Division I; cross-listed as ECON B324) Not offered in 2005-06.

CITY B335 Elite and Popular Culture
An examination of urban culture as a ground for conflict, domination and resistance through both theoretical and applied analysis of production, texts, readings and social action within a political/economic framework. In 2004, for example, this course dealt with the city and mass media, including imagery, ownership, audience and reinterpretation as well as critical cultural policy. Materials were drawn from U.S. and global media, from comics to the Internet, with special emphasis on film and television. (McDonogh, Division I; cross-listed as ANTH B335) Not offered in 2005-06.

CITY B338 The New African
Diaspora: African and Caribbean Immigrants in the U.S.
(cross-listed as SOCL B338) Not offered in 2005-06.

## CITY B348 Culture and Ethnic Conflict

(Ross; cross-listed as POLS B348)

## CITY B351 The Phoenicians

(Turfa, Division III; cross-listed as ARCH B351)

CITY B360 Topics in Urban Culture and Society
(Hein, Division I or III; cross-listed as ANTH B359, GERM B321 and HART B359) Not offered in 2005-06.

CITY B365 Techniques of the City: Models, Codes and Citizenship
Drawing on case studies and theoretical materials, this seminar asks how good and bad cities come to be defined, explores the culture of those who define the city and consider the impact of gender, sexuality, race, immigration and power relations on such mappings. Students will also meet with planners and develop charette projects in order to explore how we can move critically beyond our models. Enrollment limited to 15 by permission of the instructor. Preference given to majors. (McDonogh, Division I)

CITY B377 Topics in Modern
Architecture: Berlin
(Sandler, Division III; cross-listed as HART B377)

CITY B378 Formative Landscapes:
The Architecture and Planning of American Collegiate Campuses
An exploration of the architecture, planning and visual rhetoric of American collegiate campuses from their early history to the present. Historical consideration of design trends and projected imageries will be complemented by student exercises involving documentary research on design genesis and contexts, discussion of critical reception, evidence of contemporary
performance and perception, and digital presentation. (Cohen, Division III) Not offered in 2005-06.

CITY B397 Senior Seminar in Environmental Studies
(staff; cross-listed as ANTH B397, BIOL B397 and GEOL B397)

## CITY B398 Senior Seminar

An intensive research seminar. (Sandler, McDonogh)

CITY B399 Senior Thesis
An intensive research seminar. (staff) Not offered in 2005-06.

CITY B403 Independent Study

CITY B450 Internships

## Hebrew And Judaic Studies

Faculty
Amiram Amitai, Lecturer
Deborah Harrold, Lecturer
Hebrew language instruction is available at Bryn Mawr on the elementary level. At Haverford, Judaic studies courses are offered by the department of religion. Bryn Mawr also offers several courses which complement Haverford's offerings in Judaic studies. All of these courses are listed in the Tri-Co Course Guide under the heading "Hebrew and Judaic Studies."

HEBR B001, B002 Elementary Hebrew This course prepares students for reading classical religious texts as well as modern literary work. It covers grammar, composition and conversation with primary emphasis on fluency in reading as well as the development of basic conversational skills. This is a year-long course. (Amitai)

HEBR B211 Primo Levi, the Holocaust and Its Aftermath
(Patruno, Division III; cross-listed as COML B211 and ITAL B211)

HEBR B233 History, Politics and the Search for Security: Israel and The Palestinians
(Harrold, Division I; cross-listed as HIST B290 and POLS B233) Not offered in 2005-06.

## HEBR B248 Modern Middle East Cities <br> (Harrold; cross-listed as CITY B248 and POLS B248)

## HEBR B283 Introduction to the Politics of the Modern Middle East and North Africa

(Harrold, Division I; cross-listed as HIST B283 and POLS B283)

HEBR B380 Topics in Contemporary Art: Visual Culture and the Holocaust (Saltzman, Division III; cross-listed as GERM B380 and HART B380)

# Hispanic and HispanicAmerican Studies 

Students may complete a concentration in Hispanic and Hispanic-American studies.

## Coordinators:

Lázaro Lima
Enrique Sacerio-Garí (on leave semester II)

The program is designed for students interested in a comprehensive study of the society and culture of Spanish America or Spain or both. Students supplement a major in other departments with (1) Spanish 240: Hispanic Culture and Civilization, the core course for the concentration, (2) allied courses outside their major department dealing with Hispanic and Latino topics and (3) a Senior Essay focusing on a topic that cuts across all the major areas involved.

Concentration Requirements

1. Competence in Spanish, to be achieved no later than the junior year. This competence may be attested either by a score of at least 690 on the Spanish Achievement test of the College Entrance Examination Board or by the completion of a course above the intermediate level with a grade of at least 2.0.
2. Spanish 240 and at least five other courses outside the major department and approved by the program coordinator. Students should consult with their advisers as to which courses are
most appropriate for their major and special interests.
3. A long paper or an independent project on Spain or Spanish America, to be completed in either semester of the junior year or the first semester of the senior year as part of the work for one of the courses in the major. Topics must be approved and the paper read by both the major department and the Hispanic studies coordinator.
4. A senior essay supervised by a faculty member in one of the departments participating in the concentration.

The Hispanic and Hispanic-American Studies concentration is under the general supervision of one member of the Department of Spanish. Students are admitted into the concentration at the end of their sophomore year after the submission of a plan of study, worked out by the student and her major department, that meets the requirements of the concentration.

## History

Students may complete a major or minor in history.

## Faculty

Ignacio Gallup-Diaz, Associate Professor
(on leave 2005-06)
Holly Grieco, Lecturer
Madhavi Kale, Associate Professor
Mara Lazda, Lecturer
Kalala Ngalamulume, Associate
Professor (on leave 2005-06)
Elliott Shore, Professor
Sharon R. Ullman, Associate Professor and Chair

A primary aim of the Department of History is to deepen students' sense of time as a factor in cultural diversity and change. Our program of study offers students the opportunity to experience the past through attention to long-range questions and comparative history.

History 101, (taken preferably before the junior year) aims to address specific disciplinary concerns and objectives as well as general College-wide curricular needs by introducing students to the study of history as a field. Within this framework, each instructor highlights specific themes, periods, traditions, texts and contexts to introduce students to the discipline of history.

In the 200-level courses, the department offers students the opportunity to pursue interests in specific cultures, regions, policies or societies, and enable them to experience a broad array of approaches to history.

The department's 300-level focused topical courses build on students' knowledge gained in 200-level classes and gives them the chance to work in a small seminar setting.

The capstone sequence of History 395 and 398 is a year long thesis project. In the fall, senior majors work together to hone their research skills as they prepare to write their own thesis - a process they complete in the spring.

## Major Requirements

Eleven courses are required for the history major, three of which must be taken at Bryn Mawr. These are The Historical Imagination (History 101), which majors are encouraged to take before their junior year; and the capstone sequence - Exploring History (History 395) and the Senior Thesis (History 398), which are taken in the senior year.

The remaining eight history courses may range across fields or concentrate within them, depending on how a major's interests develop. Of these, at least two must be seminars at the 300 level offered by the Departments of History at Bryn Mawr, Haverford or Swarthmore Colleges or the University of Pennsylvania. (It is strongly recommended that at least one of these advanced courses be taken with Bryn Mawr history faculty, as it is with one of them that majors will be working on their senior thesis.)

Only two 100-level courses may be counted toward the major. Credit toward the major is not given for either the Advanced

Placement examination or the International Baccalaureate.

## Honors

Majors with cumulative GPAs of at least 2.7 (general) and 3.5 (history) at the end of their senior year, and who achieve a grade of at least 3.7 on their senior thesis, qualify for departmental honors.

## Minor Requirements

The requirement for the minor is six courses, at least four of which must be taken in the Bryn Mawr Department of History, and include the following - History 101, at least one 300-level course within the department, and two additional history courses within the department.

HIST B101 The Historical Imagination Explores some of the ways people have thought about, represented and used the past across time and space. Introduces students to modern historical practices and debates through examination and discussion of texts and archives that range from scholarly monographs and documents to monuments, oral traditions and other media. Majors are required to take this course, preferably before the junior year. (Kale, Division I or III)

## HIST B131 Chinese Civilization

(Kim, Division I or III; cross-listed as EAST B131)

HIST B200 European Expansion and Competition: History of Three Worlds
The aim of this course is to provide an understanding of the way in which peoples, goods and ideas from Africa, Europe and
the Americas came together to form an interconnected Atlantic World system. The course is designed to chart the manner in which an integrated system was created in the Americas in the early modern period, rather than to treat the history of the Atlantic World as nothing more than an expanded version of North American, Caribbean or Latin American history. (Gal-lup-Diaz, Division I or III) Not offered in 2005-06.

HIST B202 American History, 1850 to the Present
Covering U.S. history from Civil War to the present, this course is designed to provide an overview of the central political and social changes that have produced the modern American nation. (Ullman, Division I or III) Not offered in 2005-06.

## HIST B203 High Middle Ages

An introduction to the major cultural changes in the societies of Europe and the Mediterranean basin from ca. 1000 C.E. to 1348. (Grieco, Division I or III)

HIST B205 Greek History
(Edmonds, Division I or III; cross-listed as CSTS B205)

## HIST B206 Society, Medicine and Law in Ancient Greece

(Chiekova, Division III; cross listed as
CSTS B206) Not offered in 2005-06.
HIST B207 Early Rome and the
Roman Republic
(Scott, Division III; cross-listed as CSTS B207) Not offered in 2005-06.

## HIST B208 The Roman Empire

(Scott, Division I or III; cross-listed as CSTS B208) Not offered in 2005-06.

## HIST B226 Europe in the 20th

Century: From Catastrophe to Coexistence
This course will explore the history of Europe in this century from a number of vantage points and through themes that will involve going backwards and forwards in time. This will allow us to revisit issues or periods from different perspectives, and to study the history of issues that may currently be in the news. Topics covered will include Europe's 20th-century wars; revolution in Soviet Russia and counter-revolution in Fascist Italy and Nazi Germany; Europe's "others," including Jews, colonial peoples and post-imperial diasporas; welfare states; the 1960s; and post-Cold War Europe. (staff, Division I or III) Not offered in 2005-06.

## HIST B235 Africa to 1800

The course explores the development of African societies to 1800 . Themes will be drawn from across the continent. We will discuss issues related to the creation, maintenance or destruction of a social order (small-scale societies and states), production, social reproduction, explanations, identities, conflicts, external contacts and social change, and examine selective narratives, documents, debates and films. (staff, Division I or III)

## HIST B237 Urbanization in Africa

The course examines the cultural, environmental, economic, political and social factors that contributed to the expansion
and transformation of preindustrial cities, colonial cities and cities today. We will examine various themes, such as the relationship between cities and societies, migration and social change, urban space, health problems, city life and women. (Ngalamulume, Division III; cross-listed as CITY B237)

## HIST B241 Twentieth Century

American Society Between the Wars
(Ullman, Division III) Not offered in 200506.

## HIST B242 American Politics and

 Society: 1945 to the PresentThis is a lecture course focusing on America after WWII that explores the political, social and cultural factors creating recent American history. Special attention will be paid to social movements and foreign policy. (Ullman, Division I or III)

HIST B243 Atlantic Cultures: Free
African Communities in the New World
An exploration of the process of self-emancipation by slaves, and an investigation of the establishment of autonomous African communities throughout the Americas. Taking a comparative framework, the course examines developments in North America, South America, the Caribbean and Brazil. (Gallup-Diaz, Division I or III) Not offered in 2005-06.

## HIST B245 Recent U.S. History: <br> Disease and Modern Life

(Ullman, Division I or III) Not offered in 2005-06.

## HIST B247 Topics in German Cultural

 Studies(Kenosian, Pavsek, Division I or III; crosslisted as GERM B223)

## HIST B248 German Histories

Introduction to the history of modern Germany with emphasis on social and political themes, including nationalism, liberalism, industrialization, women and feminism, labor movements, National Socialism, partition and postwar Germany, East and West. (staff, Division III) Not offered in 2005-06.

## HIST B252 Introduction to Korean Culture

(Kim, Division III; cross-listed as EAST B234) Offered at Swarthmore, not Bryn Mawr, in 2005-06.

## H1ST B253 Survey of Western

Architecture
(Cast, Hein, Division III; cross-listed as ANTH B254, CITY B253 and HART B253) Not offered in 2005-06.

## HIST B258 British Empire: Imagining Indias

This course considers ideas about and experiences of "modern" India, i.e., India during the colonial and post-Independence periods (roughly 1757-present). While "India" and "Indian history" along with "British empire" and "British history" will be the ostensible objects of our consideration and discussions, the course proposes that their imagination and meanings are continually mediated by a wide variety of institutions, agents and analytical categories (nation, religion, class, race, gender,
to name a few examples). The course uses primary sources, scholarly analyses and cultural productions to explore the political economies of knowledge, representation and power in the production of modernity. (Kale, Division III)

HIST B263 Impact of Empire: Britain 1858-1960
(Kale, Division III) Not offered in 200506.

HIST B264 Passages from India: 1800Present
An exploration of the contested terrains of identity, authenticity and cultural hybridity, focusing on migration from India to various parts of the world during the 19th and 20th centuries. The significance of migration overseas for anti-colonial struggles in India and elsewhere in the British Empire, and for contested, often conflicting, notions of India and nationhood during and after colonial rule is also considered. (Kale, Division I or III)

HIST B265 Colonial Encounters in the Americas, 1492-1800
The course explores the confrontations, conquests and accommodations that formed the "ground-level" experience of day-to-day colonialism throughout the Americas. The course is comparative in scope, examining events and structures in North, South and Central America, with particular attention paid to indigenous peoples and the nature of indigenous leadership in the colonial world of the 18th century. (Gallup-Diaz, Division I or III) Not offered in 2005-06.

HIST B267 Philadelphia, 1682 to Present
This course will focus on the intersection of the sense of Philadelphia as it is popularly understood and the Philadelphia that we can reconstruct individually and together using scholarly books and articles, documentary and popular films and novels, visual evidence, and visits to the chief repositories of the city's history. We will analyze the relationship between the official representations of Philadelphia and their sources and we will create our own history of the city. Preference given to junior and senior growth and structure of cities and history majors and those students who were previously lotteried out of the course. (Shore, Division I or III; crosslisted as CITY B267)

HIST B277 Religion and Dissent in the Middle Ages
Explores religious movements during the Middle Ages. Some were incorporated into the church, whereas others were condemned as heretical. Examines the origins of these groups and motivations for their religious beliefs to determine why the church embraced some and condemned others. (Grieco, Division I or III)

HIST B283 Introduction to the Politics of the Modern Middle East and North Africa
(Harrold, Division I; cross-listed as HEBR B283 and POLS B283)

HIST B290 History, Politics and the
Search for Security: Israel and the Palestinians
(Harrold, Division I; cross-listed as HEBR B233 and POLS B233) Not offered in 2005-06.

HIST B291 La Civilisation française
(Mahuzier, Division III; cross-listed as FREN B291) Not offered in 2005-06.

HIST B296 Science in Western Society Since 1500
(staff, Division I or III) Not offered in 2005-06.

## HIST B303 Topics in American Social History

Topics vary. Recent topics have included medicine, advertising and history of sexuality. In 2005-06, the topics will be "Civil War and Memory" (fall) and "The 1950s" (spring). (Ullman, Division I or III)

## HIST B318, B319 Topics in Modern

 European HistoryTopics vary. Recent topics have included: Marxism and History; Socialist Movements and Socialist Ideas. In 2005-06, the topics will be "Life Under Communism in 20th-Century Europe" (fall) and "Population Politics in Modern Europe" (spring). (Lazda, Division I or III)

HIST B325 Topics in Social History
(Shore, Ullman, Division I or III) Not offered in 2005-06.

## HIST B326 Topics in Chinese History and Culture: Modern Chinese Intellectual Hhistory

(staff, Division III; cross-listed as EAST B325)

HIST B327 American Colonial
History: Conquest Colonization and Conversion
This course explores the complex nature of the "religious conquest" of indigenous peoples that was an adjunct process to the physical conquest of territory in the early modern period (1500-1800). We will investigate the indigenous religious systems as they existed before contact, the modes of Christianity that the European missionaries worked to impose upon the "conquered," and the nature of the complicated forms of ritual practice and spirituality that arose in the communities of those peoples that survived the conquest. (Gallup-Diaz; cross-listed as ANTH B327) Not offered in 2005-06.

## HIST B337 Topics in African History

Topics vary. Recent topics have included
Social History of Medicine; Women and Gender; and Witcheraft Ideology, Fears, Accusations and Trials. Please see Tri-Co Course Guide for 2005-06 topics. (staff, Division I or III)

## HIST B357 Topics in British Empire

This course will focus on gender in the material and discursive production, consolidation and defense (from the 17th century to the present) of both the British empire and the "imagined communities" that constitute such contemporary nations
as the United Kingdom; the republics of India, Trinidad and Tobago, and Ireland; and the United States. (Kale, Division I or III)

## HIST B368 Topics in Medieval History

Topics vary. The 2005-06 topics will be: "Travel and Travelers in the Middle Ages" (fall) and "Sex and Gender in Medieval Europe" (spring). (Grieco, Division I or III)

## HIST B371 Topics in Atlantic History: The Early Modern Pirate in Fact and Fiction

This course will explore piracy in the Americas in the period 1550-1750. We will investigate the historical reality of pirates and what they did, and the manner in which pirates have entered the popular imagination through fiction and films. Pirates have been depicted as lovable rogues, anti-establishment rebels and enlightened multiculturalists who were skilled in dealing with the indigenous and African peoples of the Americas. The course will examine the facts and the fictions surrounding these important historical actors. (Gallup-Diaz) Not offered in 2005-06.

## HIST B395 Exploring History

An intensive introduction to theory and interpretation in history through the discussion of exemplary historiographical debates and analyses selected by the instructor. The coursework also includes research for and completion of a prospectus for an original research project. These two goals prepare senior majors for their own historical production in the spring semester,
when the senior thesis is completed and presented. Enrollment is limited to senior history majors. (Kale, Division III)

## HIST B398 Senior Thesis

The second semester of a year-long sequence. This semester students research and write a thesis on a topic of their choice. Enrollment is limited to senior history majors. (Ullman)

## HIST B403 Supervised Work

Optional independent study, which requires permission of the instructor and the major adviser.

## History of Art

Students may complete a major or minor in history of art.

## Faculty

David J. Cast, Professor and Chair (on leave semester II)
Martha Easton, Lecturer
Christiane Hertel, Professor and Major Adviser
Homay King, Assistant Professor (on leave 2005-06)
Dale Kinney, Professor
Steven Z. Levine, Professor
Gridley McKim-Smith, Professor (on leave semester II)
Lisa Saltzman, Associate Professor and Acting Chair, semester II
Suzanne Spain, Lecturer
The curriculum in history of art immerses students in the study of visual culture. Structured by a set of evolving disciplinary concerns, students learn to interpret the visual through methodologies dedicated to the historical, the material, the critical and the theoretical. Majors are encouraged to supplement courses taken in the department with history of art courses offered at Swarthmore and the University of Pennsylvania. Majors are also encouraged to study abroad for a semester.

## Major Requirements

The major requires eleven units, approved by the major adviser. A usual sequence of courses would include at least one 100level course, four 200-level courses, two

300 -level courses, and participation in senior conference. In the course of their departmental studies, students are strongly encouraged to take courses across media and areas, and in at least three of the following fields of study: Ancient and Medieval, Renaissance and Baroque, Modern and Contemporary, Film, and non-Western.

With the approval of the major 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.

## Honors

Seniors whose major average at the beginning of the spring semester is 3.7 or higher will be invited to write an honors thesis instead of the senior paper.

## Minor Requirements

A minor in history of art requires six units: one or two 100 -level courses and four or five others selected in consultation with the major adviser.

## HART B100 The Stuff of Art

(Burgmayer, Division III; cross-listed as CHEM B100)

## HART B104 The Classical Tradition

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. (Cast, Division III)

## HART B105 Poetry and Politics in Landscape Art

An introduction to the representation and perception of nature in different visual media, with attention to such issues as nature and utopia; nature and violence; natural freedom; and the femininity of nature. (Hertel, Division III)

## HART B107 Self and Other in the Arts of France, 1500-2000

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. (Levine, Division III)

## HART B108 Women, Feminism and History of Art

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. (Easton, Division III)

## HART B110 Identification in the Cinema

An introduction to the analysis of film through particular attention to the role of the spectator. (Horne, Division III)

## HART B190 The Form of the City:

Urban Form from Antiquity to the Present
(Hein, Division I or III; cross-listed as ANTH B190 and CITY B190)

## HART B204 Greek Sculpture

(Webb, Division III; cross-listed as ARCH B205) Not offered in 2005-06.

HART B205 Introduction to Film
(Horne, Division III; cross-listed as ENGL B205)

## HART B206 Hellenistic and Roman Sculpture

(Donohue, Division III; cross-listed as ARCH B206) Not offered in 2005-06.

HART B210 Introduction to Western
Medieval Art
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. (Easton, Division III)

## HART B212 Medieval Architecture

A survey of medieval building types, including churches, mosques, synagogues, palaces, castles and government structures, from the fourth through the 14th centuries in Europe, the British Isles and the Near East. Special attention to regional differences and interrelations, the relation
of design to use, the respective roles of builders and patrons. (Kinney, Division III; cross-listed as CITY B212) Not offered in 2005-06.

## HART B227 Topics in Modern

Planning
(Hein, Division I; cross-listed as CITY B227)

## HART B230 Renaissance Art

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. (Cast, Division III) Not offered in 2005-06.

## HART B237 Northern Renaissance

An introduction to painting, graphic arts and sculpture in Germany in the first half of the 16th century, with emphasis on the influence of the Protestant Reformation on the visual arts. Artists studied include Altdorfer, Cranach, Dürer, Grünewald, Holbein and Riemenschneider. (Hertel, Division III)

HART B238 Silent Film: International Film to 1930
(Horne, Division III; cross-listed as ENGL B238)

## HART B239 Women and Cinema

 (Horne, Division III; cross-listed as ENGL B239) Not offered in 2005-06.
## HART B245 Dutch Art of the 17th Century

A survey of painting in the Northern Netherlands with emphasis on such issues as

Calvinism, civic organization, colonialism, the scientific revolution, popular culture and nationalism. Attention is given to various approaches to the study of Dutch painting; to its inherited classification into portrait, still life, history, scenes of social life, landscape and architectural paintings; and to the oeuvres of some individual artists, notably Vermeer and Rembrandt. (Hertel, Division III) Not offered in 2005-06.

## HART B246 Interdisciplinary

Approaches to German Literature and Culture
(Meyer, Seyhan, Division III; cross-listed with GERM B245) Not offered in 200506.

HART B250 Nineteenth-Century Painting in France
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. (Levine, Division III)

## HART B253 Survey of Western

Architecture
(Cast, Hein, Division III; cross-listed as ANTH B254, CITY B253 and HIST B253) Not offered in 2005-06.

## HART B254 History of Modern

Architecture
(Hein, Division III; cross-listed as CITY B254)

HART B255 Survey of American
Architecture
(Cohen, Division III; cross-listed as CITY B255)

HART B259 Counter-Cinema: Radical, Revolutionary and Underground Film (Kahana, Division III; cross-listed as ENGL B255) Not offered in 2005-06.

## HART B266 Contemporary Art and

 TheoryAmerica, Europe and beyond, from the 1950s to the present, in visual media and visual theory. (Saltzman, Division III)

HART B270 Japanese Architecture and Planning
(Hein, Division III; cross-listed as EAST B270 and CITY B270) Not offered in 2005-06.

HART B291 Documentary Film and Media
(Kahana, Division III; cross-listed as ENGL B291) Not offered in 2005-06.

## HART B298 Cultural Diversity and Its

 Representations(Seyhan, Division III; cross-listed as COML B299 and GERM B299)

## HART B299 History of Narrative Cinema

(King, Division III; cross-listed as ENGL B299) Not offered in 2005-06.

HART B301 Greek Architecture
(Webb, Division III; cross-listed as ARCH B302 and CITY B302) Not offered in 2005-06.

## HART B303 Art and Technology

A consideration of the technological examination of paintings. While studying the appropriate aspects of technology - such as the infrared vidicon, the radiograph
and autoradiograph, analysis of pigment samples and pigment cross-sections - students are also encouraged to approach the laboratory in a spirit of creative scrutiny. Raw data neither ask nor answer questions, and it remains the province of the students to shape meaningful questions and answers. Students become acquainted with the technology involved in examining paintings and are encouraged to find fresh applications for available technology in answering art historical questions. (McKim-Smith, Division III) Not offered in 2005-06.

## HART B305 Classical Bodies

(Donohue, Division III; cross-listed as ARCH B303) Not offered in 2005-06.

## HART B306 Film Theory

(staff, Division III; cross-listed as COML B306 and ENGL B306)

## HART B311 Topics in Medieval Art:

Medieval Rome
A seminar on the art, architecture, urban development and ideology of the city of Rome between 300 and 1400. Students will gain an overview of the city's development, familiarity with surviving structures and artworks, and an introduction to the latest research. (Kinney)

## HART B312 The Cult of Saints and

 Medieval ArtThis course will examine the interaction between the cult of saints and medieval art, beginning in the fourth century with the legalization of Christianity and ending in the early 16th century. Topics to be discussed include pilgrimage; relics and reliquaries;
gender and martyrdom; saintly miracles; illustrated saints' lives; as well as the devotion to individual figures such as Ste. Foy of Conques, Thomas Becket, St. Francis and Joan of Arc. We will also think about the way the cult of the saints extended into the modern age. (Easton)

HART B317 Exhibition and Inhibition: Movies, Pleasure and Social Control (Horne, Division III; cross-listed as ENGL B317)

## HART B321 Late-Gothic Painting in

 Northern EuropeA study of late medieval illuminated manuscripts and Early Netherlandish painting. (Easton) Not offered in 2005-06.

HART B324 Roman Architecture
(Scott, Division III; cross-listed as ARCH B324, CSTS B324 and CITY B324) Not offered in 2005-06.

## HART B327 Feminist Film Theory and Practice

An intensive introduction to feminist film theory and films by feminist directors. (King, Division III; cross-listed as ENGL B327) Not offered in 2005-06.

## HART B331 Palladio and Palladianism

A seminar on the diffusion of Palladian architecture from the 16th century to the present. (Cast; cross-listed as CITY B331) Not offered in 2005-06.

## HART B340 Topics in Baroque Art

 (McKim-Smith, Division III; cross-listed as COML B340 and SPAN B340) Not offered in 2005-06.
## HART B348 Topics in German Art: Picturing Gender

(Meyer, Division III; cross-listed as GERM B348)

## HART B349 Theories of Authorship in the Cinema

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. (King, Division III; cross-listed as ENGL B349) Not offered in 2005-06.

## HART B350 Topics in Modern Art: <br> Self-portraiture <br> (Levine, Division III)

## HART B354 Topics in Art Criticism

Individual topics in art-historical methodology, such as art and psychoanalysis, feminism, post-structuralism or semiotics are treated. (Levine, Division III; cross-listed as COML B354) Not offered in 2005-06.

HART B359 Topics in Urban Culture and Society
(Hein, Division I or III; cross-listed as ANTH B359, GERM B321 and CITY B360) Not offered in 2005-06.

## HART B377 Topics in Modern

## Architecture

(Cohen, Division III; cross-listed as CITY B377)

## HART B380 Topics in Contemporary

 Art: Visual Culture and the HolocaustPoems and novels, films and photographs, paintings and performances, monuments and memorials, even comics have been the cultural forms that engage us with the
catastrophic and traumatic history of the Holocaust. Through these cultural forms we have come to know events considered by some to defy the very possibility of historical, let alone aesthetic, representation. (Saltzman, Division III; cross-listed as GERM B380 and HEBR B380)

## HART B381 Topics in Japanese Art

A study of the visual culture of Japan from prehistory to the present, seen through the lens of history, literature and religion. Trends in contemporary Japanese art in the late 20th and early 21 st centuries will also be considered, as will the cultural interaction of Japan, China and the West. (Easton, Division III; cross-listed as EAST B381) Not offered in 2005-06.

## HART B398 Senior Conference

A critical review of the discipline of art history in preparation for the senior paper. Required of all majors. (Cast, McKimSmith)

## HART B399 Senior Conference

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. (Easton, Levine)

## HART B403 Supervised Work

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. (staff)

## International Studies

Students may complete a minor in international studies.

## Steering Committee Members and Advisers

Michael H. Allen, Co-Director
Grace M. Armstrong
Isabelle Barker, Andrew W. Mellon
Postdoctoral Fellow in International Studies
Philip L. Kilbride
Christine M. Koggel, Co-Director
Imke Meyer
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International studies is the study of relationships among people and states affected by increasingly permeable borders and facing global issues. The minor in international studies aims to prepare students to be responsible citizens by introducing them to issues of importance in an increasingly interdependent world of global dynamics in politics, economics, ideas, language and culture. Around the world, international studies programs are preparing students for productive roles in transnational or intergovernmental institutions and in the areas of public policy, governance, business, diplomacy, development and cultural studies. A goal of the minor is to provide a foundation for students interested in pursuing career opportunities in these areas or in entering graduate programs in international studies.

The minor combines applied and theoretical approaches to international studies and draws from an increasing number of disciplines that are now exploring the descriptive and normative aspects of living in a world impacted by features of globalization. The minor allows students to use the disciplinary methods and materials acquired in their major as a base from which to engage in the necessarily inter- and multidisciplinary course work of international studies. Finally, the minor employs a broad conception of international studies by incorporating the study of politics, economics and political theory (as captured in the core courses) with the complementary study of specific themes (as captured by each of the five tracks).

Although language study is not required per se for the minor, students intending to undertake graduate work in international studies should plan to acquire proficiency in a foreign language, which is a requirement (at the time of admission or graduation) in the most selective programs here and abroad.

## Minor Requirements

Students minoring in international studies must complete a total of seven courses. Four of these are core courses. Three of these form a coherent group coming (one each) from political science, economics and philosophy and the fourth provides critical inquiry into cultural differences. The core courses form the base from which students can then concentrate their study in one of five tracks: international politics, international economics, social justice,
area studies, or language and arts. Within a track, students can choose three electives from among a range of courses drawn from the social sciences and humanities. The three electives should demonstrate coherence and be approved by an adviser from the Center for International Studies.

## Core courses

There are a total of four core courses. All students are required to take three courses, one from each of political science, economics and philosophy. These disciplines have become central to international studies programs. Each of the two sets identified below form a coherent group of three courses designed to introduce students to the field as a whole by providing them with resources for studying the most basic elements of globalization in the context of international relations, economics and politics. If one of the core courses from a set is not offered in a given year, substitutions will be made with another allied course, offered at Bryn Mawr or Haverford, with the approval of an adviser from the Center for International Studies.

POLS B141 Introduction to International Politics
ECON B225 Development Economics PHIL B344 Development Ethics
or
PHIL B221 Ethics
ECON B232 International Economics
POLS B391 International Political Economy

To complete the core requirements, students must take one course on cultural differences. This requirement allows students to acquire a greater appreciation of the significance of culture in the global context by providing an awareness of how different values, norms, beliefs and practices affect possibilities for understanding different cultures and for cross-cultural dialogue and consensus. The course may be selected from (but is not limited to) the following:

ANTH B102 Introduction to Anthropology: Cultural Anthropology
COML/PHIL B202 or B323 Culture and Interpretation
COML/ITAL/HEBR B2IIPrimo Levi, the Holocaust and Its Aftermath ANTH/COML/GERM/CITY B245

Women's Narratives on Modern Migrancy, Exile and Diaspora
FREN B251 La Mosaïque France

## Electives

In addition to the four core courses listed above, three electives are required. Each of the five tracks identifies a major topic or theme in international studies that builds on or develops the core. Students should choose the three electives from the approved lists under one of the tracks identified below. Electives should demonstrate coherence and be approved by an adviser. At least one of the courses must be a $300-$ level course.

## International Politics

This track allows students to focus on the dynamics and structures of intergovernmental and transnational relationships from
the perspective of the discipline of political science. Through engagement with the most salient theoretical and policy debates, students may focus upon such themes as globalization and resistance to it, development and sustainability, nationalism and sovereignty, human rights, conflict and peace, public international law and institutions, and nongovernmental or civil society organizations and movements at regional, transregional and global levels.

The three elective courses are to be selected from an approved list or be approved by an adviser from the Center for International Studies.

## International Economics

This track allows students to focus on various theoretical, empirical and policy issues in international economics. Each of the courses in the track - trade, openeconomy macroeconomics, development and environmental economics - focuses on different economic aspects of the international or global economy. International trade looks at the major theories offered to explain trade and examines the effects of trade barriers and trade liberalization on welfare. International macroeconomics and international finance examines poli-cy-making in open economies, exchange rate systems, exchange rate behavior, and financial integration and financial crises. Development economics is concerned, among other things, with understanding how developing countries can structure their participation in the global economy so as to benefit their development. Environmental economics uses economic analysis to examine the behavioral causes
of local, regional and global environmental and natural resource problems and to evaluate policy responses to them.

The three elective courses are to be selected from an approved list or be approved by a faculty member in economics affiliated with the Center for International Studies.

## Social Justice

This track allows students to explore issues of social and political change in the context of economic and political transition in the global context. Students gain insight into how global issues affect relationships among people and cultures within and across national boundaries and how global issues are in turn affected by these relationships. Major themes include: a) migration, imperialism and colonialism; b) international/ethnic conflict and cooperation; c) culture and values; d) justice and global issues; e) globalization and urban development; and f) social movements and change in the global context.

A coherent set of courses can be achieved by selecting the three electives from approved lists within one of the thematic groupings or be approved by an adviser from the Center for International Studies.

## Area Studies

This track allows students to situate and apply the economic, political and social theory provided in the core to the study of a particular geopolitical area. It provides students with a global frame of reference from which to examine issues of history, migration, colonization, modernization, social change and development through an area study.

A coherent set of courses can be achieved by selecting the three electives from approved lists within an area study or be approved by an adviser from the Center for International Studies.

## Language and Arts

This track allows students to explore human interaction at the global level through language, literature and arts. Students in this track focus their studies on the forms of language and the arts that are generated through global processes and in turn affect the generation and exchange of ideas in and between different societies and cultures.

A coherent set of courses can be achieved by selecting the three electives from approved lists within a language study or be approved by an adviser from the Center for International Studies.

Italian

Students may complete a major or minor in Italian.

## Faculty

Titina Caporale, Lecturer
Nicholas Patruno, Professor and Chair Roberta Ricci, Assistant Professor Ute Striker, Instructor at Haverford College
Nancy J. Vickers, Professor
The aims of the major are to acquire a knowledge of Italian language and literature and an understanding of Italian culture. The Department of Italian also cooperates with the Departments of French and Spanish in the Romance Languages major (see page 275).

## Major Requirements

Major requirements in Italian are 10 courses: Italian 101, 102 and eight additional units, at least two of which are to be chosen from the offerings on the 300 level, and no more than two from an allied field. All students must take a course on Dante, one on the Italian Renaissance and one on modern Italian literature. Where courses in translation are offered, students may, with the approval of the department, obtain major credit provided they read the texts in Italian, submit written work in Italian and, when the instructor finds it necessary, meet with the instructor for additional discussion in Italian.

Courses allied to the Italian major include, with departmental approval, all courses for major credit in ancient and modern languages and related courses in archaeology, art history, history, music, philosophy and political science. Each student's program is planned in consultation with the department.

Students who begin their work in Italian at the 200 level will be exempted from Italian 101 and 102.

## Honors

The requirements for honors in Italian are a grade point average of 3.7 in the major and, usually, a research paper written at the invitation of the department, either in Senior Conference or in a unit of supervised work.

## Minor Requirements

Requirements for the minor in Italian are Italian 101, 102 and four additional units including at least one at the 300 level. With departmental approval, students who begin their work in Italian at the 200 level will be exempted from Italian 101 and 102. 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/ University of Pennsylvania summer program in Florence offers courses for major credit in Italian, or students may study in other approved summer programs in Italy
or in the United States. Courses for major credit in Italian may also be taken at the University of Pennsylvania.

## ITAL B001, B002 Elementary Italian

 A practical knowledge of the language is acquired by studying grammar, listening, speaking, writing and reading. Coursework includes the use of the Language Learning Center. The course meets in intensive (eight hours a week at Bryn Mawr) and nonintensive (five hours a week at Bryn Mawr and Haverford) sections. (Caporale, Patruno, Striker)
## ITAL B101, B102 Intermediate Course in the Italian Language

A review of grammar and readings from Italian authors with topics assigned for composition and discussion; conducted in Italian. The course meets in intensive (four hours a week) and nonintensive (three hours a week) sections. (Caporale, Patruno, Ricci)

## ITAL B200 Advanced Conversation and Composition

The purpose of this course is to increase fluency in Italian and to facilitate the transition to literature courses. The focus is on spoken Italian and on the appropriate use of idiomatic and everyday expressions. Students will be expected to do intensive and extensive language drills, orally and in the form of written compositions as well as Web-related exercises. Literary material will be used; conducted in Italian. (Caporale, Patruno)

ITAL B203 Italian Theater (in Italian)
A survey of Italian theater from the Renaissance to the present. Readings include plays by Alfieri, Dario Fo, Natalia Ginzburg, Goldoni, Dacia Mariani, Pirandello, Ruzante and Verga. (staff, Division III) Not offered in 2005-06.

## ITAL B205 The Short Story of Modern Italy

Examination of the best of Italian short stories from post-unification to today's Italy. In addition to their artistic value, these works will be viewed within the context of related historical and political events. Among the authors to be read are Buzzati, Calvino, D’Annunzio, Ginzburg, Moravia, Pirandello and Verga. (Patruno, Division III)

## ITAL B207 Dante in Translation

An historical appraisal and critical appreciation of the Vita Nuova and the Divina Commedia. (Patruno, Ricci, Vickers, Division III)

## ITAL B211 Primo Levi, the Holocaust and Its Aftermath

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. (Patruno, Division III; cross-listed as COML B211 and HEBR B211)

## ITAL B212 Italia D’Oggi

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 them. (Patruno, Division III) Not offered in 2005-06.

## ITAL B225 Italian Cinema and

Literary Adaptation
A survey, taught in English but also valid for Italian languages credit for those who qualify to do reading and writing in Italian, of Italian cinema with emphasis placed on its relation to literature. The course will discuss how cinema conditions literary imagination and how literature leaves its imprint on cinema. We will "read" films as "literary images" and "see" novels as "visual stories." The reading of the literary sources will be followed by evaluation of the corresponding films (all subtitled) by well-known directors, including Bellocchio, Bertolucci, Rosi, the Taviani brothers and L. Visconti. (Ricci, Division III) Not offered in 2005-06.

ITAL B230 Poetics of Desire in the Lyric Poetry of Renaissance Italy and Spain
(Quintero, Division III; cross-listed as COML B230 and SPAN B230) Not offered in 2005-06.

## ITAL B301 Dante

A study of the Vita Nuova and Divina Commedia, with central focus on Inferno. Prerequisite: two years of Italian or the equivalent. (Patruno, Ricci, Vickers, Division III)

## ITAL B303 Petrarca and Boccaccio

(Patruno, Division III) Not offered in 2005-06.

## ITAL B304 Il Rinascimento

Topics include courtliness, images of power, epic romance and the lyric voice. Prerequisite: two years of Italian or the equivalent. (Ricci, Division III) Not offered in 2005-06.

## ITAL B399 Senior Conference

Under the direction of the instructor, each student prepares a paper on an author or a theme that the student has chosen. This course is open only to senior Italian majors. (Patruno, Ricci, Vickers)

## ITAL B403 Independent Project

Offered with approval of the department. (staff)

## Linguistics

Students may submit an application to major in linguistics through the independent major program.

## Coordinators:

Ted Fernald, at Swarthmore College Shizhe Huang, at Haverford College Eric Raimy

Bryn Mawr College students may take advantage of courses offered by the Department of Linguistics at Swarthmore College. Students interested in majoring in linguistics may do so via the independent major program (see page 20). Such students must meet the requirements set by the independent major program at Bryn Mawr.

Linguistics is the study of language. On the most general level it deals with the internal structure of language, the history of the development of language, the information language can give us about the human mind and the roles language plays in influencing the entire spectrum of human activity.

The relevance of linguistics to the disciplines of anthropology, language study, philosophy, psychology and sociology has been recognized for a long time. But recently a knowledge of linguistics has become important to a much wider range of activities in today's world. It is a basic tool in artificial intelligence. It is increasingly a valuable tool in literary analysis. It is fundamental to an understanding of com-
munication skills and cognitive science. And, because the very nature of modern linguistic inquiry is to build arguments for particular analyses, the study of linguistics gives the student finely-honed argumentation skills, which stand in good stead in careers in business, law and other professions where such skills are crucial.

Bryn Mawr offers the following course in linguistics.

GNST B239 Introduction to<br>Linguistics<br>(Raimy, Division I)

Selected courses offered at Swarthmore College include the following, plus advanced seminars.

Anthropological Linguistics: Endangered Languages
Beginning Arabic for Text Study
Beginning Hebrew for Text Study
Computational Linguistics (also at Bryn Mawr College)
Computational Models of Language
Experimental Phonetics
Exploring Acoustics
Field Methods
Historical and Comparative Linguistics
History of the Russian Language
Intermediate Syntax and Semantics
Introduction to Classical Chinese
Introduction to Language and Linguistics
Language and Meaning
Language, Culture and Society
Language Policy in the United States
Languages of the World
Morphology and the Lexicon
Movement and Cognition

Old English/History of the Language
Oral and Written Language
Phonology
Psychology of Language (also at Haverford College)
Russian Phonetics and Phonology
Semantics
Structure of American Sign Language
Structure of Navajo
Structure of Tuvan
Syntax
Translation Workshop
Writing Systems, Decipherment and Cryptography

## Mathematics

Students may complete a major or minor in mathematics. With the major, students may complete the requirements for secondary school certification. Majors may complete an M.A. in mathematics, if accepted into the combined A.B./M.A. program, or may enter the 3-2 Program in Engineering and Applied Science at the California Institute of Technology.

## Faculty

Leslie C. Cheng, Assistant Professor (on leave 2005-06)
Mary Louise Cookson, Instructor (on leave semester II)
Victor J. Donnay, Professor
Todd Drumm, Lecturer
Jane Farella, Instructor
Helen G. Grundman. Professor
Rhonda J. Hughes, Professor (on leave semester I)
Peter G. Kasius, Instructor
Paul M. Melvin, Professor and Chair
Yibiao Pan, Visiting Professor
Elise Pasles, Lecturer
Lisa Traynor, Associate Professor (on leave 2005-06)

The mathematics curriculum is designed to expose students to a wide spectrum of ideas in modern mathematics, train students in the art of logical reasoning and clear expression, and provide students with an appreciation of the beauty of the subject and of its vast applicability.

## Major Requirements

A minimum of 10 semester courses are required for the major, including the six core courses listed below and four electives at or above the 200 level.

## Core Requirements:

MATH B201 Multivariable Calculus
(H121 or H216)
MATH B203 Linear Algebra (H215)
MATH B301/B302 Real Analysis (H317/ H318)
MATH B303 Abstract Algebra (H333)
MATH B398 or B399 Senior Conference
With the exception of Senior Conference, equivalent courses at Haverford or elsewhere may be substituted for Bryn Mawr courses with approval of the major adviser. In consultation with a major adviser, a student may also petition the department to accept courses in fields outside of mathematics as electives if these courses have serious mathematical content appropriate to the student's program.

Mathematics majors are encouraged to complete their core requirements other than Senior Conference by the end of their junior year. Senior Conference must be taken during the senior year. Students considering the possibility of graduate study in mathematics or related fields are urged to go well beyond the minimum requirements of the major. In such cases, a suitable program of study should be designed with the advice of a major adviser.

## Honors

A degree with honors in mathematics will be awarded by the department to students who complete the major in mathematics and also meet the following further requirements: at least two additional semesters of work at the 300 level or above (this includes Supervised Work 403). completion of a meritorious project consisting of a written thesis and an oral presentation of the thesis, and a major grade point average of at least 3.6, calculated at the end of the senior year.

## Minor Requirements

The minor requires five courses in mathematics at the 200 level or higher, of which at least two must be at the 300 level or higher.

## Advanced Placement

Students entering with a 4 or 5 on the Calculus $A B$ advanced placement test will be given credit for Math 101 and should enroll in Math 102 as their first mathematics course. Students entering with a 4 or 5 on the Calculus BC advanced placement test will be given credit for Math 101 and 102, and should enroll in Math 201 as their first mathematics course. All other students are strongly encouraged to take the Mathematics Placement Exam so they can be best advised.

## A.B./M.A. Program

For students entering with advanced placement credits it is possible to earn both the A.B. and M.A. degrees in an integrated program in four or five years (see page 35).

## 3-2 Program in Engineering and Applied Science

See page 35 for a description of the 3-2 Program in Engineering and Applied Science. offered in cooperation with the California Institute of Technology. for earning both an A.B. at Bryn Mawr and a B.S. at Cal Tech.

## MATH B001 Fundamentals of Mathematics

Basic techniques of algebra, analytic geometry, graphing and trigonometry for students who need to improve these skills before entering other courses that use them, both inside and outside mathematics. Placement in this course is by advice of the department and permission of the instructor. (staff)

## MATH B005 Math Workshop

Review of arithmetic and introduction to the basics of elementary and intermediate algebra for students whose mathematical backgrounds require such support. This course prepares students to take either Mathematics 001 or Mathematics 104 immediately thereafter. Placement in this course is by advice of the department. 0.5 course credit. (staff, offered in the fall semester only)

MATH B101, B102 Calculus with Analytic Geometry II and II
Differentiation and integration of algebraic and elementary transcendental functions, with the necessary elements of analytic geometry and trigonometry; the fundamental theorem, its role in theory and applications, methods of integration, applications of the definite integral, infinite series. May include a computer lab component. Prerequisite: math readiness or permission of the instructor. Students in the calculus sequence need a grade of 2.0 or better to continue with the next course. (staff, Division II and Quantitative Skills)

## MATH B104 Elements of Probability and Statistics

Basic concepts and applications of probability theory and statistics, including finite sample spaces, permutations and combinations, random variables, expected value, variance, conditional probability, hypothesis testing, linear regression and correlation. The computer is used; prior knowledge of a computer language is not required. This course may not be taken after any other statistics course. Prerequisite: math readiness or permission of instructor. (Pasles, Quantitative Skills)

## MATH B201 Multivariable Calculus

Vectors and geometry in two and three dimensions, partial derivatives, extremal problems, double and triple integrals, line and surface integrals, Green's and Stokes' Theorems. May include a computer lab component. Prerequisite: Mathematics 102 or permission of instructor. (staff, Division II and Quantitative Skills)

## MATH B203 Linear Algebra

Matrices and systems of linear equations, vector spaces and linear transformations, determinants, eigenvalues and eigenvectors, inner product spaces and quadratic forms. May include a computer lab component. Prerequisite: Mathematics 102 or permission of instructor. (staff, Division II and Quantitative Skills)

## MATH B205 Theory of Probability with Applications

Random variables, probability distributions on Rn, limit theorems, random processes. Prerequisite: Mathematics 201. (Pasles, Division II and Quantitative Skills)

## MATH B206 Transition to Higher

 MathematicsAn introduction to higher mathematics with a focus on proof writing. Topics include active reading of mathematics, constructing appropriate examples, problem solving, logical reasoning and communication of mathematics through proofs. Students will develop skills while exploring key concepts from algebra, analysis, topology and other advanced fields. Corequisite: Mathematics 203; not open to students who have had a 300-level math course. (Hughes, Division II)

## MATH B210 Differential Equations with Applications

Ordinary differential equations, including general first-order equations, linear equations of higher order and systems of equations, via numerical, geometrical and analytic methods. Applications to physics, biology and economics. Corequisite:

Mathematics 201 or 203. (Donnay, Division II and Quantitative Skills)

## MATH B221 Introduction to Topology and Geometry

An introduction to the ideas of topology and geometry through the study of knots and surfaces in three-dimensional space. The course content may vary from year to year, but will generally include some historical perspectives and some discussion of connections with the natural and life sciences. Corequisite: Mathematics 201 or 203. (Drumm, Division II)

## MATH B225 Introduction to Financial Mathematics

Topics to be covered include market conventions and instruments, Black-Scholes option-pricing model, and practical aspects of trading and hedging. All necessary definitions from probability theory (random variables, normal and lognormal distribution, etc.) will be explained. Prerequisite: Mathematics 102. Economics 105 is recommended. (Drumm, Division II)

## MATH B231 Discrete Mathematics

(Weaver, Division II and Quantitative Skills; cross-listed as CMSC B231 and PHIL B230)

## MATH B290 Elementary Number Theory

Properties of the integers, divisibility, primality and factorization, congruences, Chinese remainder theorem, multiplicative functions, quadratic residues and quadratic reciprocity, continued fractions, and applications to computer science and cryptography. Prerequisite: Mathematics 102.
(staff, Division II and Quantitative Skills) Not offered in 2005-06.

## MATH B295 Selected Topics in Mathematics

This course will cover topics that are not part of the standard departmental offerings and will vary from semester to semester. Students may take this course more than once. Spring 2006: Statistics. Prerequisite: Mathematics 201. (Pasles, Division II)

## MATH B301, B302 Introduction to Real Analysis I and II

The real number system, elements of set theory and topology, continuous functions, uniform convergence, the Riemann integral, power series, Fourier series and other limit processes. Prerequisite: Mathematics 201. (Pan, Division II)

MATH B303, B304 Abstract Algebra I and II
Groups, rings, fields and their morphisms. Prerequisite: Mathematics 203. (Kasius, Melvin, Division II)

## MATH B311 Partial Differential Equations

Heat and wave equations on bounded and unbounded domains, Laplace's equation, Fourier series and the Fourier transform, qualitative behavior of solutions, computational methods. Applications to the physical and life sciences. Prerequisite: Mathematics 301 or permission of instructor. (staff, Division II) Not offered in 2005-06.

## MATH B312 Topology

General topology (topological spaces, continuity, compactness, connectedness, quo-
tient spaces), the fundamental group and covering spaces. Introduction to geometric topology (classification of surfaces, manifolds) and algebraic topology (homotopy theory, homology and cohomology theory, duality on manifolds). Prerequisites: Mathematics 201 and 203, or permission of instructor. (staff, Division II) Not offered in 2005-06.

## MATH B315 Geometry

An introduction to geometry with an emphasis that varies from year to year. Prerequisites: Mathematics 201 and 203 (or equivalent) or permission of instructor. (staff, Division II) Not offered in 2005-06.

## MATH B322 Functions of Complex Variables

Analytic functions, Cauchy's theorem, Laurent series, calculus of residues, conformal mappings, Moebius transformations, infinite products, entire functions, Riemann mapping theorem, Picard's theorem. Prerequisite: Mathematics 301 or permission of instructor. (Pan, Division II)

MATH B361 Introduction to Harmonic Analysis and Wavelets
A first introduction to harmonic analysis and wavelets. Topics to be covered include Fourier series on the circle, Fourier transforms on the line and space, Discrete Wavelet Transform, Fast Wavelet Transform and filter-bank representation of wavelets. Prerequisite: Mathematics 203 or permission of instructor. (staff, Division II) Not offered in 2005-06.

## MATH B390 Number Theory

Algebraic number fields and rings of integers, quadratic and cyclotomic fields, norm and trace, ideal theory, factorization and prime decomposition, lattices and the geometry of algebraic integers, class numbers and ideal class groups, computational methods, Dirichlet's unit theorem. Prerequisite: Mathematics 303 or permission of instructor. (staff, Division II) Not offered in 2005-06.

MATH B395, B396 Research Seminar
A research seminar for students involved in individual or small group research under the supervision of the instructor. With permission, the course may be repeated for credit. Prerequisite: Mathematics 203 or permission of instructor. (staff, Division II)

## MATH B398, B399 Senior Conference

A seminar for seniors majoring in mathematics. Topics vary from year to year. (Grundman, Pan, Division II)

## MATH B403 Supervised Work (staff)

## Music

Students may complete a major or minor in music at Haverford College.

## Faculty

Ingrid Arauco, Associate Professor and Chairperson
Christine Cacioppo, Visiting Instructor
Curt Cacioppo, Ruth Marshall Magill
Professor
Richard Freedman, Professor
Thomas Hong, Visiting Assistant
Professor
Heidi Jacob, Associate Professor and
Director of the Haverford-Bryn Mawr
Orchestral Program
David Kasunic, Visiting Assistant Professor
Thomas Lloyd, Associate Professor and Director of the Haverford-Bryn Mawr Choral Program
Marianne Tettlebaum, Visiting Assistant
Professor of Music and Comparative Literature

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 HaverfordBryn Mawr Chamber Singers, Chorale, Orchestra, and ensembles formed within the context of Haverford's chamber music program. Students can receive academic credit for participating in these ensembles (Music 102, 214, 215, 216, and 219), and can receive credit for Private Study (Music 217) in voice or their chosen instrument.

## Special Programs And Funds

The Department of Music Guest Artists Series presents distinguished and emerging performers in public concerts, master classes, lecture-demonstrations. reading sessions, and informal encounters. Among artists recently featured have been Native American flutist Mary Youngblood, the Cuarteto Latinoamericano, pianist Charles Abramovic, violinist Arnold Steinhardt, the Network for New Music, and the American String Quartet. The William Heartt Reese Music Fund was established in 1977 to honor William Heartt Reese, professor of music and conductor of the glee club and orchestra at Haverford from 1947 to 1975. The fund supports applied music lessons for students enrolled in the department's private study program. The John H. Davison '51 Fund for Student

Composers supports new works by student composers. This fund recognizes John's 40 years of teaching and musical creativity at Haverford. The Orpheus Prize is awarded for exceptional achievement in the practice of tonal harmony. The Kessinger Family Fund for Asian Performing Arts sponsors musical performances and lecture-demonstrations that enrich Haverford's cross-cultural programs. Since its inception in 1997, the fund has sponsored visits by artists representing traditions of South, Central, and East Asia, and Indonesia.

## Major Requirements

1. Theory-composition: 203a, 204b, 303a.
2. Musicology: three courses chosen from 221a, 222b, 223a, 224b, 325b.
3. Two electives in music, chosen from: 207 a or b, 221a, 222b, 223a, 224b, $227 \mathrm{a}, 228 \mathrm{a}, 250 \mathrm{a}$ or b, 251a or b, 265 b, 266b, 304b, and 325 a or b.
4. Performance: participation in a de-partment-sponsored performance group is required for at least a year. Music 217f,i instrumental or vocal private study for one year. Continuing ensemble participation and instrumental or vocal private study are strongly urged.
5. An additional full credit course equivalent is required of music majors in their senior year. The senior experience in music may be fulfilled through an independent study project (usually a composition, performance, or research paper pursued in the context of Music 480) or through enhancement of a regular advanced course
offering to include an independent study component. The format of the senior experience will be determined prior to the beginning of the student's senior year, after consultation with the department.
6. Majors are expected to attend the majority of department-sponsored concerts, lectures, and colloquia.

## Minor Requirements

1. Theory-Composition: 203a, 204b
2. Musicology: two courses chosen from 221a, 222b, 223a, 224b.
3. One elective chosen from: 207 a or b, courses not already taken in fulfillment of requirement 2 ), 228 a or b, 250a or b, 251a or b, 265b, 266b, 303a, 304b, 403a or b
4. Music 217f,i instrumental or vocal private study or department ensemble participation for one year. Continuing ensemble participation and instrumental or vocal private study are strongly urged.

Substitutions for Haverford College courses in fulfillment of the major or minor in music must be approved in advance by the music department.

## Requirements For Honors

Departmental honors or high honors will be awarded on the basis of superior work in music courses combined with exceptional accomplishment in the senior experience.

## Theory And Composition

## MUSC H110a Musicianship and

## Literature

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. (Arauco, Division III)

## MUSC H203a Tonal Harmony I

The harmonic vocabulary and compositional techniques of Bach, Haydn, Mozart, Beethoven, Schubert, and others. Emphasis is on composing melodies, constructing phrases, and harmonizing in four parts. Composition of minuet and trio, set of variations, or other homophonic piece is the final project. Three class hours plus laboratory period covering related aural and keyboard harmony skills. Prerequisite: Music 110 or consent of instructor. (Cacioppo, Division III)

## MUSC H204b Tonal Harmony II

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 (Arauco, Division III)

## MUSC H265a,b Symphonic Technique and Tradition

In this course, we will be familiarizing ourselves with significant orchestral rep-
ertory 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. (Arauco, Cacioppi, Division III) Not offered in 2005-06.

## MUSC H266b Composition

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. (Arauco, Division III) Not offered in 2005-06.

## MUSC H303a Advanced Tonal

Harmony
Study of late 19th-century harmonic practice in selected works of Liszt, Wagner, Brahms, Faure, Wolf, Debussy, and Mahler. Exploration of chromatic harmony through analysis and short exercises; final composition project consisting of either art song or piano piece such as nocturne or intermezzo. Musicianship lab covers related aural and keyboard harmony skills. Prerequisite: Music 204 (Arauco, Division III)

## MUSC H304b Counterpoint

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 (Cacioppo, Division III)

## MUSC H325b Seminar in 20th

Century Theory and Practice
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. (Arauco, Division III)

## Performance

## MUSC H102f,i Chorale

Chorale is a large mixed chorus that performs major works from the oratorio repertoire with orchestra. Attendance at weekly two-hour rehearsals and dress rehearsals during performance week is required. Prerequisite: Audition and consent of instructor. (Lloyd, Division III)

## MUSC H107f,i Introductory Piano

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). (Cacioppo, Division III)

## MUSC H207a,b Topics in Piano

Combines private lessons and studio/master classes, musical analysis, research questions into performance practice and historical context, critical examination of sound recorded sources. Preparation of works of selected composer or style period for end of semester class recital is required. Topic for Fall 2005: American Roots. Topic for Spring 2006: Transatlantic Connections. Prerequisite: Audition and consent of instructor. (Cacioppo, Division III)

## MUSC H214f,i Chamber Singers

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. (Lloyd, Division III)

## MUSC H215f, i Chamber Music

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. (Jacob, Division III)

## MUSC H216f, i Orchestra

For students participating in the Haver-ford-Bryn Mawr Orchestra, this course addresses the special musical problems of literature rehearsed and performed during the semester. Prerequisite: Audition and consent of instructor. (Hong, Division III)

## MUSC H217f, i Vocal or Instrumental Private Study

Students should be participating in a departmentally directed ensemble or activity (Chorale, Orchestra, etc.) as advised by their program supervisor. All students in the private study program perform for a faculty jury at the end of the semester. Students assume the cost of their private lessons, but may apply for private study subsidies at the beginning of each semester's study through the department. Prerequisite: Departmental audition and consent of supervisor. (Lloyd, Jacob, Cacioppo)

## MUSC H219i Art Song

Intensive rehearsal of art songs representative of various style periods and languages, with supplemental research and listening assigned. Performance is required. The course is available to those who are concurrently studying privately, or who have studied privately immediately prior to the start of the semester. Prerequisite: Audition and consent of instructor. (Lloyd, Division III)

## Musicology

## MUSC H111b Introduction to Western Music

A survey of the European musical tradition from the Middle Ages to modern times. Students will hear music by Monteverdi, Bach, Mozart, Beethoven, Wagner, Stravinsky, and Glass, among many others, developing both listening skills and an awareness of how music relates to the culture that fosters it. In addition to listening and reading, students will attend concerts and prepare written assignments. (Freedman, Division III)

## MUSC H112 Opera

A survey of the history of opera, focusing on the most influential operas, their forms and the cultural, aesthetic, and political desires that shaped them. The goal of the course is to teach students the art of close listening, that is, to privilege their hearing over their seeing. Audio and visual recordings will be supplemented by a course packet of primary and secondary source readings. No previous musical training or coursework required. (Kasunic, Division III)

MUSC H221a,b Medieval and Renaissance Music
Music of the 12 th 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 struc-
ture, debates about performance practice, and issues of cultural history. Extensive reading and listening culminating in individual research or performance projects. Prerequisite: Music 110, 111, or consent of instructor. (Freedman, Division III) Not offered in 2005-06.

## MUSC H222a Baroque Music

Music of the 17th and 18th centuries, with focus on central developments of opera, sacred music, and instrumental genres. Through careful study of works by Monteverdi, Lully, Corelli, Handel, Rameau, and Bach, students will explore changing approaches to musical style and design, basic problems of performance practice, and how musicologists have sought to understand the place of music in cultural history. Prerequisite: Music 110, 111, or consent of instructor. (Freedman, Division III)

## MUSC H223b Classical Music

The music of Haydn, Mozart, Beethoven, and Schubert (among many others). Classroom assignments will lead students to explore the origins and development of vocal and instrumental music of the years around 1800 , and to consider the ways in which musicologists have approached the study of this repertory. Prerequisite: Music 110, 111, or consent of instructor. (Freedman, Division III)

## MUSC H224a,b Romantic Music

Music by Chopin, Schumann, Verdi, Wagner, Brahms, and Mahler (among others), with special focus on changing approaches to style of expression, and to the aesthetic principles such works articulate. Assignments will allow students to explore indi-
vidual vocal and instrumental works, and will give students a sense of some of the perspectives to be found in the musicological literature on 19th century music. Prerequisite: Music 110, 111, or consent of instructor. (Freedman, Division III) Not offered in 2005-06.

## MUSC H250 Music in the Literary Imagination, 1800-1949

An inquiry into the role of music in European and American literature during the 19th and early 20th centuries. Authors and composers studied will include Goethe, Beethoven, Balzac, Chopin, Wagner, Forster, Proust, and Mann. Prerequisite: Any full credit course in music, or consent of instructor. Students with reading knowledge of French and German will be encouraged to work in original languages. (Kasunic, Division III)

## MUSC H251a,b Music, Film, and Narrative

An introduction to music and film, with special attention to works from the 1930's through the 1950's by composers such as Auric, Copland, Eisler, Herrmann, Korngold, Prokofiev, Shostakovich, Steiner, Tiomkin and Waxman. Close study of orchestration, harmony and thematic process as they contribute to cinematic narrative and form. Source readings to include artistic positions staked out by film composers themselves, as well as critical and scholarly essays by leading writers on the narrative possibilities of film music. Prerequisite: Music 203 or equivalent knowledge of music theory. (Freedman, Division III) Not offered in 2005-06.

MUSC H252 Music and the "Origin of Language" in the 18th Century
Examines the preoccupation of 18th-century thinkers with the origin of language and its relationship to music. Considers why thinkers so often turn to music to discuss language and what assumptions about the nature of music and language underlie their accounts. Readings by Rousseau, Herder, Goethe, Hoffmann; works of music by Mozart, Reichardt, Schubert. The ability to read music is not necessary. (Tettlebaum, Division III) Not offered in 2005-06.

## MUSC H258 Vienna at the Turns of

 Centuries: Art, Politics and Culture An exploration of the musical, literary, cultural, and political climate of Vienna, at the end of the 18th century and the beginning of the twentieth century. We will study representative artworks from the two periods, as well as their relationships. Prerequisite: Sophomore standing. (Tettlebaum, Division III)
## MUSC H276 Piano in the Age of Chopin

An inquiry into piano manufacture, composition and pedagogy during the first half of the 19 th century, the era of the pianistcomposer, when the piano came into its own and assumed its status as the foremost solo musical instrument. Piano performance in class to demonstrate points, though not required, will be encouraged. Prerequisite: Music 110 or 111 or consent of instructor. (Kasunic, Division III) Not offered in 2005-06.

MUSC H358 Art and Aesthetic Theory An examination of the relationship between art and asethetic theory that will take as its model the rich and complex essays of Theodor Adorno. We will study the works of music and literature Adorno discusses and will examine models of aesthetic theory proposed by previous philosophers. Prerequisite: One 200-level course in comparative literature, German and German studies, music or philosophy, or consent of instructor. (Tettlebaum, Division III) Not offered in 2005-06.

## MUSC H359 Disciplining Art: The Rise of Aesthetic Theory

An examination of the rise of aesthetics as a branch of philosophical inquiry. The aim is to determine what defines aesthetics as a discipline and evaluate its contribution to the study of art. Readings by Kant, Schiller, Hegel, Nietzsche, Freud, and Adorno. Prerequisite: a 200 level course in any of the cross-listing disciplines or permission of the instructor. (Tettlebaum, Division III)

MUSC H480a,b,f,i Independent Study
Prerequisite: Approval of department and consent of instructor. (Arauco, Cacioppo, Freedman, Lloyd)

## Diverse Traditions

MUSC H227a Jazz and the Politics of Culture
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. (Freedman, Division III) Not offered in 2005-06.

MUSC H228a,b Musical Voices of Asia The musical traditions of South, East, and Central Asia, as well as Indonesia. Extensive discussion of vocal and instrumental genres, approaches to texts and stories, and systems of learning. We will also pay special attention to the place of music in broader cultural and social contexts: as a definer of gender or religious identities, as an object of national or political ownership, and in its interaction with Western classical and popular forms. Prerequisite: Sophomore standing or higher. (Freedman, Division III) Not offered in 2005-06.

## Neural and Behavioral Sciences

Students may complete a concentration in neural and behavioral sciences within the majors of biology and psychology.

## Coordinator

Wendy F. Sternberg, at Haverford College

## Advisory Committee

Douglas Blank
Peter D. Brodfuehrer, Concentration
Adviser for Biology
Kimberly Wright Cassidy
Rebecca Compton, Concentration
Adviser for Psychology at Haverford
College
Karen F. Greif
Paul Grobstein
Margaret A. Hollyday
Deepak Kumar
Andrea Morris
Leslie Rescorla
Anjali Thapar
Earl Thomas, Concentration Adviser for Psychology

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 and physiology. The field of neuroscience emerged as an interdisciplinary approach, combining techniques and perspectives from these
disciplines 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 offered by the Departments of Biology and Psychology at Bryn Mawr and the Departments of Biology and Psychology at Haverford College. Students undertaking the concentration must major in one of these four departments.

The concentration consists of two components. Students must satisfy the requirements of the department in which they major, with appropriate modifications related to the concentration (consult departmental advisers listed above). 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.

## 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 (Biology 202 at Bryn Mawr), Behavioral Neuroscience (Psychology 218 at Bryn Mawr) or Biological Psychology (Psychology 217 at Haverford).
3. One course in neural and behavioral sciences outside the major (from the list below or approved by the student's major department).

Requirements 1-3 must be completed before the senior year.
4. One additional course in neural and behavioral sciences from any participating department.
5. Two semesters of senior research (Biology 401 , Psychology 401 at Bryn Mawr).
6. Senior Seminar for concentrators (Biology 396, Psychology 396 at Bryn Mawr).

## Biology at Bryn Mawr

BIOL B202 Neurobiology and Behavior BIOL B233 Psychobiology of Sex Differences
BIOL B250 Computational Models in the Sciences
BIOL B271 Developmental Biology
BIOL B304 Cell and Molecular Neurobiology
BIOL B313/B314 Integrative Organismal Biology I and II
BIOL B321 Neuroethology
BIOL B326 From Channels to Behavior
BIOL B364 Developmental Neurobiology

## Computer Science at Bryn Mawr

CMSC B120 Visualizing Information
CMSC B250 Computational Models in the Sciences
CMSC B325 Computational Linguistics
CMSC B361 Emergence
CMSC B371 Cognitive Science

CMSC B372 Introduction to Artificial Intelligence
CMSC B376 Androids: Design \& Practice
CMSC B380 Recent Advances in Computer Science

## Psychology at Bryn Mawr

PSYC B212 Human Cognition
PSYC B218 Behavioral Neuroscience
PSYC B323 Cognitive Neuroscience
PSYC B333 Psychobiology of Sex Differences
PSYC B350 Developmental Cognitive Disorders
PSYC B351 Developmental Psychopathology
PSYC B395 Psychopharmacology
PSYC B397 Laboratory Methods in the Brain and Behavioral Sciences

## Biology at Haverford

BIOL H309 Molecular Neurobiology (half-semester course)
BIOL H330 Laboratory in NBS: Molecular Development (half-semester course)
BIOL H350 Pattern Formation in the Nervous System (half-semester course)

Note: Two half-semester courses equal one full-semester course

## Psychology at Haverford

PSYC H217 Biological Psychology
PSYC H221 Primate Origins of Society
PSYC H240 Psychology of Pain and Pain Inhibition

PSYC H260 Cognitive Neuroscience
PSYC H250 Biopsychology of Emotion and Personality
PSYC H320 Evolutionary Human Psychology
PSYC H330 Laboratory in NBS: Behavioral Neuroscience (a half-semester course)
PSYC H350 Biopsychology of Stress
PSYC H340 Human Neuropsychology

# Peace and Conflict Studies 

Students may complete a concentration in peace and conflict studies.

## Coordinator

Marc Howard Ross

## Instructor

Ahsiya Posner
The goal of the Bi-College concentration is to help focus students' coursework around specific areas of interest central to peace and conflict studies.

## Concentration Requirements

The concentration is composed of a sixcourse cluster centering around conflict and cooperation within and between nations. Of these six courses, at least two and no more than three may be in the student's major. The peace and conflict studies concentration draws upon the long-standing interest in war, conflict and peacemaking, and social justice, as well as questions associated with the fields of anthropology, economics, history, political science, social psychology and sociology. It draws on these fields for theoretical understandings of matters such as bargaining, internal causes of conflict, cooperative and competitive strategies of negotiation, intergroup relations and the role of institutions in conflict management.

Students meet with the coordinator in the spring of their sophomore year to work out
a plan for the concentration. All concentrators are required to take three core courses: the introductory course, General Programs 111a; either Political Science 206 or General Programs 322; and Political Science 347. It is advised that concentrators complete at least two of these three courses by the end of their junior year.

Students are required to take three additional courses chosen in consultation with the coordinator, working out a plan that focuses this second half of their concentration regionally, conceptually or around a particular substantive problem. These courses might include international conflict and resolution; ethnic conflict in general or in a specific region of the world (e.g., South Africa, the Middle East, Northern Ireland); a theoretical approach to the field, such as nonviolence, bargaining or game theory; an applied approach, such as reducing violence among youth, the arts and peacemaking, community mediation or labor relations.

Peace and conflict studies courses currently available at Bryn Mawr include:

ANTH B206/POLS B206 Conflict Management: A Cross-Cultural Approach CITY B205/SOCL B205 Social Inequality
CITY B266/EDUC B266/SOCL B266
Schools in American Cities
CITY B348/POLS B348 Culture and Ethnic Conflict
HEBR B283/HIST B283/POLS B283
Introduction to the Politics of the Modern Middle East and North Africa

HIST B303 Topics in American History
POLS B111 Introduction to Peace and Conflict Studies
POLS B141 Introduction to International Politics
POLS B233 Israel and the Palestinians: History, Politics, Negotiation and Conflict
POLS B241 Politics of International Law and Institutions
POLS B316 Ethnic Group Politics
POLS B347 Advanced Issues in Peace and Conflict Studies
POLS B348 Culture and Ethnic Conflict
PSYC B208 Social Psychology
SOCL B215 Challenges and Dilemmas of Diversity
SOCL B350 Movements for Social Justice

Peace and conflict studies courses at
Haverford include:
ANTH H258A Politics of Culture and Identity
ANTH H324B Post-Conflict Trauma and Psychosocial Repair
GNPR H111B Introduction to Peace and Conflict Studies
GNPR H201A Human Rights Development
HIST H240B History and Principles of Quakerism
POLS H141A International Politics
POLS H235B African Politics
POLS H245A The State System
POLS H391A Political Philosophy: From Theory to Practice
POLS H391A Democracy and Global Governance

POLS H391A Democracy and its Challenges
POLS H391A Democracy in America
POLS H391A Public Policy Analysis
RELG H264A Religion and Violence

## Philosophy

Students may complete a major or minor in philosophy.

## Faculty

Cheryl Chen, Assistant Professor
Robert J. Dostal, Professor
Christine M. Koggel, Associate
Professor, Chair and Major Adviser (on leave semester II)
Michael Krausz, Professor
George E. Weaver Jr., Professor
The Department of Philosophy introduces students to some of the most compelling answers to questions of human existence and knowledge. It also grooms students for a variety of fields that require analysis, conceptual precision, argumentative skill and clarity of thought and expression. These include administration, the arts, business, computer science, health professions, law and social services. The major in philosophy also prepares students for graduate-level study leading to careers in teaching and research in the discipline.

The curriculum focuses on three major areas: the systematic areas of philosophy, such as logic, theory of knowledge, metaphysics, ethics and aesthetics; the history of philosophy through the study of key philosophers and philosophical periods; and the philosophical explication of methods in such domains as art, history, religion and science.

The department is a member of the Greater Philadelphia Philosophy Consortium
comprising 13 member institutions in the Delaware Valley. It sponsors conferences on various topics in philosophy and an annual undergraduate student philosophy conference.

## Major Requirements

Students majoring in philosophy must take a minimum of 10 semester courses and attend the monthly noncredit departmental colloquia. The following five courses are required for the major: the two-semester Historical Introduction (Philosophy 101 and 201); Ethics (221); Theory of Knowledge (211), Metaphysics (212) or Logic (103); and Senior Conference (399). At least three other courses at the 300 level are required. Majors must take one historical course that concentrates on the work of a single philosopher or a period in philosophy.

Philosophy majors are encouraged to supplement their philosophical interests by taking advantage of courses offered in related areas, such as anthropology, history, history of art, languages, literature, mathematics, political science, psychology and sociology.

## Honors

Honors will be awarded by the department based on the senior thesis and other work completed in the department. The Milton C. Nahm Prize in Philosophy is a cash award presented to the graduating senior major whose senior thesis the department judges to be of outstanding caliber. This prize need not be granted every year.

## Minor Requirements

Students may minor in philosophy by taking six courses in the discipline at any level. They must also attend the monthly noncredit departmental colloquia.

## Cross-Registration

Students may take advantage of crossregistration arrangements with Haverford College, Swarthmore College and the University of Pennsylvania. Courses at these institutions may satisfy Bryn Mawr requirements, but students should check with the chair of the department to make sure specific courses meet requirements.

## Prerequisites

No introductory-level course carries a prerequisite. However, most courses at both the intermediate and advanced levels carry prerequisites. Unless stated otherwise in the course description, any introductory course satisfies the prerequisite for an in-termediate-level course, and any intermediate course satisfies the prerequisite for an advanced-level course.

## PHIL B101 A Historical Introduction to Philosophy: Ancient Philosophy

What is the fundamental nature of the world? Can we have knowledge about the world and ourselves, and if so, how? What is the good life? In this course, we explore answers to these sorts of metaphysical, epistemological and ethical questions by examining the works of the Presocratics and of the two central Greek philosophers, Plato and Aristotle. (Chen, Dostal, Division III)

## PHIL B103 Introduction to Logic

Training in reading and writing proof discourses (i.e., those segments of writing or speech that express deductive reasoning) to gain insight into the nature of logic, the relationship between logic and linguistics, and the place of logic in theory of knowledge. (Weaver)

## PHIL B201 A Historical Introduction to Philosophy: Modern Philosophy

The development of philosophic thought from Descartes to Nietzsche. (Chen, Dostal, Division III)

PHIL B202 Culture and Interpretation
A study of methodological and philosophical issues associated with interpreting alternative cultures, including whether ethnocentrism is inevitable, whether alternative cultures are found or imputed, whether interpretation is invariably circular or relativistic, and what counts as a good reason for one cultural interpretation over another. (Krausz, Division III; cross-listed as COML B202)

## PHIL B203 Formal Semantics

A study of the adequacy of first-order logic as a component of a theory of linguistic analysis. Grammatical, semantic and proof theoretic inadequacies of first-order logics are examined and various ways of enriching these logics to provide more adequate theories are developed, with special attention to various types of linguistic presuppositions, analyticity, selection restrictions, the question-answer relation, ambiguity and paraphrase. Prerequisite: Philosophy 103. (Weaver, Division III) Not offered in 2005-06.

## PHIL B204 Readings in German Intellectual History <br> (Seyhan, Division III; cross-listed as GERM B212)

## PHIL B205 Philosophy and Medicine

This course explores several of the philosophical issues raised by the enterprise of medical science. These issues cross a wide range of philosophical subfields, including the philosophy of science, epistemology, metaphysics and ethics. Topics to be covered include: the nature of health, disease and illness, the epistemology of medical diagnosis, and the relationship between medical science and healthcare ethics. (staff, Division III) Not offered in 2005-06.

## PHIL B209 Introduction to Literary Analysis: Philosophical Approaches to Criticism

(Seyhan, Division III; cross-listed as COML B209 and GERM B209) Not offered in 2005-06.

## PHIL B211 Theory of Knowledge: Relativism and Realism

What sorts of things are there and what constraints are there in knowing them? Have we access to things as such or are they inevitably filtered through some conceptual scheme? This course will examine the debate between relativism and absolutism in relation to the debate between realism and antirealism. The course will seek to instill philosophical skills in the critical evaluation of pertinent theories. Readings will include works of Karl Popper, Nelson Goodman, Hilary Putnam, Israel Scheffler,

Chhanda Gupta and others. (Krausz, Division III)

## PHIL B212 Metaphysics

An examination of the issues that arise when we try to discern the fundamental nature of the world. What does it mean to say that something is real, objective, mind-independent or true? How do we go about deciding whether the world includes values, God, mind, numbers? Is there a reason to regard science's description of the world as depicting the world as it really is? (Chen, Division III)

## PHIL B213 Introduction to Mathematical Logic

Equational logics and the equational theories of algebra are used as an introduction to mathematical logic. While the basics of the grammar and deductive systems of these logics are covered, the primary focus is their semantics or model theory. Particular attention is given to those ideas and results that anticipate developments in classical first-order model theory. Prerequisites: Philosophy 103 and Mathematics 231. (Weaver, Division II; cross-listed as GNST B213)

## PHIL B221 Ethics

How should we live our lives and interact with others? This course explores answers to this question in the context of the global community in which we now live. It introduces students to ethics by way of an examination of moral theories (such as theories of justice and human rights, utilitarianism, Kant's categorical imperative, relativism and care ethics) and of practical
issues (such as abortion, euthanasia, pornography and censorship, animal rights and the environment, and equity). (Koggel, Division III)

PHIL B222 Aesthetics: The Nature and Experience of Art
What sorts of things are works of art, music and literature? Can criticism in the arts be objective? Do such works answer to more than one admissible interpretation? If so, what is to prevent one from sliding into an interpretive anarchism? What is the role of a creator's intentions in fixing upon admissible interpretations? What is the nature of aesthetic experience? Readings will be drawn from contemporary sources from the analytic and continental traditions. (Krausz, Division III; cross-listed as COML B222)

## PHIL B226 Introduction to

Confucianism
(Kim, Division III; cross-listed as EAST B226 and POLS B226) Not offered in 2005-06.

## PHIL B228 Political Philosophy (Ancient and Early Modern)

(Salkever, Division III; cross-listed as POLS B228)

## PHIL B229 Concepts of the Self

In this course, we will discuss several related philosophical questions about the nature of the self, introspection, self-knowledge and personal identity. What kind of thing is the self? Is the self identical with your body or something distinct from it? What is introspection? What are you conscious of when you are self-conscious? How does
knowledge of your own thoughts, sensations and desires differ from other kinds of knowledge? What kinds of changes can you undergo and still remain the same person you were before? We will address these issues by reading work from both historical and contemporary sources. (Chen, Division III) Not offered in 2005-06.

## PHIL B230 Discrete Mathematics

An introduction to discrete mathematics with strong applications to computer science. Topics include set theory, functions and relations, propositional logic, proof techniques, recursion, counting techniques, difference equations, graphs and trees. (Weaver, Division II or Quantitative Skills; cross-listed as CMSC B231 and MATH B231)

## PHIL B231 Political Philosophy (Modern)

(staff, Division III; cross-listed as POLS B231)

## PHIL B236 Plato: Early and Middle Dialogues

Plato is sometimes accused of being out of touch with the real world, of radically changing his mind in his later years, of keeping his "secret" philosophy hidden, and even of writing not philosophy so much as dramatic fiction. Carefully reading representative later and earlier work, we will try to see how far such claims might or might not be justified. (Dostal, Division III) Not offered in 2005-06.

## PHIL B238 Science, Technology and the Good Life

This course considers questions concerning what is science, what is technology and what is their relationship to each other and to the domains of ethics and politics. We will consider how modern science defined itself in its opposition to Aristotelian science. We will examine the Cartesian and Baconian scientific models and the selfunderstanding of these models with regard to ethics and politics. Developments in the philosophy of science will be considered, e.g., positivism, phenomenology, feminism, sociology of science. Biotechnology and information technology illustrate fundamental questions. The "science wars" of the 1990s provide debates concerning science, technology and the good life. (Dostal, Division III; cross-listed as POLS B238)

## PHIL B246 Philosophical Skepticism

This course will examine philosophical arguments that purport to show that we cannot know the things we take ourselves to know. We will focus on the problem of induction, external world skepticism, the problem of other minds and self-knowledge. (Chen, Division III) Not offered in 2005-06.

## PHIL B252 Feminist Theory: Gender and the Global Division of Labor

An examination of feminist critiques of traditional philosophical conceptions of morality, politics, the self, reason and objectivity. Contributions to issues of concern for feminists, such as the nature of equality, justice and oppression, are studied. The course considers the evolution of
feminist theory concepts and hones in on the feminist interrogation of globalization. (Barker, Division III)

PHIL B300 Nietzsche, Kant, Plato:
Modes of Practical Philosophy
(Salkever, Division III; cross-listed as POLS B300)

## PHIL B303 Advanced Mathematical

 LogicThis course develops various advanced topics in the branch of mathematical logic called model theory. Topics include homogeneous models, universal models, saturated and special models, back-and-forth constructions, ultraproducts, the compactness and Lowenheim-Skolem theorems, submodel complete theories, model complete theories, and omega-categorical theories. Prerequisite: Philosophy 213 or Haverford Mathematics 237. (Weaver, Division II; cross-listed as GNST B303)

## PHIL B310 Philosophy of Science

An examination of positivistic science and its critics. Topics include the possibility and nature of scientific progress from relativistic perspectives. (Krausz, Grobstein, Division III)

## PHIL B314 Existentialism

The course examines the philosophical roots and development of existentialism through selected readings (including novels and plays where relevant) in the works of Kierkegaard, Nietzsche, Heidegger, Sartre, Simone de Beauvoir, Camus, Marcel and Jaspers. The focus will be on the main features of the existentialist outlook, including treatments of freedom and choice,
the person, subjectivity and intersubjectivity, being, time and authenticity. (staff, Division III) Not offered in 2005-06.

## PHIL B318 Philosophy of Language

Mathematically precise results in linguistics, computer science and logic presuppose the theory of strings. This theory has two formulations: (1) the theory of string systems; and (2) the theory of generalized arithmetics. These formulations are equivalent and within the theory of string systems three different models for linguistic description are developed: algebraic, automata theoretic and formal grammar. As an example we take distributional structure and define regular sets. We then show that these regular sets are the class of languages generated by left linear grammars and that this class is those languages accepted by finite state automata. Prerequisite: Philosophy 103. (Weaver, Division III)

## PHIL B319 Philosophy of Mind

Contemporary philosophy of mind is a subfield of metaphysics that attempts to explain how the existence of mental properties and events (such as pain and belief) can be consistent with the modern scientific view that everything that exists is physical. The course will explore major theories about mental properties, including functionalism, epi-phenomenalism, supervenience and eliminative materialism. We will discuss the debate over whether the mind is more like a traditional computer or a connectionist "neural net." We will examine theories of mental content - how mental states come to be about one thing rather than something else. (Chen, Division III) Not offered in 2005-06.

PHIL B321 Greek Political Philosophy (Salkever, Division III; cross-listed as POLS B320) Not offered in 2005-06.

## PHIL B323 Culture and Interpretation

This course will pursue such questions as the following. For all objects of interpretation, must there be a single right interpretation? If not, what is to prevent one from sliding into an interpretive anarchism? Does interpretation affect the nature or the number of an object of interpretation? Does the singularity or multiplicity of interpretations mandate either realism or constructivism or any other ontology? Discussions will be based on contemporary readings. (Krausz, Division III; cross-listed as COML B323) Not offered in 2005-06.

## PHIL B325 Philosophy of Music: The Nature and Experience of Classical Music

This course will consider philosophical issues pertaining to the ontology of works of music, meaning and understanding of music, emotions and expressiveness of music, music and intentionality, scores in relation to performances, the idea of rightness of interpretation, music and morality, and music in relation to other arts and practices. Examples of works will be provided in class. Prerequisite: a 200 -level philosophy course or a course in music, music theory or criticism, or permission of instructor. (Krausz, Division III) Not offered in 2005-06.

## PHIL B326 Relativism: Cognitive and Moral

Cognitive relativists believe that truth is relative to particular cultures or concep-
tual schemes. In an analogous way, moral relativists believe that moral rightness is relative to particular cultures or conceptual schemes. Relativistic theories of truth and morality are widely embraced in the current intellectual climate, and they are as perplexing as they are provocative. This course will examine varieties of relativism and their absolutistic counterparts. Readings will be drawn from contemporary sources. (Krausz, Division III)

## PHIL B327 Political Philosophy in the 20th Century

(Salkever, Division III; cross-listed as POLS B327)

## PHIL B329 Wittgenstein

Wittgenstein is notable for developing two philosophical systems. In the first, he attempted to show there is a single common structure underlying all language, thought and being, and that the job of philosophy was to make it clear. In the second, he denied the idea of such a structure was even coherent, and claimed that the job of philosophy was to free philosophers from bewitchments due to misunderstandings of ordinary concepts in language. The course begins by examining the first system in the Tractatus-Logico-Philosophicus and turns to his rejection of his earlier ideas in Philosophical Investigations and in On Certainty. (Koggel, Division III; crosslisted as GERM B329)

## PHIL B330 Kant

The significance of Kant's transcendental philosophy for thought in the 19th and 20th centuries cannot be overstated. His work is profoundly important for both the
analytical and the so-called "continental" schools of thought. This course will provide a close study of Kant's breakthrough work: The Critique of Pure Reason. We will read and discuss the text with reference to its historical context (Descartes, Locke, Hume, Leibniz, etc.) and with respect to its impact on developments in epistemology, philosophy of mind, philosophy of science, philosophy of religion as well as developments in German Idealism and 20th century phenomenology (Husserl and Heidegger). (Dostal, Division III) Not offered in 2005-06.

## PHIL B336 Plato: Later Dialogues

An examination of several so-called "late" dialogues, primarily Theaetetus, Sophist, Statesman and Philebus. Special attention is given to the literary character of the dialogues, with thematic focus on dialectic and dialogic inquiry, Aristotelian modes of explanation and the Platonic images of the philosopher and the political leader. Fundamental ontological, epistemological and political questions are considered in these dialogues. (Dostal, Division III; cross-listed as POLS B336)

## PHIL B338 Phenomenology: Husserl and Heidegger

This upper-level seminar will consider the two main proponents of phenomenology - a movement in philosophy in the 20th century that attempted to restart philosophy in a radical way. Its concerns are philosophically comprehensive: ontology, epistemology, philosophy of science, ethics and so on. Phenomenology provides the important background for other later developments in 20th-century philosophy
and beyond: existentialism, deconstruction, post-modernism. This seminar will focus primarily on Edmund Husserl's Crisis of the European Sciences and Martin Heidegger's Being and Time. Other writings to be considered include some of Heidegger's later work and Merleau-Ponty's preface to his Phenomenology of Perception. (Dostal, Division III)

## PHIL B344 Development Ethics

This course explores the questions and moral issues raised by development in the context of globalization. Questions to be considered include: In what direction and by what means should a society develop? What are the obligations, if any, of rich countries to poor countries? What role, if any, should rich countries, international institutions and nongovernmental organizations have in the development or self-development of poor countries? To what extent, if any, do moral relativism, national sovereignty and universalism pose a challenge to cross-cultural ethical inquiry about theories of human flourishing, human rights and justice? (Koggel, Division III; cross-listed as POLS B344) Not offered in 2005-06.

## PHIL B347 Philosophy of Perception

A discussion of several issues in the philosophy of perception. What exactly do we perceive? What is the role of concepts in our experience? What is the relation between perceptual experience and empirical judgment? Does our capacity to think depend on our ability to perceive? (Chen, Division III)

## PHIL B352 Feminism and Philosophy:

## Transnationalism

An investigation of the lessons feminism and philosophy offer one another. The course examines feminist critiques of traditional philosophical conceptions of morality, the self, reason and objectivity; and it studies philosophical contributions to issues of concern for feminists, such as the nature of equality, justice and oppression. (Koggel, Division III; cross-listed as POLS B352) Not offered in 2005-06.

## PHIL B355 Descartes

This advanced seminar examines the major works of the 17 th-century philosopher René Descartes. Through his Meditations, with responses and replies, Principles of Philosophy, Discourse on Method and other works, we will gain an appreciation of Descartes' philosophical sophistication and the richness of his positions. Emphasis will be placed on the context of Descartes' work in the history of philosophy. (Chen, Division IOI) Not offered in 2005-06.

PHIL B359 Sacrifice, Identity and Law (Elkins, Division III; cross-listed as COML B359 and POLS B359) Not offered in 2005-06.

## PHIL B361 Interpretation Theory: Gadamer

This upper-level seminar focuses on a major work of contempoary philosophy, Hans-Georg Gadamer's Truth and Method, which provides a comprehensive theory of interpretation. Gadamer argues that all experience and understanding is interpretive. The seminar will consider both the background for and the reception of this
work through selections from, among others, Aristotle, Derrida, Dilthey, Habermas, Heidegger, Kant, Plato, and Strauss. (Dostal, Division III) Not offered in 2005-06.

## PHIL B364 Irony and Inquiry: Plato

 and Nietzsche(Elkins, Salkever, Division III; cross-listed as COML B364 and POLS B364) Not offered in 2005-06

## PHIL B367 Hegel's Philosophy of Right

Hegel's Philosophy of Right, his major work of legal and political philosophy, is an account of the ethical basis of the state and of the relationship of politics, law and morality. In this course, we will engage in a close reading of the full text of the Philosophy of Right and consider several supplementary texts, including Marx's Critique of the Philosophy of Right. (Elkins, Division III; cross-listed as POLS B367)

## PHIL B372 Introduction to Artificial Intelligence

(Kumar, Division II and Quantitative Skills; cross-listed as CMSC B372) Not offered in 2005-06.

PHIL B376 Citizenship and Migration
(Barker; cross-listed as POLS B376)
PHIL B380 Persons, Morality and Modernity
(Elkins, Division III; cross-listed as POLS B380) Not offered in 2005-06.

PHIL B384 Islamic Political Thought
(Harrold, Division III; cross-listed as POLS B384) Not offered in 2005-06.

PHIL B390 The American Regime:
Philosophical Foundations of
American Politics
(staff, Division III; cross-listed as POLS
B390) Not offered in 2005-06.

## PHIL B399 Senior Conference

Senior majors are required to write an undergraduate thesis on an approved topic. The senior conference is the course in which research and writing are directed. Seniors will meet collectively and individually with the supervising instructor. (Chen)

PHIL B403 Supervised Work

## Physics

Students may complete a major or minor in physics. Within the major, students may complete a minor in computational methods or educational studies, or complete the requirements for secondary education certification. Students may complete an M.A. in the combined A.B./M.A. program.

## Faculty

Peter A. Beckmann, Professor and Chair
Christian Bracher, Lecturer
Mark Matlin, Senior Lecturer and Laboratory Coordinator
Elizabeth F. McCormack, Professor (on leave 2005-06)
David Nice, Visiting Assistant Professor
Michael W. Noel, Assistant Professor
The courses in physics emphasize the concepts and techniques that have led to our present state of understanding of the physical universe. They are designed to relate the individual parts of physics to the whole rather than to treat them as separate disciplines. In the advanced courses, the student applies these concepts and techniques to increasingly independent studies of physical phenomena. Opportunities exist for interdisciplinary work, for participation by qualified majors in research with members of the faculty, and for training in electronics, instrumentation and experimentation, including computer interfacing and programming.

## Required Introductory Courses for the Major and Minor

The introductory courses required for the physics major and minor are Physics 103, 104 or 101, 102 and Mathematics 101, 102. Advanced placement and credit is given for a score of 4 or 5 on the AP tests. Alternatively, students may take the departmental advanced placement examinations just prior to or during the first week of classes. Entering students are strongly urged to take departmental placement examinations in physics and mathematics if they had reasonably strong courses in high school. It is best for a student considering a physics major to complete the introductory requirements in the first year. However, the major sequence is designed such that a student who completes the introductory sequence by the end of the sophomore year can major in physics.

## Major Requirements

Beyond the four introductory physics and mathematics courses, nine additional courses are required for the major. (Haverford courses may be substituted for Bryn Mawr courses where appropriate.) Five of the nine courses are Physics 206, 214, 215, 306 and Mathematics 201. The remaining four courses must be chosen from among the 300 -level physics courses, any one course from among Astronomy 305, 320 and 322 , or any one course from among Mathematics 303, 312 and 322.

The department has been very successful in preparing students for graduate school in physics, physical chemistry, materials science, engineering and related fields. To
be well prepared for graduate school, students should take Physics 302, 303, 308, 309 and 331. These students should also take any additional physics, mathematics and chemistry courses that reflect their interests, and should engage in research with a member of the faculty by taking Physics 403. Note that Physics 403 does not count toward one of the 13 courses required for the major.

Typical plans for a four-year major in physics are listed below.

Four-Year Plan meeting the minimum requirements for the major:

1 st Year $\quad \begin{aligned} & \text { Physics 103, } 104 \\ & \\ & \\ & \text { Mathematics 101, } 102\end{aligned}$
2nd Year Physics 214, 215, 206
Mathematics 201
3rd Year Physics 306 and one (or two) other 300-level physics course(s)
4th Year Three (or two) other 300-level physics courses

Four-Year Plan providing adequate preparation for graduate school:

1st Year Physics 103, 104 Mathematics 101, 102
2nd Year Physics 214, 215, 206
Mathematics 201
3rd Year Physics 306 and either 303, 309 or 308, 302
4th Year Physics 331 and either 308, 302 or 303, 309
Physics 403
The physics program at Bryn Mawr allows for a student to major in physics even if the introductory courses are not completed
until the end of the sophomore year, as long as calculus is taken in the first year. It is also possible, although difficult, for the student majoring in three years to be adequately prepared for graduate school. To do this, the outline below should be supplemented with (at least) Physics 403 in the 4th year.

## Three-Year Plan meeting the minimum requirements for the major:

1st Year Mathematics 101, 102)
2nd Year Physics 103, 104, 206
Mathematics 201
3rd Year Physics 214, 215, 306 and 302 or 331
4th Year Three 300-level physics courses

## Honors

The A.B. degree may be awarded with honors in physics. The award is based on the quality of original research done by the student and a minimum grade point average. The research must be described in a senior thesis presented to the department. A grade point average of 3.4 or higher in 200- and 300 -level physics courses (excluding Physics 380 and 390) and an overall grade point average of at least 3.0, both calculated at the end of the senior year, must be achieved.

## Minor Requirements

The requirements for the minor, beyond the introductory sequence, are Physics 206, 214, 215, 306; Mathematics 201; and two additional 300 -level physics courses.

## Minor in Computational Methods

Students may major in physics and receive a minor in computational methods. Students would need to complete the requirements for the Physics major including two of the following courses: Physics 305 (or 316 at Haverford). 306 and 322. Further, students would have to complete Computer Science 110, 206 and 231 and one of Computer Science 212, 225 (at Haverford), 245, 246, 330 or 340 (at Haverford).

## Minor in Educational Studies or Secondary-School Teacher Certification

Students majoring in physics may pursue a minor in educational studies or state certification to teach at the secondary-school level. Students seeking the minor need to complete the requirements for the physics major including one of Physics 380, 459 (at Haverford) or 460 (at Haverford), and five additional courses in the Education Program, including a two-semester senior seminar, which requires five to eight hours per week of fieldwork. To earn secondaryschool certification (grades 7-12) in physics students must: complete the physics major plus two semesters of chemistry and one semester as a teaching assistant in a laboratory for introductory or intermediate physics courses; complete one year of biology (recommended); complete six education courses; and student-teach full-time (for two course credits) second semester of their senior year.

## A.B./M.A. Program

To earn an M.A. degree in physics in the College's A.B./M.A. program, a student must complete the requirements for an undergraduate physics major and also must complete six units of graduate level work in physics. Of these six units, as many as two units may be undergraduate courses at the 300 level taken for graduate credit (these same two courses may be used to fulfill the major requirements for the A.B. degree), at least two units must be graduate seminars at the 500 level, and two units must be graduate research at the 700 level leading to the submission and oral defense of an acceptable M.A. thesis. Students must also demonstrate skill in computing or in a foreign language.

## Courses at Haverford College

Many upper-level physics courses are taught at Haverford and Bryn Mawr in alternate years. These courses (numbered $302,303,308,309$ and 322) may be taken interchangeably to satisfy major requirements.

## PHYS B101, B102 Introductory

Physics
Two introductory courses on the study of the physical universe. Emphasis is on developing an understanding of how we study the universe, the ideas that have arisen from that study, and on problem solving. Physics 101 includes topics from among Newtonian kinematics and dynamics, relativity, gravitation, fluid mechanics, and waves and sound. Physics 102 includes electricity and magnetism, electrical circuits, light and optics, quantum
mechanics, atomic and nuclear physics, and particle physics and cosmology. Calculus is introduced and used throughout. An effective and usable understanding of algebra and trigonometry is assumed. Lecture three hours, laboratory three hours a week. (staff, Division IIL and Quantitative Skills)

## PHYS B103, B104 Foundations of

## Physics

These two courses present an integrated introduction that develops physical insight and problem-solving skills, and an appreciation for the conceptual and mathematical processes by which scientists model the universe. Calculus is used throughout. Topics include: particle physics; cosmology; the fundamental forces of nature; attempts at unifying the forces; Newtonian kinematics and dynamics; conservation laws; gravitation; electricity and magnetism; weak force and radioactive decay; nuclear physics; particle physics; sound waves; electromagnetic waves; quantum mechanics; atoms and molecules; and general relativity. Students are advised against taking Physics 104 without having taken Physics 103. Lecture three hours, laboratory three hours a week. (staff, Division IIL and Quantitative Skills)

## PHYS B107 Conceptual Physics

This course is an introduction to our modern understanding of the physical universe. Special emphasis is placed on how the laws of physics are inferred and tested, how paradigms are developed and how working principles are extrapolated to new areas of investigation. The systematic and serendipitous nature of discoveries is
explored. Examples and illustrations are typically drawn from particle physics, cosmology, nuclear physics, relativity and mechanics. This is a terminal course open to all students who have not taken collegelevel physics. Lecture three hours, laboratory three hours a week. (staff, Division IIL and Quantitative Skills) Not offered in 2005-06.

## PHYS B109 How Things Work

This course provides nonscience majors the opportunity to explore the physical principles that govern the objects and activities familiar in their everyday lives. For example, objects such a roller coasters, rockets, light bulbs and Xerographic copiers will be used to explore motion, fluids, heat and electricity. (staff, Division IIL and Quantitative Skills)

PHYS B206 Mathematical Methods in the Physical Sciences I
This course is the first of a two-course sequence with Physics 306 presenting topics in applied mathematics and computational methods useful to students studying any of the natural sciences including physicists, engineers, physical chemists, geologists and computer scientists. Topics typically covered include vector and complex algebra and analysis, linear systems of equations, probability and statistics, an introduction to first and second order differential equations and partial differential equations. and numerical methods for solving differential equations, solving linear systems of equations, pseudo-random number generation, numerical integration and curve fitting. Lecture and discussion four hours a week. Prerequisites: Mathematics 201.

## PHYS B214 Modern Physics and Quantum Mechanics

Survey of particles and fields, experimental origins of quantum theory; Schrödinger's equation, one-dimensional quantum mechanical problems; classical and quantum mechanical treatments of the harmonic oscillator and motion in an inverse square field; the hydrogen atom. Lecture three hours, laboratory in modern physics and physical optics three hours a week. Prerequisite: Physics 102 or 104 , or permission of instructor. Corequisite: Mathematics 201 or Haverford equivalents. (staff, Division IIL and Quantitative Skills)

## PHYS B215 Special Relativity,

 Electromagnetism and Particle Physics Topics covered in lecture include elec-tro- and magnetostatics, electrodynamics, Maxwell's equations, light and physical optics. Maxwell's theory is used to motivate the study of the special theory of relativity; its impact on Newtonian mechanics is considered. The covariant formalism is introduced. Other fundamental forces of nature and their possible unification are studied. The laboratory covers topics in direct and alternating current and digital circuitry. Lecture three hours, laboratory three hours a week. Prerequisite: Physics 102 or 104 and Mathematics 201, or Haverford equivalents. (staff, Division IIL and Quantitative Skills)
## PHYS B302 Quantum Mechanics and Applications

This course presents nonrelativistic quantum mechanics, including Schrödinger's equation, the eigenvalue problem, the measurement process, the hydrogen atom, the
harmonic oscillator, angular momentum, spin, the periodic table, time-dependent perturbation theory and the relationship between quantum and Newtonian mechanics. Lecture and discussion four hours a week. Prerequisites: Physics 214 and 306. Alternates between Bryn Mawr and Haverford; 2005-06 at Bryn Mawr.

## PHYS B303 Statistical and Thermal

## Physics

This course presents the statistical description of the macroscopic states of classical and quantum systems, including conditions for equilibrium; microcanonical, canonical and grand canonical ensembles; and Bose-Einstein, Fermi-Dirac and Max-well-Boltzmann statistics. Examples and applications are drawn from thermodynamics, solid state physics, low temperature physics, atomic and molecular physics and electromagnetic waves. Lecture and discussion four hours a week. Prerequisite: Physics 214. Corequisite: Physics 306. Alternates between Bryn Mawr and Haverford; 2005-06 at Haverford.

## PHYS B305 Advanced Electronics

This laboratory course is a survey of electronic principles and circuits useful to experimental physicists and engineers. Topics include the design and analysis of circuits using transistors, operational amplifiers, feedback and analog-to-digital conversion. Also covered is the use of electronics for automated control and measurement in experiments, and the interfacing of computers and other data acquisition instruments to experiments. Laboratory eight hours a week. Prerequisite: Physics 215 or Haverford Physics 213.

PHYS B306 Mathematical Methods in the Physical Sciences II
This course is the second of a sequence with Physics 206 presenting topics in applied mathematics and computational methods useful to students studying the natural sciences including physicists, engineers, physical chemists, geologists and computer scientists. Topics covered include coordinate transformations and tensors, vector spaces, Fourier series, integral transforms, advanced ordinary and partial differential equations, special functions, boundary-value problems, functions of complex variables, an introduction to group theory and numerical methods for matrix diagonalization, solving systems of ordinary differential equations, solving partial differential equations, and Monte Carlo simulations. Lecture and discussion four hours a week. Prerequisites: Mathematics 201 and Physics 206.

## PHYS B308 Advanced Classical Mechanics

This course presents kinematics and dynamics of particles and macroscopic systems using Newtonian, Lagrangian and Hamiltonian techniques. Topics include oscillations, normal mode analysis, inverse square laws, nonlinear dynamics, rotating rigid bodies and motion in noninertial reference frames. Lecture and discussion four hours a week. Corequisite: Physics 306. Alternates between Bryn Mawr and Haverford; 2005-06 at Bryn Mawr.

## PHYS B309 Advanced <br> Electromagnetic Theory

This course presents the mathematical structure of classical field theories. Topics
include electrostatics and magnetostatics, dielectrics, magnetic materials, electrodynamics, Maxwell's equations, electromagnetic waves and relativity. Examples and applications may also be drawn from superconductivity, plasma physics and radiation theory. Lecture and discussion four hours a week. Prerequisites: Physics 215 and 306. Alternates between Bryn Mawr and Haverford; 2005-06 at Haverford.

## PHYS B313 Particle Physics

This course presents models of the structure and interactions of the fundamental particles. Topics include relativistic kinematics; symmetries and conservation laws; the Feynman diagram formalism; quantum theories of the electromagnetic, weak and strong forces; the Standard Model; gauge theories; unification of the fundamental forces; and an introduction to string theory. Prerequisite: Physics 302.

## PHYS B322 Solid State Physics

This course presents the physics of solids. Topics include crystal structure and diffraction; the reciprocal lattice and Brillouin zones; crystal binding; lattice vibrations and normal modes; phonon dispersion; Einstein and Debye models for the specific heat; the free electron model; the Fermi surface; electrons in periodic structures; the Bloch theorem; band structure; semiclassical electron dynamics; semiconductors; and superconductivity. Lecture and discussion four hours a week. Prerequisites: Physics 303 and 306. Alternates between Bryn Mawr and Haverford; 2005-06 at Haverford.

## PHYS B325 Unified Grand Tour of Theoretical Physics

This course presents an introduction to the successful mathematical models of physical systems developed over the last 100 years. Topics will be taken from the geometry of spacetime, special relativity, general relativity and gravitation, quantum theory, second quantization and quantum field theory, relativistic quantum mechanics, gauge fields, the standard model of the particles and forces, grand unified theories, gravity and supersymmetry, and string theory. Lecture and discussion four hours a week. Prerequisites: Physics 306 and 308. Corequisite: Physics 302.

## PHYS B331 Advanced Modern Physics Laboratory

This laboratory course consists of setpiece experiments as well as directed experimental projects to study a variety of phenomena in atomic, molecular, optical, nuclear and solid state physics. The experiments and projects serve as an introduction to contemporary instrumentation and the experimental techniques used in physics research laboratories in industry and in universities. Laboratory eight hours a week. Prerequisites: Physics 214 and 306. Corequisite: Physics 215.

## PHYS B380 Assistant Teaching in

## Physics

Students have the opportunity to work with an experienced faculty member as they serve as assistant teachers in a college course in physics. Students will participate in a directed study of the literature on teaching and learning pedagogy; participate in constructing and designing
a course, and engage in teaching components of the course. Supervised work 12 hours a week. Prerequisite: Physics 103/104 or equivalent, and permission of the instructor.

## PHYS B390 Independent Study

At the discretion of the department, juniors or seniors may supplement their work in physics with the study of topics not covered in regular course offerings. Supervised work 12 hours a week. Prerequisite: Physics 306 and permission of the instructor.

## PHYS B403 Supervised Units of Research

At the discretion of the department, juniors and seniors may supplement their work in physics with research in one of the faculty research groups. At the discretion of the research supervisor, a written paper and an oral presentation may be required at the end of the semester or year. The available areas of supervised research projects include molecular spectroscopy and dynamics, nonlinear dynamics, condensed matter physics and physical chemistry. Students are encouraged to contact individual faculty members and the departmental Web pages for further information.

# The Caroline McCormick Slade Department of Political Science 

Students may complete a major or minor in political science. Within the major, students may complete a concentration in environmental studies.

## Faculty

Michael H. Allen, Professor
Jeremy Elkins, Assistant Professor (on leave semester I)
Marissa Martino Golden, Associate
Professor and Chair (on leave semester I)
Carol J. Hager, Associate Professor
Deborah Harrold, Lecturer
Ahsiya Posner, Instructor
Marc Howard Ross, Professor and Acting Chair, semester I
Stephen G. Salkever, Professor
Corey Shdaimah, Lecturer
Dannagal Goldthwaite Young, Instructor
The major in political science aims at developing the reading, writing and thinking skills needed for a critical understanding of the political world. Coursework includes a variety of approaches to the study of politics: historical/interpretive, quantitative/deductive and philosophical. Using these approaches, students examine political life in a variety of contexts from the small-scale neighborhood to the international system, asking questions about the different ways in which humans have addressed the organization of society, the
management of conflicts and the organization of power and authority.

## Major Requirements

The major consists of a minimum of 10 courses, including 398 and 399. Two of these must be chosen from among any of the following entry-level courses: 101, $121,131,141,205,220,228$ and 231. The major must include work done in two distinct fields. A minimum of three courses must be taken in each field, and at least one course in each field must be at the 300 level. Majors take the Senior Seminar (398) in the first semester of the senior year and write the Senior Essay (399) in the second.

Fields are not fixed in advance, but are set by consultation between the student and departmental advisers. The most common fields have been American politics, comparative politics, international politics and political philosophy, but fields have also been established in American history, East Asian studies, environmental studies, Hispanic studies, international economics, political psychology, public policy and women and politics, among others.

Up to three courses from departments other than political science may be accepted for major credit, if in the judgment of the department these courses are an integral part of the student's major plan. This may occur in two ways: an entire field may be drawn from courses in a related department (such as economics or history) or courses taken in related departments will count toward the major if they are closely linked
with work the student has done in political science. Ordinarily, courses at the 100 level or other introductory courses taken in related departments may not be used for major credit in political science. In addition, at least three of the courses taken towards completion of the major must be taken in the Bryn Mawr Department of Political Science, not counting Political Science 398 and 399.

## Honors

Students who have done distinguished work in their courses in the major and who write outstanding senior essays will be considered by the department for departmental honors.

## Minor Requirements

A minor in political science consists of six courses distributed across at least two fields. At least two of the courses must be at the 300 level. At least three of the courses must be taken from the Bryn Mawr Department of Political Science course offerings.

## Concentration in Environmental Studies

The Department of Political Science participates with other departments in offering a concentration within the major in environmental studies (see page 151 ).

## Cross-Registration

All Haverford political science courses count toward the Bryn Mawr major; courses in related departments at Haverford that are accepted for political science major
credit will be considered in the same way as similar courses taken at Bryn Mawr. All Bryn Mawr majors in political science must take at least three courses in political science at Bryn Mawr, not counting Political Science 398 and 399.

## POLS B101 Introduction to Political Science

An introduction to various theoretical and empirical approaches to the study of politics with emphasis on three concepts central to political life in all societies: authority, community and conflict. The course examines these concepts in relation to local communities, nations and the international system. (Ross, Harrold, Division I) Not offered in 2005-06.

## POLS B111 Introduction to Peace and Conflict Studies

A broad and interdisciplinary overview of the study of peace and conflict. Areas to be introduced will include interpersonal conflict and conflict management, alternative dispute resolution and the law, community conflict and mediation, organizational, intergroup and international conflict and conflict management. This course will also serve as a foundation course for students in or considering the peace studies concentration. (Posner)

## POLS B121 American Politics

An introduction to the major features and characteristics of the American political system. Features examined include voting and elections; the institutions of government (Congress, the Presidency, the courts and the bureaucracy); the policy-making process; and the role of groups (interest
groups, women and ethnic and racial minorities) in the political process. Enrollment is limited to 35 students. (Golden, Division I)

## POLS B131 Comparative Politics

An introduction to the comparative study of political systems. A sampling of major questions addressed by comparative approaches such as why authority structures differ across countries; how major issues such as inequality, environmental degradation and ethno-nationalism arise in different polities; and why governmental responses to those issues differ so widely. Comparisons are made across time and space. Emphasis is placed on institutional, cultural and historical explanations. Enrollment is limited to 35 students. (Hager, Division I)

## POLS B141 Internationall Politics

An introduction to international relations, exploring its main subdivisions and theoretical approaches. Phenomena and problems in world politics examined include systems of power management, imperialism, war, cold war, bargaining and peace. Problems and institutions of international economy and international law are also addressed. This course assumes a reasonable knowledge of modern world history. Enrollment is limited to 35 students. (Allen, Division I)

## POLS B205 European Politics: Between Unification and Dissolution

An analysis of the accelerating process of European unification and the increasing political divisiveness within individual European countries. We focus on the evolu-
tion of the state-society relationship in selected countries and the emergence of new sources of conflict in recent years. These are placed in the context of a changing international scene: the eastward expansion of the European Union, European social and economic unity and the introduction of the Euro. (Hager, Division I) Not offered in 2005-06.

## POLS B206 Conflict and Conflict Management: A Cross-Cultural Approach

This course examines cross-cultural differences in the levels and forms of conflict and its management through a wide range of cases and alternative theoretical perspectives. Conflicts of interest range from the interpersonal to the international levels and an important question is the relevance of conflict and its management in smallscale societies as a way to understand political conflict and dispute settlement in the United States and modern industrial settings. Prerequisite: one course in political science, anthropology or sociology. (Ross, Division I; cross-listed as ANTH B206)

## POLS B220 Constitutional Law

A consideration of some of the leading cases and controversies in American constitutional law. The course will focus on such questions as the role of the constitution in mediating the relationship between public and private power with respect to both difference and hierarchy, and on the role of judicial review within a constitutional system. Enrollment is limited to 35 students. (Elkins, Shdaimah, Division I)

POLS B222 Introduction to Environmental Issues: Movements, Controversies and Policy Making in International Perspective
An exploration of the ways in which different cultural, economic and political settings have shaped issue emergence and policy-making. Consideration is given to the prospects for international cooperation in solving environmental problems. (Hager, Division I; cross-listed as CITY B222) Not offered in 2005-06.

POLS B226 Introduction to Confucianism
(Kim, Division III; cross-listed as EAST B226 and PHIL B226) Not offered in 2005-06.

## POLS B228 Political Philosophy (Ancient and Early Modern)

An introduction to the fundamental problems of political philosophy, especially the relationship between political life and the human good or goods. Readings from Aristotle, Hobbes, Machiavelli, Plato and Rousseau. (Salkever, Division III; crosslisted as PHIL B228)

## POLS B231 Political Philosophy (Modern)

A continuation of Political Science 228, although 228 is not a prerequisite. Particular attention is given to the various ways in which the concept of freedom is used in explaining political life. Readings from Hegel. Locke, Marx, J.S. Mill and Nietzsche. (Salkever, Division III; crosslisted as PHIL B231)

POLS B233 Israel and the Palestinians: History, Politics, Negotiation and Conflict.
This course brings students to examination and analysis of the historical events and political processes that have produced the current situation faced by Israel and the Palestinians. Designed to introduce students to the complexity behind the soundbytes, the course readings will emphasize analytical skills for reading different kinds of texts, including primary sources. Topics include the history of the Zionist movement, the emergence of Palestinian nationalism, major changes in Israeli domestic politics and negotiation processes. (Harrold, Division I; cross-listed as HEBR B233 and HIST B290)

POLS B234 The Jurisprudence of the Administrative State
Through an intensive examination of judicial opinions and secondary texts, this course considers the nature of law and rights in the administrative state. Topics include the sources of legitimate agency power, the role of courts and agencies in interpreting statutes, and the rights of individuals to participate in agency deci-sion-making and to challenge agency action. (Elkins, Division I)

POLS B238 Science, Technology and the Good Life
(Dostal, Division III; cross-listed as PHIL B238)

## POLS B241 The Politics of International Law and Institutions

An introduction to international law, which assumes a working knowledge of modern
world history and politics since World War II. The origins of modern international legal norms in philosophy and political necessity are explored, showing the schools of thought to which the understandings of these origins give rise. Significant cases are used to illustrate various principles and problems. Prerequisite: Political Science 141. (Allen, Division I)

## POLS B243 African and Caribbean Perspectives in World Politics

This course makes African and Caribbean voices audible as they create or adopt visions of the world that explain their positions and challenges in world politics. Students learn analytical tools useful in understanding other parts of the world. Prerequisite: Political Science 141. (Allen, Division I)

## POLS B248 Modern Middle East Cities: Spaces of Politics, Places of Identity

Taking advantage of the considerable new scholarship on cities, the course will draw from diverse fields to bring different methods to the study of Middle Eastern cities and urbanization. The course will treat the negotiation of state control, urban planning and its alterations in urban practices, social movements and new spaces of politics, competing architectural visions, globalizations, and new local identities. It will treat such topics as Islamic charities in Cairo, shopping malls as public space in Dubai City, Islamic politics in public space in Istanbul, the restructuring of Beirut, and ideas of modernity in the construction of Tel Aviv. (Harrold; cross-listed as CITY B248 and HEBR B248)

## POLS B251 Politics and the Mass Media

A consideration of the mass media as a pervasive fact of U.S. political life and how they influence American politics. Topics include how the media have altered American political institutions and campaigns, how selective attention to particular issues and exclusion of others shape public concerns, and the conditions under which the media directly influence the content of political beliefs and the behavior of citizens. Prerequisite: one course in political science, preferably Political Science 121.
(Young, Division I)

## POLS B254 Bureaucracy and

 Democracy(Golden) Not offered 2005-2006.
POLS B262 Who Believe What and Why: the Sociology of Public Opinion (cross-listed as SOCL B262)

POLS B265 Political Data Analysis (Paradigms and Perestroika)
This course invokes renewed emphasis in the discipline of political science on methodological pluralism. In that spirit, it introduces students to a variety of different ways in which to gather data in order to make knowledge claims about politics. Data are construed broadly to encompass qualitative information as well as quantitative. Methods range from historical contextualization to experiments, surveys, field studies and interpretations of texts and images. (Schram, Division I)

POLS B283 Introduction to the Politics of the Modern Middle East and North Africa
This course is a multidisciplinary approach to understanding the politics of the region, using works of history, political science, political economy, film and fiction as well as primary sources. The course will concern itself with three broad areas: the legacy of colonialism and the importance of international forces; the role of Islam in politics; and the political and social effects of particular economic conditions, policies and practices. (Harrold, Division I; crosslisted as HEBR B283 and HIST B283)

POLS B300 Nietzsche, Kant, Plato:
Modes of Practical Philosophy
A study of three important ways of thinking about theory and practice in Western political philosophy. Prerequisites: Political Science 228 and 231, or Philosophy 101 and 201. (Salkever, Division III; crosslisted as PHIL B300)

## POLS B308 Political Transformation in Eastern and Western Europe: Germany and Its Neighbors

This course examines the many recent changes in Europe through the lens of German politics. From the two world wars to the Cold War to the East European revolutions of 1989 and the European Union, Germany has played a pivotal role in world politics. We will identify cultural, political and economic factors that have shaped this role and analyze Germany's actions in the broader context of international politics. (Hager, Division I; cross-listed as GERM B308) Not offered in 2005-06.

## POLS B310 Topics in Comparative

 Politics: Comparative Public Policy A comparison of the policy-making process and policy outcomes in a variety of countries. Focusing on particular issues such as environmental, social welfare and economic policy, we will identify institutional, historical and cultural sources of the differences. We will also examine the growing importance of international-level policy-making and the interplay between international and domestic pressures on policy makers. (Hager)
## POLS B316 The Politics of Ethnic, Racial and National Groups

An analysis of ethnic, racial and national group cooperation and conflict in a variety of settings. Particular attention is paid to processes of group identification and definition; the politicization of race, ethnic and national identity; and various patterns of accommodation and conflict among groups. Prerequisite: two courses in political science, anthropology or sociology, or permission of instructor. (Ross)

## POLS B320 Greek Political Philosophy

A consideration of major works by Thucydides, Plato and Aristotle, along with readings from the current debate over the relevance of Greek philosophy to philosophy and politics today. (Salkever, Division III; cross-listed as PHIL B321) Not offered in 2005-06.

## POLS B321 Technology and Politics

An analysis of the complex role of technology in Western political development in the industrial age. We focus on the implications of technological advance
for human emancipation. Discussions of theoretical approaches to technology will be supplemented by case studies illustrating the politics of particular technological issues. Prerequisite: one course in political science or permission of instructor. (Hager; cross-listed as CITY B321)

## POLS B327 Political Philosophy in the 20th Century

A study of 20th-century extensions of three traditions in Western political philosophy: the adherents of the German and English ideas of freedom and the founders of classical naturalism. Authors read include Hannah Arendt, Jurgen Habermas and John Rawls. Topics include the relationship of individual rationality and political authority, the "crisis of modernity" and the debate concerning contemporary democratic citizenship. Prerequisites: Political Science 228 and 231, or Philosophy 101 and 201. Enrollment is limited to 18 students. (Salkever, Division III; cross-listed as PHIL B327)

POLS B333 Transformations in American Politics 1955-2005 (Golden) Not offered in 2005-06.

POLS B336 Plato: Later Dialogues
(cross-listed as PHIL B336)

## POLS B339 The Policy-Making

Process
This course examines the processes by which we make and implement public policy in the United States, and the institutions and actors involved in those processes. The aim of the course is to increase our understanding of how these
institutions and actors interact at different stages in the policy process and the nature of the policies that result. Examples will be drawn from a range of policy domains including environmental policy and civil rights. Enrollment is limited to 20 students. (Golden)

## POLS B344 Developmental Ethics

 (Koggel, Division III; cross-listed as PHIL B344) Not offered in 2005-06.
## POLS B347 Advanced Issues in Peace and Conflict Studies

An in-depth examination of crucial issues and particular cases of interest to advanced students in peace and conflict studies through common readings and student projects. Various important theories of conflict and conflict management are compared and students undertake semes-ter-long field research. The second half of the semester focuses on student research topics with continued exploration of con-flict-resolution theories and research methods. Prerequisite: Political Science 206, Political Science 111 or Political Science 247b (at Haverford). (Posner)

## POLS B348 Culture and Ethnic Conflict

An examination of the role of culture in the origin, escalation and settlement of ethnic conflicts. This course examines the politics of culture and how it constrains and offers opportunities for ethnic conflict and cooperation. The role of narratives, rituals and symbols is emphasized in examining political contestation over cultural representations and expressions such as parades, holy sites, public dress,
museums, monuments, and language in culturally framed ethnic conflicts from all regions of the world. Prerequisites: two courses in the social sciences. (Ross; cross-listed as CITY B348)

POLS B352 Feminism and Philosophy (Koggel, Division III; cross-listed as PHIL B352) Not offered in 2005-06.

## POLS B354 Comparative Social

 Movements: Power, Protest and MobilizationA consideration of the conceptualizations of power and "legitimate" and "illegitimate" participation, the political opportunity structure facing potential protesters, the mobilizing resources available to them and the cultural framing within which these processes occur. Specific attention is paid to recent movements that have occurred both within and across countries, especially the feminist, environmental and peace movements. (Hager, Karen; cross-listed as SOCL B354) Not offered in 2005-06.

## POLS B358 Political Psychology of Group Identification <br> (McCauley, Ross; cross-listed as PSYC B358) Not offered in 2005-06.

POLS B359 Sacrifice, Identity and Law This course explores the role of various "sacrificial" practices - involving forms of relinquishment, renunciation, destruction and/or tribute - in the construction of individual and collective identity. The course focuses on both individual and collective (social and political) identity, including the role that various modes of "sacrifice" within law play in constructing
identity. (Elkins, Division III: cross-listed as COML B359 and PHIL B359) Not offered in 2005-06.

## POLS B364 Irony and Inquiry: Plato and Nietzsche

In the work of both Plato and Nietzsche, there is a special and important relation between substance and "style" - that is, between what is said, how it is said and what it is meant to do. Through a close reading of primary texts, this course will explore this relation. In the course of our inquiry, we will explore such questions as the relationship of truth and power; of immanence and transcendence; of thought, action and the good life; and the notion of philosophical irony. (Elkins, Salkever, Division III; cross-listed as COML B364 and PHIL B364) Not offered in 2005-06.

## POLS B367 Hegel's Philosophy of

 Right(Elkins, cross-listed as PHIL B367)

## POLS B374 Gender and Power in Comparative Context: Patriarchy Across Cultures

Patriarchy and fraternity are powerful forms of authority in traditional and modern societies, forms of authority that operate along lines of gender and age and have proved resilient and resistant to feminist challenge. This course examines patriarchy, fraternity and forms of resistance through political theory and empirical analysis of social practices. Our studies will include different historical practices of veiling in Muslim countries, violence and nature in the American West, young women factory workers in Malaysia and
labor protest, women politicians in Turkey, fathers, sons and soldiers in Israel, and discourses of respect, respectability and masculinity for African American men. (Harrold)

## POLS B375 Women, Work and Family

 As the number of women participating in the paid workforce who are also mothers exceeds 50 percent, it becomes increasingly important to study the issues raised by these dual roles as well as to study women's decisions to participate in the paid workforce itself. This seminar will examine the experiences of working and nonworking mothers in the United States, the roles of fathers, the impact of working mothers on children and the policy implications of women, work and family. (Golden, Division I; cross-listed as SOCL B375) Not offered in 2005-06.
## POLS B376 Citizenship and Migration

 An exploration of the theories, policies and practices surrounding political membership, with a focus on contemporary labor migration. The course will examine political theory texts on the subject of citizenship, as well as undertake a comparative review of theories of migration, national migration policies and regional migration pathways. Topics will include immigrant incorporation, transnational identity and the feminization of migration. (Barker; cross-listed as PHIL B376)
## POLS B380 Persons, Morality and Modernity

What demands does the modern world impose on those who live in it? What kinds of persons does the modern world bring
into being? What kinds of ethical claims can that world make on us? What is the relationship between public and private morality, and between each of us as public citizens and private persons? This course explores such questions through an examination of a variety of texts in political theory and philosophy. (Elkins, Division III; cross-listed as PHIL B380) Not offered in 2005-06.

## POLS B384 Islamic Political Thought

The course is concerned with Islamic political thought both as philosophy and as engagement with its contemporary historical world. Readings will be drawn from the rational and philosophic tradition in Islam: al-Farabi, Ibn Rushd (Averroes), Ibn Sina (Avicenna) and al-Ghazali, as well as from later thinkers who engaged issues of authoritarianism, non-Islamic rule, modernity and change: Ibn Taimiya, al-Afghani, Abduh, Mawdudi, Qutb and Khomeini. (Harrold, Division III; cross-listed as PHIL B384) Not offered in 2005-06.

## POLS B390 The American Regime: Philosophical Foundations of American Politics

A consideration of the debates over the meaning of American politics, focusing on three major controversies: religion and politics, race and politics, and the relationship between polity and economy. Readings for the course are drawn from major texts in American political thought, from leading cases in American constitutional law and from modern commentary, both philosophical and policy-oriented. (Salkever, Division III; cross-listed as PHIL B390) Not offered in 2005-06.

## POLS B391 International Political

## Economy

This seminar examines the growing importance of economic issues in world politics and traces the development of the modern world economy from its origins in colonialism and the industrial revolution. Major paradigms in political economy are critically examined. Aspects of and issues in international economic relations such as finance, trade, migration and foreign investment are examined in the light of selected approaches. (Allen)

## POLS B398 Senior Seminar

Required of senior majors. This course is divided into two parts. During the first eight weeks of the term, department faculty meet weekly with senior majors to discuss core questions of method and epistemology in political science and to consider a few selected examples of outstanding work in the discipline. The rest of the term is devoted to individual reading and tutorial instruction in preparation for writing the senior essay. (Allen, Elkins, Golden, Hager, Ross, Salkever)

## POLS B399 Senior Essay

(Allen, Golden, Hager, Harrold, Ross, Salkever)

POLS B403 Supervised Work (staff)

## Psychology

Students may complete a major or minor in psychology. Within the major, students may complete a concentration in neural and behavioral sciences.

## Faculty

Kimberly Wright Cassidy, Associate
Professor and Chair
Margaret A. Hollyday, Professor
Clark R. McCauley, Professor
Paul Neuman, Laboratory Lecturer (on leave semester I)
Leslie Rescorla, Professor
Marc Schulz, Associate Professor
Anjali Thapar, Associate Professor
Earl Thomas, Professor
Robert H. Wozniak, Professor (on leave semester II)

The department offers the student a major program that allows a choice of courses from among a wide variety of fields in psychology: clinical, cognitive, developmental, physiological and social. In addition to the considerable breadth offered, the program encourages the student to focus on more specialized areas through advanced coursework, seminars and especially through supervised research. Students have found that the major program provides a strong foundation for graduate work in clinical, cognitive, developmental, experimental, physiological and social psychology, as well as for graduate study in law, medicine and business.

## Major Requirements

Major requirements in psychology are either Psychology 101 or 102 (or a onesemester introductory psychology course taken elsewhere); Psychology 205; and additional courses at the 200 and 300 levels, as described below. Students may choose to take either Psychology 101 or 102 , or they can elect to take both, as the content areas differ. If a student takes one of the 100 -level courses ( 101 or 102 ), the major requires at least nine courses above the 100 level, not including Psychology 205: five 200-level and four 300-level courses, or six 200-level and three 300level courses. If a student takes both 101 and 102, she must take either four 200level and four 300-level courses or five 200 -level and three 300-level courses. With permission of the department, two semesters of supervised research may be substituted for one 300 -level course. In addition, the following courses offered at Bryn Mawr College may be taken in lieu of one 300-level psychology course: Anthropology 203 (Human Ecology), Anthropology 212 (Primate Evolution and Behavior), Anthropology 253 (Childhood in the African Experience), Biology 321 (Neuroethology), Computer Science 361 (Emergence), Computer Science 372 (Introduction to Artificial Intelligence), Computer Science 376 (Androids: Design and Practice), Philosophy 319 (Philosophy of Mind), Sociology 217 (The Family in Social Context).

Students who have obtained a score of 5 on the Psychology Advanced Placement Exam can waive 101/102 and take courses
at the 200 level. Majors may substitute advance placement credit (score of 5 on the Psychology Advanced Placement exam) for either Psychology 101 or 102.

Courses at the 200 level survey major content areas of psychological research and have introductory psychology as a prerequisite. Courses at the 300 level have a 200 level survey course as a prerequisite and offer either specialization within a content area or integration across areas. With the exception of Psychology 205, all 200-level courses require Psychology 101 or 102 or the permission of the instructor.

The psychology major requires two courses with a laboratory, one at the 100 level ( 101 or 102) and one at the 200 or 300 level. If a major elects to take both 101 and 102 , a laboratory course at the 200 or 300 level is still required. If a student takes introductory psychology elsewhere, and the course has no laboratory, or the student receives advanced placement credit for introductory psychology, then two laboratory courses must be taken at the 200 or 300 level to fulfill major requirements.

Majors are also expected to attend a onehour, weekly seminar in the junior year. This seminar is designed to sharpen students' analytical and critical skills, to provide additional opportunities for studentfaculty interactions, and to build a sense of community.

The selection of courses to meet the major requirements is made in consultation with the student's major adviser. Any continuing faculty member can serve as a major
adviser. It is expected that the student will sample broadly among the diverse fields represented in the curriculum. Courses outside the department may be taken for major credit if they satisfy the above descriptions of 200 -level and 300-level courses. Students should contact their major adviser about major credit for a course outside the department, preferably before taking the course.

## Honors

Departmental honors (called Honors in Research in Psychology) are awarded on the merits of a report of research (the design and execution; and the scholarship exhibited in the writing of a paper based on the research). To be considered for honors, students must have a grade point average in psychology of 3.6 or higher at the end of the fall semester of the senior year.

## Minor Requirements

A student may minor in psychology by taking Psychology 101 or 102 and any other five courses that meet the requirements of the major.

## Concentration in Neural and Behavioral Sciences

An interdepartmental concentration in neural and behavioral sciences is available as an option to students majoring in either biology or psychology. Students electing this option must fulfill requirements of both the major and the concentration, which is administered by an interdepartmental committee.

For a psychology major with a concentration in neural and behavioral sciences, students must complete six required courses: Psychology 101 or $102,201,205,212$, 218 and one of the following 300-level courses - Psychology 323, 326, 350, 351 or 395 .

Five additional Psychology courses at the 200, 300 and 400 levels are required to complete the psychology major with a concentration in neural and behavioral sciences. These should be chosen in consultation with the major adviser to ensure that the distribution of 200 - and 300 -level courses satisfies the psychology major requirements. Some of these courses (such as Supervised Research) may also fulfill core major requirements.

These departmental requirements are in addition to the requirements for the neural and behavioral sciences concentration, which are described on page 230.

## Haverford College Courses

Certain courses currently offered at Haverford College may be substituted for the equivalent Bryn Mawr courses for purposes of the Bryn Mawr psychology major.

Psychology 103d, 104e, 105g, 106,h 107 g at Haverford may be substituted for 101/102. Psychology 200 at Haverford may be substituted for Psychology 205. The following courses at Haverford will count as 200-level courses for the major: Psychology 213 (Memory and Cognition), Psychology 217 (Biological Psychology), Psychology 224 (Social Psychology), Psychology 238 (Psychology of Language),

Psychology 260 (Cognitive Neuroscience), Psychology 309 (Abnormal Psychology). The following Haverford courses will count as 300-level courses for the major: Psychology 214 (Psychology of Adolescence), Psychology 220 (The Psychology of Time), Psychology 221 (The Primate Origins of Society), Psychology 222 (Evolution and Behavior), Psychology 240 (Psychology of Pain and Pain Inhibition), Psychology 250 (Biopsychology of Emotion and Personality), Psychology 311 (Advanced Personality Psychology: Freud), Psychology 325 (The Psychology of Close Relationships), Psychology 340 (Human Neuropsychology), Psychology 350 (Biopsychology of Stress). Students who take Haverford courses with the half credit laboratory attachments may count the lab portion of the course toward fulfilling the advanced lab requirement for the Bryn Mawr major.

## PSYC B101, B102 Experimental

Psychology
Both 101 and 102 present psychology as a natural science and provide a survey of methods, facts and principles relating to basic psychological processes. Topics covered in 101 include neural bases of behavior, learning and motivation, and psychosocial development and abnormal psychology. Topics covered in 102 include human cognition, cognitive development, individual differences and social psychology. Lecture three hours and laboratory four hours a week (for both 101 and 102). (staff, Division IIL)

## PSYC B201 Learning Theory and

## Behavior

This course covers the basic principles of behavior, most of which were discovered through animal research, and their application to the understanding of the human condition. Traditionally, learning has been described in terms of operant and Pavlovian processes, with modeling treated as a special kind of operant conditioning. The basic procedures and principles of operant and Pavlovian conditioning are examined, and their relation to complex human functioning, such as concept formation and awareness, is explored. An introduction to functional assessment and analysis - the benchmarks of applied behavior analysis - will follow. Lecture three hours, laboratory one to two hours a week. (Neuman, Division IIL)

## PSYC B203 Educational Psychology

Topics in the psychology of human cognitive, social and affective behavior are examined and related to educational practice. Issues covered include learning theories, memory, attention, thinking, motivation, social/emotional issues in adolescence and assessment/learning disabilities. This course provides a Praxis Level I opportunity. Classroom observation is required. (Cassidy, Division I)

## PSYC B205 Experimental Methods

 and StatisticsAn introduction to experimental design, general research methodology and the analysis and interpretation of data. Emphasis will be placed on issues involved with conducting psychological research. Topics include descriptive and inferential
statistics, experimental design and validity, analysis of variance and correlation and regression. Each statistical method will also be executed using computers. Lecture three hours, laboratory 90 minutes a week. (Thapar, Division I and Quantitative Skills)

## PSYC B206 Developmental

Psychology
A topical survey of psychological development from infancy through adolescence, focusing on the interaction of personal and environmental factors in the ontogeny of perception, language, cognition and social interactions within the family and with peers. Topics include developmental theories; infant perception; attachment; language development; theory of mind; memory development; peer relations, schools and the family as contexts of development; and identity and the adolescent transition. (Wozniak, Division I)

## PSYC B208 Social Psychology

A survey of theories and data in the study of human social behavior. Special attention to methodological issues of general importance in the conduct and evaluation of research with humans. Topics include group dynamics (conformity, leadership, encounter groups, crowd behavior, intergroup conflict); attitude change (consistency theories, attitudes and behavior, mass media persuasion); and person perception (stereotyping, essentializing, moral judgment). Participation in a research project is required. (Moskalenko, Division I)

## PSYC B209 Abnormal Psychology

An examination of the main psychological disorders manifested by individuals across the lifespan. It begins with a historical overview followed by a review of the major models of psychopathology, including the medical, psychoanalytic, coguitive and behavioral. Disorders covered include attention deficit disorders, personality disorders, anorexia/bulimia, schizophrenia, substance abuse, depression and anxiety disorders. Topics include symptomatology and classification, theories of etiology, research on prognosis, treatment approaches and studies of treatment effectiveness. Two lectures, one discussion section a week. (Rescorla, Division I)

## PSYC B212 Human Cognition

A survey of the history, theories and data of cognitive psychology. Emphasis is placed on those models and methods that fall within the information-processing approach to human cognition. Topics include perception, object recognition, attention and automaticity, memory, mental representations and knowledge, language and problem solving. Data from laboratory experiments (including those conducted within the course) and the performance of patients with brain damage are reviewed. Participation in self-administered laboratory experiments is mandatory. A research project or paper is also required. (Thapar, Division IIL)

## PSYC B214 Behavior Modification

This course covers the basic principles of behavior and their relevance and application to clinical problems. The theoretical approaches of Pavlovian conditioning and
operant conditioning (behavior analysis) will be covered to help understand the methods used in clinical practice. Topics may include eating disorders, anxiety disorders, addictive behavior, autistic behavior, attention deficit hyperactivity disorder and oppositional/conduct disorder. Methods for recording, analyzing and modifying behavior will be covered. This course provides a Praxis Level I opportunity. (Neuman, Division I) Not offered in 2005-06.

## PSYC B218 Behavioral Neuroscience

An interdisciplinary course on the neurobiological bases of experience and behavior, emphasizing the contribution of the various neurosciences to the understanding of basic problems of psychology. An introduction to the fundamentals of neuroanatomy, neurophysiology and neurochemistry with an emphasis upon synaptic transmission; followed by the application of these principles to an analysis of sensory processes and perception, emotion, motivation, learning and cognition. Lecture three hours a week. (Thomas, Division II)

## PSYC B305 Psychological Testing

Principles of measurement relevant to both experimental and individual differences psychology, with special emphasis on evaluating tests for either research or practical selection problems. Tests considered include intelligence tests (e.g., WAIS, WISC, Stanford-Binet, Raven's Matrices), aptitude tests (e.g., SAT, GRE), and personality tests (e.g., MMPI, NEO, Rorschach). Issues considered include creativity versus intelligence testing, nature versus nurture in IQ scores and effects of
base rate in using tests for selection. Prerequisite: Psychology 205. (McCauley) Not offered in 2005-06.

## PSYC B312 History Modern American

 PsychologyAn examination of major 20 th-century trends in American psychology and their 18th- and 19th-century social and intellectual roots. Topics include physiological and philosophical origins of scientific psychology; growth of American developmental, comparative, social and clinical psychology: and the cognitive revolution. Open only to juniors and seniors majoring in psychology or by permission of the instructor. (Wozniak) Not offered in 2005-06.

## PSYC B323 Advanced Topics in Cognitive Neuroscience: Psychobiology of Sex Differences

This course reviews the literature on sex differences in brain and behavior. The first half of the semester will examine the role that sex chromosomes and hormones play in creating sex differences in cognition. The second half of the course will examine the role that developmental processes, cultural socialization and gender-role stereotypes play in creating sex differences. Course requirements: Examinations (midterm and final), laboratory assignments and participation in class discussions. Students will conduct and original research project and submit a research paper. Prerequisite: Psychology 205 or permission of instructor. (Hollyday, Thapar, Division IIL)

## PSYC B326 From Channels to

## Behavior

(Brodfuehrer, Thomas, Division IIL; cross-listed as BIOL B326) Not offered in 2005-06.

## PSYC B340 Women's Mental Health

This course will provide an overview of current research and theory related to women's mental health. We will discuss psychological phenomena and disorders that are particularly salient to and prevalent among women, why these phenomena/disorders affect women disproportionately over men, and how they may impact women's psychological and physical wellbeing. Psychological disorders covered will include: depression, eating disorders. dissociative identity disorder, borderline personality disorder and chronic pain disorders. Other topics discussed will include work-family conflict for working mothers, the role of sociocultural influences on women's mental health, and mental health issues particular to women of color and to lesbian women. (Bennett)

## PSYC B350 Developmental Cognitive Disorders

This course uses a developmental and neuropsychological framework to study several cognitive disorders (e.g., language delay, specific reading disability, nonverbal learning disabilities and autism). Cognitive disorders are viewed in the context of the normal development of language, memory, attention, reading and quantitative/spatial abilities. More general issues of curriculum/pedagogical adjustment, educational placement, law and policy for children with disabilities will also be
covered. Students will participate in a course-related placement approximately four hours a week. This course provides a Praxis Level I opportunity. (Cassidy) Not offered in 2005-06.

## PSYC B351 Developmental Psychopathology

An examination of research and theory addressing the origins, progression and consequences of maladaptive functioning in children, adolescents and families. Major forms of psychopathology, such as depression and disruptive behavior syndronles will be considered. An important focus of the course is on the identification of biological. social and psychological risk and protective factors for psychopathology and the implications of these factors for prevention and treatment efforts. The role of family-based risk and protective factors, such as marital conflict and parenting quality, will be emphasized. (Schulz)

## PSYC B352 Advanced Topics in Developmental Psychology

This course will provide an in-depth exploration of the development of the concept of gender and the formation of gender stereotypes in children. We will examine the major theoretical positions relating to children's understanding of gender and the empirical data that supports those positions. The course will involve the critical exploration of popular press books on gender development, focusing on the broader issue of how psychological research gets translated for public consumption. In addition, the course contains a laboratory component, which will involve original research designed by the class for both
children and adults. Prerequisite: Psychology 206 (Cassidy, Division IIL) Not offered in 2005-06.

## PSYC B353 Advanced Topics in Clinical Developmental Psychology: Emotion Processes and Family Interactions

This course examines research and theory at the intersection of clinical and developmental psychology. Topics will include emotion and family relationships, stress and psychological or physical well-being, and family research methods. Class will involve discussion of relevant theory and research as well as the design and execution of research projects. Open only to juniors and seniors majoring in psychology. (Schulz, Division I) Not offered in 2005-06.

## PSYC B358 Political Psychology of Group Identification

This seminar will explore the common interests of psychologists and political scientists in the phenomena of group identification. The focus will be identification with ethnic and national groups, with special attention to the ways in which research on small-group dynamics can help us understand identification and conflict for these larger groups. The seminar will review major theories of group identity and examine several historical or current cases of successful and unsuccessful development of national identity. Prerequisite: Psychology 208 or two semesters of political science. (McCauley; cross-listed as POLS B358) Not offered in 2005-06.

## PSYC B395 Psychopharmacology

A study of the role of drugs in understanding basic brain-behavior relations. Topics include the pharmacological basis of motivation and emotion; pharmacological models of psychopathology; the use of drugs in the treatment of psychiatric disorders such as anxiety, depression and psychosis; and the psychology and pharmacology of drug addiction. Prerequisite: Psychology 218. (Thomas)

PSYC B396 Topics in Neural and

## Behavioral Science

(Brodfuehrer, Thomas; cross-listed as BIOL B396)

PSYC B398 Cognitive Issues in Personality and Social Psychology
An examination of recent research in relation to issues of social perception (e.g., stereotypes and judgments of members of stereotyped groups), intergroup conflict (e.g., sources of group cohesion and "groupthink") and identification (e.g., emotional involvement with film characters, possessions and ethnic/national groups). Prerequisite: Psychology 208. (Moscalenko)

PSYC B401 Supervised Research in Neural and Behavioral Sciences (staff; cross-listed as BIOL B401)

PSYC B403 Supervised Research in Psychology
Laboratory or field research on a wide variety of topics. Students should consult with faculty members to determine their topic and faculty supervisor, early in the semester prior to when they will begin. (staff)

## Religion

Students may complete a major in religion at Haverford College.

## Faculty

J. David Dawson, Provost and Constance and Robert MacCrate Professor in Social Responsibility
Tracey Hucks, Associate Professor (on leave 2005-06)
Kenneth Koltun-Fromm, Associate Professor
Naomi Koltun-Fromm, Associate
Professor and Chairperson
John Lardas, Visiting Assistant Professor
Anne M. McGuire, Associate Professor
Sarah Schwarz, Visiting Assistant
Professor
Barbara von Schlegell, Visiting Assistant Professor

The religions of the world are as diverse, complex and fascinating as the individuals, communities and cultures of which they are comprised. Religions propose interpretations of reality and shape very particular forms of life. In so doing, they make use of many aspects of human culture, including art, architecture, music, literature, science and philosophy - as well as countless forms of popular culture and daily behavior. Consequently, the fullest and most rewarding study of religions is interdisciplinary in character, drawing upon approaches and methods from disciplines such as anthropology, comparative literature and literary theory, gender theory, history, philosophy, psychology, political science and sociology.

The department's overall goal is to enable students to become critically informed, independent and creative interpreters of some of the religious movements that have decisively shaped human experience. In their coursework, students develop skills in the critical analysis of the texts, images, beliefs and performances of religions. Like other liberal-arts majors, the religion major is meant to prepare students for a broad array of vocational possibilities. Religion majors typically find careers in law, public service (including both religious and secular organizations), medicine, business, ministry and education. Religion majors have also pursued advanced graduate degrees in anthropology, history, political science, biology, Near Eastern studies and religious studies. For more information, see the department Web site at http://www. haverford.edu/relg/index.html.

## Major Requirements

Eleven courses are required for the major in religion. The exact structure of the student's program must be determined in consultation with the major advisor, whom the student chooses from among the regular members of the department. All majors should seek, with their advisors, to construct a program that achieves breadth in the study of various religious traditions, as well as concentration in one of the department's three areas.

The major program must satisfy the following requirements:

1. 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.
2. Senior Seminar and Thesis, Religion 399b.
3. At least four additional half-year courses drawn from among outside the major's area of concentration.
4. At least six of each major's 11 courses must be taken in the Haverford Department of Religion. Students planning to study abroad should construct their programs in advance with the department.
5. Where appropriate and relevant to the major's program, up to three courses for the major may be drawn from outside the department, subject to departmental approval.
6. 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.
7. Final evaluation of the major program will consist of written work, including a thesis, and an oral examination completed in the context of the Senior Seminar, Religion 399b.

## Requirements For Honors

Honors and high honors in religion are awarded on the basis of the quality of work in the major and in the Senior Thesis (399b).

## RELG H101 Introduction to the Study of Religion [A]

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. (staff, Division III)

## RELG H118 Hebrew Bible: Literary Text and Historical Context [A, B]

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. (N. Koltun-Fromm, Division III) Not offered in 2005-06.

## RELG H121 Varieties of Judaism in the Ancient World [A]

From Abraham to Rabbi Judah the Prince, Judaism has been transformed from a local ethnic religious cult to a broad-based, diverse religion. Many outside cultures and civilizations, from the ancient Persians to the Imperial Romans, influenced the Jews and Judaism through language, culture and political contacts. Absorbing and adapting these various and often opposing influences, the Israelite, and then Jewish, community re-invented itself, often fragmenting into several versions at once. After the destruction of the temple, in 70 C.E., the rabbis gradually came to dominate Jewish life. This course will study those changes and developments which brought about these transformations. (N. Koltun-Fromm, Schwarz, Division III)

## RELG H122 Introduction to the New

 Testament [A, B]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 noncanonical writings, in addition to the writings of the New Testament canon. (McGuire, Schwarz, Division III)

## RELG H130 Material Religion in America [C]

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. (K. Koltun-Fromm, Division III)

## RELG H132 Varieties of African American Religious Experience [A]

This course will examine the history of religion in America as it spans several centuries. Each week lectures, readings and discussions will explore the phenomenon of religion within American society. The goal is to introduce students to American religious diversity as well as its impact in the shaping of larger historical and social relationships within the United States. This study of American religion is not meant to be exhaustive and will cover select traditions each semester. (Hucks, Division III) Not offered in 2005-06.

## RELG H134 American Spiritualities [A, C]

With the continuing development of American religious pluralism, the weakening of public faith and the expansion of moral attitudes, "spirituality" has become common in descriptions of contemporary American culture. As a practice that cuts across racial, ethnic, class and gender lines, how are we to understand this particular form of religiosity? The goals of this course encompass the study of different forms of spirituality in the United States
past and present. The course will explore mainstream as well as alternative spiritual practices, from Catholic Devotions and the Lakota Sundance to Pentecostal worship and the spontaneous bop prosody of Jack Kerouac. (Lardas, Division III)

## RELG H201 Introduction to Buddhism [A]

This course is an introduction to Buddhism with a focus on the East Asian Buddhist tradition. Students will learn the basics of Buddhist philosophy and doctrine and will also be exposed to old and current debates in the field of Buddhist Studies. We will examine Buddhism both as a textual tradition and as a lived religion. There are no prerequisites. (Glassman, Division III; cross-listed as EAST H201a) Not offered in 2005-06.

RELG H203 The Hebrew Bible and Its Interpretations [A, B]
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. ( N . Koltun-Fromm, Schwarz, Division III)

RELG H204 Women and Judaism [C] Women's roles in Judaism and Jewish life have been defined by the religious precepts and civil laws described in the Bible and interpreted by the rabbis in a patriarchal age. Throughout the ages, women have carved out areas for themselves within
the Jewish religious, social and political systems as well as fulfilled the roles prescribed to them. In the modern era, however, many women have challenged the institutions that define these roles. This course will study the development of these institutions and the women of Jewish history who have participated in and shaped Jewish religious, social and cultural life. (N. Koltun-Fromm, Division III) Not offered in 2005-06.

## RELG H206 History and Literature of Early Christianity [A, B]

The history, literature and theology of Christianity from the end of the New Testament period to the time of Constantine. (McGuire, Schwarz, Division III)

## RELG H221 Women and Gender in Early Christianity [A, C]

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. (McGuire, Division III)

## RELG H222 Gnosticism [A, B]

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. (McGuire, Division III)

## RELG H231 Religious Themes in

 African American Literature [B]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 James Baldwin, Maryse Conde, Zora Neale Hurston, Ishmael Reed and others. (Hucks, Division III) Not offered in 2005-06.

## RELG H234 Religion in American History to 1865 [A, C]

This course surveys American religious history until 1865. It will begin by looking at the interaction between European colonists and established Native American traditions. It will then trace the contours of this initial pluralism as the nation expanded from the 17th to the 19th century. This course will pay particular attention to certain forms of Protestant faith and experience in the pre-Civil War period and how they generated a set of social and cultural attitudes. It will also chart the erosion of Protestantism's institutional authority as these attitudes were shaped by other traditions and larger patterns of American cultural development. (Lardas, Division III) Not offered in 2005-06.

RELG H235 Religion in American History: 1865 to the Present [A, C]
This course undertakes a cultural history of American religion from the end of the Civil War to the present "war on terrorism." In addition to looking at liturgical forms
of religion and surveying various religious movements and groups during this time period, we will explore 1) how cultural forms serve as vehicles of religious meaning; 2) how religious values are expressed and/or criticized in everyday social life; and 3) the place of religion in the recent history of American modernity. (Lardas, Division III) Not offered in 2005-06.

## RELG H240 History and Principles of Quakerism [A]

The Quaker movement in relation to other intellectual and religious movements of its time and in relation to problems of social reform. The development of dominant Quaker concepts is traced to the present day and critically examined. The course is designed for non-Friends as well as for Friends. The course is open to first year students with consent of the instructor. (Lapsansky, Division III; cross-listed as GNPR H240b and HIST H240b)

## RELG H242 Topics in African

 American Religious History [A, C]This course will investigate various traditions of the black religious experience from slavery to the present. Religious traditions examined within the course may include slave religion, black Christianity, Gullah religion, Santeria, and Islam. We will examine the relationship of these religious traditions to American social history as well as explore how they adapted over space and time. (Hucks, Division III) Not offered in 2005-06.

RELG H256 Zen Thought, Zen Culture, Zen History [A]
(Glassman, Division III; cross-listed as EAST H256a)

## RELG H281 Modern Jewish Thought [C]

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 Adler, Buber, Cohen, Heschel, Mendelssohn, Rosenzweig and Spinoza. (K. KoltunFromm, Division III; cross-listed as PHIL H281a) Not offered int 2005-06.

RELG H284 American Judaism [A]
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. (K. Koltun-Fromm, Division III) Not offered in 2005-06.

## RELG H299 Theoretical Perspectives in the Study of Religion [A, B, C]

An introduction to the history of the study of "religion" in the modern West. Beginning with Kant's distinction between
natural and revealed religion we will follow the curious and contested history of second-order reflection upon religion as it has been carried out in theological, philosophical, psychological, anthropological and sociological spheres. Readings may include: Asad, Benjamin, Derrida, Douglas, Durkheim, Eliade, Foucault, Freud, Geertz, Haraway, Hegel, James, Kant, Marx, Nietzche, Otto, Schleiermacher, Smith, Tylor and Weber. (Lardas, Division III)

All Religion department seminars may be repeated for credit with change of content.

## RELG H301 Seminar in Religious Traditions in Cultural Context [A]

Advanced study of topics in the department's concentration in Religious Traditions in Cultural Context. Religious traditions and the textual, historical, sociological and cultural contexts in which they develop. Critical analysis of formative texts and issues that advance our notions of religious identities, origins, and ideas. (staff, Division III)

## RELG H303 Seminar in Religion,

 Literature, and Representation [B]Advanced study of topics in the department's concentration in religion, literature and representation. The study of religion in relation to literary expressions and other forms of representation, such as performance, music, film and the plastic arts. (staff, Division III)

## RELG H305 Seminar in Religion, Ethics, and Society [C]

Advanced study of topics in the department's concentration in religion, ethics and society. Examination of larger social issues such as race, gender and identity as they relate to religion and religious traditions. Examines how moral principles, cultural values and ethical conduct help to shape human societies. (staff, Division III)

## RELG H330 Seminar in the Religious History of African American Women [C]

This seminar will examine the religious history of African American women in the United States. Using primary and secondary texts from the 19th to the 20th centuries, this course will explore the various religious traditions, denominations, sects and religious movements in which African American women have historically participated. The course will also analyze the ways in which specific social conditions such as slavery, migration, racial segregation and class and gender discrimination have historically influenced the religious lives of African American women. (Hucks, Division III) Not offered in 2005-06.

## RELG H338 Seminar in American

Religion [A, C]
(Lardas, Division III)
RELG H343 Seminar in Religions of Antiquity and Biblical Literature [A, B]
Advanced study of a specific topic in the field. The course may be repeated for credit with change of content. Prerequisite: consent of instructor. (McGuire, Division III)

## RELG H399 Senior Seminar and Thesis

Research and writing of the senior thesis in connection with regular meetings with a thesis advisor from the department. Prerequisite: Religion 301, 303, or 305 and the approval of the Department of Religion. (staff)

## RELG H480 Independent Study

Conducted through individual tutorial as an independent reading and research project. (staff)

## Romance Languages

Students may complete a major in romance languages.

## Coordinators:

Grace M. Armstrong, E. M. Schenck 1907 Professor of French
Nicholas Patruno, Professor of Italian María Cristina Quintero, Professor of Spanish

The Departments of French, Italian and Spanish cooperate in offering a major in romance languages that requires advanced work in at least two romance languages and literatures. Additional work in a third language and literature is suggested.

## Major Requirements

The requirements for the major are a minimum of nine courses, including the Senior Conference or Senior Essay, described below, in the first language and literature (if Italian is chosen as the first language, only eight courses are required) and six courses in the second language and literature, including the Senior Conference in French. Students should consult with their advisers no later than their sophomore year in order to select courses in the various departments that complement each other.

The following sequence of courses is recommended when the various languages are chosen for primary and secondary concentration, respectively (see the departmental listings for course descriptions).

## First Language and Literature

## French

French 101-102 or 101-105; 103-105 or 103-102.
Four courses chosen among: French 201, 202, 203, 204, 205, 206, 207, 213, $216,248,250251,252,255$ or 299.
French 212 or 260.
Two other courses at the 300 level.

## Italian

Italian 101, 102.
Italian 201 or 205.
Italian 207 or 301.
Italian 303 or 304.
Two other literature courses at the 200 or 300 level.

## Spanish

Spanish 110 or 120 .
Spanish 206.
Four courses at the 200 level.
Two courses at the 300 level.

## Second Language and Literature

## French

French 101-102 or 101-105; 103-105 or 103-102.
Two literature courses at the 200 level.
French 212 or 260.
One other course at the 300 level.

## Italian

Italian 101, 102.
Italian 201 or 205.
Italian 207 or 301.
One other literature course at the 200 or 300 level.

## Spanish

Spanish 110 or 120.
Spanish 204 or 206.
Two courses at the 200 level.
Two courses at the 300 level.

In addition to the coursework described above, when the first language and literature is Spanish, majors in romance languages must enroll in Spanish 398 (Senior Seminar). When French is chosen as either the first or second language, students must take one semester of the Senior Conference in French in addition to the coursework described above. When Italian is chosen, students must either select an additional literature course in Italian at the 200 or 300 level or take Italian 399, offered in consultation with the department. An oral examination (following the current model in the various departments) may be given in one or both of the two languages, according to the student's preference, and students follow the practice of their principal language as to written examination or thesis.

Interdepartmental courses at the 200 or 300 level are offered from time to time by the cooperating departments. These courses are conducted in English on such comparative romance topics as epic, romanticism or literary vanguard movements of the 20th century. Students should be able to read texts in two of the languages in the original.

## Russian

Students may complete a major or minor in Russian.

## Faculty

Elizabeth C. Allen, Professor and Chair
Sharon Bain, Lecturer and Major Adviser
Dan E. Davidson, Professor
Linda G. Gerstein, Professor at Haverford College
Timothy C. Harte, Assistant Professor (on leave 2005-06)
Vladimir Kontorovich, Professor at Haverford College George S. Pahomov, Professor

The Russian major is a multidisciplinary program designed to provide students with a broad-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.

## 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 Russian 398, Senior Essay, or Russian 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. All Russian majors take senior comprehensive examinations that cover the area of concentration and Russian language competence.

## 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.

## 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.

## RUSS B001, B002 Intensive

## Elementary Russian

Study of basic grammar and syntax. Fundamental skills in speaking, reading, writing and oral comprehension are developed. Nine hours a week including conversation sections and language laboratory work. Both semesters are required for credit; three units of credit are awarded upon completion of Russian 002. (Davidson, staff)

## RUSS B101, B102 Intermediate <br> Russian <br> Continuing development of fundamental skills with emphasis on vocabulary expan-

sion in speaking and writing. Readings in Russian classics and contemporary works. Seven hours a week. (Bain, staff)

RUSS B112 Soviet and East European Cinema of the 1960s: War, Politics and Gender
This course examines Soviet and East European "New Wave" cinema of the 1960s, which broke new ground in its treatment of war, politics and sex. Films from the USSR, Czechoslovakia, Poland and Yugoslavia to be discussed include Foreman's Loves of a Blonde, Kalatozov's I Am Cuba, Makavejev's W.R. Mysteries of the Organism and Wajda's Ashes and Diamonds. Readings on introductory film theory and film history will also be discussed. All films shown with subtitles; no knowledge of Russian or previous study of film required. (Harte, Division I or III) Not offered in 2005-06.

## RUSS B201, B202 Advanced Russian

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. (Bain, staff)

## RUSS B212 Russian Modernism:

Early 20th-Century Russian Art and Literature (in translation)
This course focuses on Russia's modernist trends in the first three decades of the 20th century. Along with discussion of Russian modernist literature, significant coursework will be devoted to studying the development of Russian "avant-garde" painting (Malevich, Kandinsky, et. al.),
ballet and film during this tumultuous, yet fruitful period. No knowledge of Russian is required (Harte, Division III) Not offered in 2005-06.

## RUSS B221 The Serious Play of Pushkin and Gogol

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. (Allen, Division III) Not offered in 2005-06.

## RUSS B223 Introduction to Russian Folklore

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. (Bain, Division III) Not offered in 2005-06.

## RUSS B225 Dostoevsky: Daydreams and Nightmares

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 Double, "The Dream of a Ridiculous Man," "The Gentle Creature," The Idiot, Notes from Underground and White Nights. (Allen, Division III)

## RUSS B235 The Social Dynamics of Russian

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. Prerequisites: Russian 201, 202, may be taken concurrently. (Bain, Division I) Not offered in 2005-06.

## RUSS B252 The Masterpieces of Russian and Soviet Cinema

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. (Harte, Division I or III) Not offered in 2005-06.

## RUSS B254 Russian Culture and Civilization in Translation

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. (Pahomov, Division I or III) Not offered in 2005-06.

## RUSS B261 The Russian Anti-Novel

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. (Allen, Division III) Not offered in 2005-06.

## RUSS B277 Nabokov in Translation

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. (Harte, Division III; cross-listed as ENGL B277) Not offered in 2005-06.

## RUSS B305, B306 Advanced Russian: Syntax, Style

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. (Pahomov)

## RUSS B310 Old Russian

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. (Davidson)

## RUSS B330 The Structure of Modern Russian I

This seminar introduces advanced undergraduates 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 Russian 331. (Davidson) Not offered in 2005-06.

## RUSS B331 The Structure of Modern Russian II: Pragmatics

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. (Davidson) Not offered in 2005-06.

## RUSS B342 Russian Culture Today

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: Russian 102 or the equivalent. (Harte, Division I or III) Not offered in 2005-06.

## RUSS B343 Russian Avant-Garde Culture

This seminar focuses on the radical, "avantgarde" transformations that occurred in Russian culture at the beginning of the 20th century. Particular emphasis will be placed on how the interaction of artists in a variety of media resulted in one of Russian culture's most innovative periods. Seminar discussion will cover the painting, poetry, prose, music, ballet and film produced in Russia between 1890 and 1932. Topics include Russia's reevaluation of its cultural heritage through neo-primitive art; the Russian avant-garde's mystical, Eastern underpinnings; the primacy of music for avant-garde artists; and the emergence of abstract, dynamic art. (Harte, Division III) Not offered in 2005-06.

## RUSS B370 The Acquisition of

Russian as a Second Language
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. (Davidson)

## RUSS B380 Seminar in Russian Literature

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: Russian 201 and one 200level Russian literature course. (Pahomov, Division III)

## RUSS B398 Senior Essay

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. (staff)

## RUSS B399 Senior Conference

Exploration of an interdisciplinary topic in Russian culture. Topic varies from year to year. Requirements may include short papers, oral presentations and examinations. (staff) Not offered in 2005-06.

RUSS B403 Supervised Work (staff)

Haverford College currently offers the following courses of interest to Russian majors:

HIST H244 Russia from 1800-1917
HIST H245 Twentieth-Century Russia
HIST H356 Russian Literature and Russian Society

## Sociology

Students may complete a major or minor in sociology.

Faculty
David Karen, Associate Professor and Chair
Mary J. Osirim, Professor
Judith R. Porter, Professor (on leave 2005-06)
Carla Shedd, Andrew W. Mellon
Foundation Predoctoral Fellow
Ayumi Takenaka, Assistant Professor
Robert E. Washington, Professor (on
leave semester II)
Nathan Wright, Lecturer
The major in sociology provides a general understanding of the structure and functioning of modern society, its major institutions, groups and values, and the interrelations of these with personality and culture. Students examine contemporary social issues and social problems, and the sources of stability, conflict and change in both modern and developing societies. The department offers rigorous preparation in social theory and problem-driven training in quantitative and qualitative methodologies.

## Major Requirements

Requirements for the major are Sociology 102, 103, 265, 302, Senior Seminar (398, 399), four additional courses in sociology (at least one of which must be at the 300 level) and two courses in sociology or an allied subject. Allied courses are chosen
from a list provided by the department. Further information is available at http://www. brynmawr.edu/sociology/major.shtml.

The Department of Sociology offers concentrations in gender and society, Asian American studies and African American studies. In pursuing these concentrations, majors should inquire about the possibility of coursework at Haverford and Swarthmore Colleges and the University of Pennsylvania.

## Concentrations Within the Sociology Major

## Gender and Society

Three courses are required for this concentration - at least two of these courses must be in sociology. The remaining course can be in sociology or an allied social science field. Students who pursue this concentration are required to take at least one of the core courses in this area offered by the department: The Study of Gender in Society (Sociology 201) or Women in Contemporary Society: The Southern Hemisphere (Sociology 225). The department encourages students in this concentration to take courses that focus on the study of gender in both northern and southern societies. In addition to taking courses in this field at Bryn Mawr, students may also take courses towards this concentration in their study abroad programs or at Haverford, Swarthmore and the University of Pennsylvania. Any course taken outside of the Bryn Mawr Department of Sociology must be approved by the department for concentration credit. Majors are urged to consult Mary Osirim about this concentration.

## Asian American Studies

Students pursuing this concentration are required to take Asian American Communities (Sociology 249), in addition to two other courses. One of them must be either Challenges and Dilemmas of Diversity (Sociology 215) or Immigrant Experiences (Sociology 246). The other course can be in anthropology, East Asian studies or any other relevant field, and must be approved by the department for concentration credit. Please contact Ayumi Takenaka for further information.

## African American Studies

Three courses are required for this concentration - at least two of these courses must be in sociology. The remaining course can be in either sociology or an allied field. Students who pursue this concentration are required to take the core course offered by the Bryn Mawr Department of Sociology: Black America In Sociological Perspective (Sociology 229). Students are encouraged to take courses on Black America listed under the Bryn Mawr and Haverford Africana Programs. Courses taken outside the Bryn Mawr Department of Sociology must be approved by the department for concentration credit. Majors interested in this concentration should consult Robert Washington for further information.

## Honors

Honors in sociology are available to those students who have a grade point average in the major of 3.5 or higher and who produce a paper in a departmental course during senior year that is judged outstanding by the department. Independent research is
possible during the senior year for students with a grade point average in the major of 3.3 or higher.

## Minor Requirements

Requirements for the minor are Sociology 102, 265, 302 and three additional courses within the department.

Students may choose electives from courses offered at Haverford College. Bryn Mawr majors should consult their department about major credit for courses taken at other institutions.

## SOCL B102 Society, Culture and the Individual

Analysis of the basic sociological methods, perspectives and concepts used in the study of society, with emphasis on culture, social structure, personality, their component parts and their interrelationship in both traditional and industrial societies. The sources of social tension, order and change are addressed through study of socialization and personality development, mental illness, delinquency and modernization. (Division I) Not offered in 2005-06.

## SOCL B103 U.S. Social Structure

Analysis of the structure and dynamics of modern U.S. society. Theoretical and empirical study of statuses and roles, contemporary class relations, the distribution of political power, and racial, ethnic and gender relations in the United States; and stratification in education systems, complex organizations, the labor market and the modern family. (Osirim, Division I)

## SOCL B160 The United States and

 International Social ProblemsExamining a broad range of social problems (for example, crime, drugs, racism, pollution, etc.), focus is on: how social problems come to be identified as such; how research is conducted and possible policy implications; whether there are categories of problems that may have a common origin; the persistence of some problems; and how problems are structured by the dominant social forces of our society. Race, class and gender will be considered. (Wright, Division I)

## SOCL B201 The Study of Gender in Society

The definition of male and female social roles and sociological approaches to the study of gender in the United States, with attention to gender in the economy and work place, the historical origins of the American family, and analysis of class and ethnic differences in gender roles. Of particular interest in this course is the comparative exploration of the experiences of women of color in the United States. (Osirim, Division I)

## SOCL B205 Social Inequality

Introduction to the major sociological theories of gender, racial-ethnic and class inequality with emphasis on the relationships among these forms of stratification in the contemporary United States, including the role of the upper class(es), inequality between and within families, in the work place and in the educational system. Global stratification is examined as well. (Karen, Division I; cross-listed as CITY B205)

## SOCL B212 Sociology of Poverty

Analysis of the causes and effects of poverty in the United States. Topics include trends in poverty and the relationship between poverty, the economy, the political system, the family and educational institutions. The culture-of-poverty approach and government programs for the poor, including current programs, are analyzed. (Porter, Division I) Not offered in 2005-06.

## SOCL B215 Challenges and Dilemmas of Diversity: Racial and Ethnic Relations in American Society

This course will explore the sociological theories of racial/ethnic prejudice, discrimination and conflict; the historical development of racial/ethnic groups in the United States; and current patterns and problems of racial/ethnic relations and the social policies being proposed to resolve those problems. (Takenaka, Washington, Division I)

## SOCL B217 The Family in Social Context

A consideration of the family as a social institution in the United States, looking at how societal and cultural characteristics and dynamics influence families; how the family reinforces or changes the society in which it is located; and how the family operates as a social organization. Included is an analysis of family roles and social interaction within the family. Major problems related to contemporary families are addressed, such as domestic violence and divorce. Cross-cultural and subcultural variations in the family are considered. (Osirim, Division I) Not offered in 2005-06.

## SOCL B225 Women in Society: The Southern Hemisphere

A study of the contemporary experiences of women of color in the developing world. The household, workplace, community and the nation-state, and the positions of women in the private and public spheres are compared cross-culturally. Topics include feminism, identity politics and self-esteem; and tensions and transitions encountered as nations embark upon development. (Osirim, Division I) Not offered in 2005-06.

## SOCL B227 Sports in Society

Using a sociological, historical and comparative approach, this course examines such issues as the role of the mass media in the transformation of sports; the roles played in sports by race, ethnicity, class and gender; sports as a means of social mobility; sports and socialization; the political economy of sports; and sports and the educational system. (Karen, Washington, Division I) Not offered in 2005-06.

## SOCL B229 Black America in Sociological Perspective

This course provides sociological perspectives on various issues affecting black America: the legacy of slavery; the formation of urban ghettos; the struggle for civil rights; the continuing significance of discrimination; the problems of crime and criminal justice; educational underperformance; entrepreneurial and business activities; the social roles of black intellectuals, athletes, entertainers and creative artists. (Washington, Division I) Not offered in 2005-06.

## SOCL B242 Urban Fieldwork

This Praxis course intends to provide students with hands-on research practice in field methods. In collaboration with the instructor and the Praxis Office, students will choose an organization or other group activity in which they will conduct participant observation for several weeks. Through this practice, students will learn how to conduct field-based primary research and analyze sociological issues. (Takenaka, Division I; cross-listed as ANTH B242 and CITY B242)

## SOCL B246 Immigrant Experiences

 (cross-listed as ANTH B258)
## SOCL B249 Sociological Perspectives on Asian American Communities

This course is an introduction to the study of Asian American communities that provides comparative analysis of major social issues confronting Asian Americans. Encompassing the varied experiences of Asian Americans and Asians in the Americas, the course examines a broad range of topics - community, migration. race and ethnicity, and identities - as well as what it means to be Asian American and what that teaches us about American society. (Takenaka, Division I; cross-listed as
ANTH B249 and CITY B249)

## SOCL B252 Sociology of Popular

 MusicThis course explores the production, distribution and consumption of popular music, paying particular attention to the interrelationships among artists, fans. the music industry and the societal context. Themes include the tension between mainstream
commercial success and artistic independence. popular music and politics. and music consumption and identity. gender and sexuality. (Wright, Division I)

SOCL B257 Marginals and Outsiders: The Sociology of Deviance
An examination of unconventional and criminal behavior from the standpoint of different theoretical perspectives on deviance (e.g., social disorganization, symbolic interaction, structural functionalism, Marxism) with particular emphasis on the labeling and social construction perspectives; and the role of conflicts and social movements in changing the normative boundaries of society. Topics will include alcoholism, drug addiction, homicide, homosexuality, mental illness, prostitution, robbery and white-collar crime. (Washington) Not offered in 2005-06.

## SOCL B258 Sociology of Education

 Major sociological theories of the relationships between education and society, focusing on the effects of education on inequality in the United States and the historical development of primary, secondary and post-secondary education in the United States. Other topics include education and social selection, testing and tracking, and micro- and macro-explanations of differences in educational outcomes. This is a Praxis I course; placements are in local schools. (Karen, Division I)SOCL B262 Who Believes What and Why: The Sociology of Public Opinion This course explores public opinion: what it is, how it is measured, how it is shaped and how it changes over time. Specific at-
tention is given to the role of elites, the mass media and religion in shaping public opinion. Examples include racial/ethnic civil rights, abortion, gay/lesbian/transgendered sexuality and inequalities. (Wright, Division I; cross-listed as POLS B262)

## SOCL B265 Research Design and Statistical Analysis

An introduction to the conduct of empirical, especially quantitative, social science inquiry. In consultation with the instructor, students may select research problems to which they apply the research procedures and statistical techniques introduced during the course. Using SPSS, a statistical computer package, students learn techniques such as crosstabular analysis, multiple regression-correlation analysis and factor analysis. (Wright, Karen, Division I and Quantitative Skills)

## SOCL B266 Schools in American Cities

(Cohen, Division I; cross-listed as EDUC B266 and CITY B266)

## SOCL B267 The Development of the Modern Japanese Nation

An introduction to the main social dimensions central to an understanding of contemporary Japanese society and nationhood in comparison to other societies. The course also aims to provide students with training in comparative analysis in sociology. (Takenaka, Division I; cross-listed as ANTH B267 and EAST B267)

## SOCL B302 Social Theory

Analysis of classical and modern theorists selected because of their continuing
influence on sociological thought. Among the theoretical conceptions examined are: alienation, bureaucracy, culture, deviance, modernization, power, religion and the sacred, social change, social class, social conflict, social psychology of self and status. Theorists include: Durkheim, Firestone, Gramsci, Marx, Mead, Mills and Weber. (Washington, Division I)

## SOCL B309 Sociology of Religion

An analysis of the relationship between religion and society, emphasizing the connection between religious systems and secular culture, social structure, social change, secular values and personality systems in cross-cultural perspective. The theories of Marx, Weber, Durkheim and Freud, among others, are applied to analysis of the effect of religion on economic modernization, political nationalism and social change and stability, and the effect of social class, secular culture and personality patterns on religion. (Wright, Division I)

## SOCL B310 Sociology of AIDS

An analysis of major sociological issues related to AIDS, including the social construction of the disease, social epidemiology, the psychosocial experience of illness, public opinion and the media, and the health-care system. The implications of political and scientific controversies concerning AIDS will be analyzed, as will the impact of AIDS on the populations most affected in both the United States and Third World countries. Must be taken concurrently with Sociology 315. (Porter) Not offered in 2005-06.

## SOCL B315 Sociology of AIDS

## Internship

An internship open only to those who are concurrently enrolled in Sociology 310. (Porter, Division I) Not offered in 200506.

## SOCL B330 Comparative Economic Sociology: Societies of the North and South

A comparative study of the production, distribution and consumption of resources in Western and developing societies from a sociological perspective, including analysis of precapitalist economic formations and of the modern world system. Topics include the international division of labor, entrepreneurship and the role of the modern corporation. Evidence drawn from Brazil, Britain, Jamaica, Nigeria and the United States. (Osirim; cross-listed as CITY B330) Not offered in 2005-06.

SOCL B338 The New African Diaspora: African and Caribbean Immigrants in the United States An examination of the socioeconomic experiences of immigrants who arrived in the United States since the landmark legislation of 1965. After exploring issues of development and globalization at "home" leading to migration, the course proceeds with the study of immigration theories. Major attention is given to the emergence of transnational identities and the transformation of communities, particularly in the northeastern United States. (Osirim; cross-listed as CITY B338) Not offered in 2005-06.

## SOCL B350 Movements for Social

## Justice

Throughout human history, powerless groups of people have organized social movements to improve their lives and their societies. Powerful groups and institutions have resisted these efforts in order to maintain their own privilege. Some periods of history have been more likely than others to spawn protest movements. In American history, we think of the 1930s and1960s in this way. Will there soon be another period of significant protest? What factors seem most likely to lead to social movements? What determines their success/failure? We will examine 20th-century social movements in the United States to answer these questions. Includes a film series. (Karen, Division I)

SOCL B354 Comparative Social
Movements: Power, Protest and Mobilization
(Hager, Karen, Division I; cross-listed as POLS B354) Not offered in 2005-06.

SOCL B375 Women, Work and Family (Golden, Division I; cross-listed as POLS B375) Not offered in 2005-06.

## SOCL B398 Senior Seminar: Sociology of Culture

Seminar on theoretical issues in the sociology of culture; required of all senior sociology majors. Open to Bryn Mawr senior sociology majors only. (Washington)

SOCL B399 Senior Seminar: The Capstone Course
This seminar is required of and limited to Bryn Mawr seniors majoring in sociology (Karen)

## SOCL B403 Independent Study

Students have the opportunity to do individual research projects under the supervision of a faculty member. (staff)

## Spanish

Students may complete a major or minor in Spanish. Majors may pursue state certification to teach at the secondary level.

## Faculty

Inés Arribas, Senior Lecturer
Dina Breña, Instructor
Peter Brampton Koelle, Lecturer
Lázaro Lima, Assistant Professor and Major Adviser
María Cristina Quintero, Professor and Chair
Enrique Sacerio-Garí, Professor and Senior Major Adviser (on leave semester II)
H. Rosi Song, Assistant Professor and Major Adviser

The major in Spanish offers a program of study in the language, literature and culture of Spain, Latin America and U.S. Latino communities. The program is designed to develop linguistic competence and critical skills, as well as a profound appreciation of the culture and civilization of the Hispanic world.
The language courses provide solid preparation and practice in spoken and written Spanish, including a thorough review of grammar and vocabulary, supplemented with cultural readings and activities. Spanish 120 prepares students for advanced work in literature and cultural studies while improving competence in the language. The introductory literature courses treat a selection of the outstanding works of Spanish and Spanish-American, and U.S.

Latino literature in various periods and genres. Spanish 206 is devoted to advanced language training and affords practice in written Spanish. Spanish 240 considers the political, social and cultural history of the Hispanic and Hispanic-American peoples. Advanced literature courses deal intensively with individual authors, topics or periods of special significance.
Students in all courses are encouraged to make use of the Language Learning Center and to supplement their course work with study in Spain or Spanish America either in the summer or during their junior year.
All students who have taken Spanish at other institutions and plan to enroll in Spanish courses at Bryn Mawr must take a placement examination. The exam is administered by the Spanish department during first-year student orientation for the incoming class or on the day before classes begin for returning students.
The Department of Spanish also cooperates with the Departments of French and Italian in the Romance Languages major (see page 275).

## Major Requirements

Requirements for the Spanish major are Spanish 120 , Spanish 206 , four 200 -level courses, three 300 -level courses and 398 (Senior Seminar). Students whose precollege training includes advanced work in literature may, with the permission of the department, be exempted from taking Spanish 120. Spanish 399 (Senior Essay) is optional. This major program prepares students appropriately for graduate study in Spanish.

Please note: the department offers some courses taught in English. In order to receive major and minor credit, students must do appropriate assignments in Spanish. No more than two courses taught in English may be applied toward a major, and only one toward a minor.
Independent research (Spanish 403) is offered to students recommended by the department. The work consists of independent reading, conferences and a long paper.

## Honors

Departmental honors are awarded on the basis of a minimum grade point average of 3.7 in the major, the recommendation of the department and a senior essay (Spanish 399).

## Minor Requirements

Requirements for a minor in Spanish are six courses in Spanish beyond Intermediate Spanish, at least one of which must be at the 300 level.

## Concentration in Hispanic and Hispanic-American Studies

The Department of Spanish participates with other departments in offering a concentration in Hispanic and HispanicAmerican Studies (see page 197).

## Teacher Certification

The department also participates in a teacher-certification program. For more information see page 133 for a description of the Education Program.

SPAN B001, B002 Elementary Spanish Grammar, composition, conversation. listening comprehension; readings from Spain, Spanish America and the Hispanic community in the United States. This is a year-long course. One section of this course is intensive and meets nine hours a week. (Arribas, Koelle, Breña)

## SPAN B101, B102 Intermediate Spanish

Intensive grammar reviews, exercises in composition and conversation, selected readings from modern Spanish. This is a year-long course. Prerequisite: 002 or placement. (Breña, Koelle, Lima, Song)

## SPAN B105 Intensive Intermediate Spanish

A thorough review of grammar with intensive oral practice, frequent writing assignments, readings and oral presentations. Prerequisite: Intensive Elementary Spanish or the recommendation of the department. (Arribas)

## SPAN B107 Spanish Conversation for

 NonmajorsIntensive practice in conversational Spanish. This course seeks to enhance speaking proficiency through the development of vocabulary, pronunciation skills and correct grammatical usage. Students participate in daily practice of speaking on wide variety of topics, as well as give formal presentations. This course will not count towards the major or minor. Prerequisite: Spanish 102 or 105. (Koelle)

## SPAN B110 Estudios culturales de España e Hispanoamérica

An introduction to the history and cultures of the Spanish-speaking world in a global context: art, folklore, geography, literature, sociopolitical issues and multicultural perspectives. This course does not count toward the major, but may be counted for the minor. Prerequisite: Spanish 102 or 105 , or placement. (Lima, Division III)

## SPAN B120 Introducción al análisis

 literarioReadings from Spanish and SpanishAmerican works of various periods and genres (drama, poetry, short stories). Main focus on developing analytical skills with attention to improvement of grammar. Prerequisite: Spanish 102 or 105, or placement. (Sacerio-Garí, Division III)

The prerequisite for 200 -level courses is Spanish 120, placement or permission of instructor.

## SPAN B206 Composición (nivel

 superior)A course designed to develop a student's written expression in Spanish. This course includes a systematic study of the structure of modern Spanish and a variety of frequent written assignments. (Song)

## SPAN B208 Drama y sociedad en

## España

A study of the rich dramatic tradition of Spain from the Golden Age (16th and 17 th centuries) to the 20th century within specific cultural and social contexts. The course considers a variety of plays as manifestations of specific sociopolitical is-
sues and problems. Topics include theater as a site for fashioning a national identity; the dramatization of gender conflicts; and plays as vehicles of protest in repressive circumstances. (Quintero, Division III) Not offered in 2005-06.

## SPAN B211 Borges y sus lectores

Primary emphasis on Borges and his poetics of reading; other writers are considered to illustrate the semiotics of texts, society and traditions. (Sacerio-Garí, Division III; cross-listed as COML B2I2)

## SPAN B215 "Memoria negra": la literatura afro-hispánica en África y las Américas

A study of the major works of African and Afro-Hispanic literatures written in Spanish with comparative examples from the literatures of the "Black Atlantic," including Lusophone African literature. The course considers how racially-marked aesthetic expression (Criollismo, Negritude, the Harlem Renaissance, etc.) fashioned literary Modernism and the ensuing "Black Atlantic" polemic. Representative writers may include Martin Bernal, Lydia Cabrera, Franz Fanon, Edouard Glissant, Nicolás Guillén, Donoto M’game, Nancy Morejón, Fernando Ortíz, Manuel Rui and Laudino Viera. (Lima, Division III; cross-listed as COML B215)

## SPAN B225 La poesía hispanoamericana

Study of poetic language from the avantgarde movements to the present. Special attention to key figures. (Sacerio-Garí, Division III) Not offered in 2005-06.

## SPAN B226 Cine y sociedad en la España contemporanea

This course studies Spanish culture and society through its cinema since the Civil War and Franco's dictatorship up to the present. It focuses on Spanish film both as a vehicle for ideological propaganda and as a space for political opposition. It also examines the multiple social changes undergone in Spain as the dictatorship collapsed and democracy was reinstituted. Class discussion will address issues surrounding the representation of women, homosexuality and ethnic minorities. (Arribas, Division III; cross-listed as COML B226) Not offered in 2005-06.

## SPAN B227 Genealogía de la literatura latina

This course examines the emancipatory and sometimes collusive appropriation of "American" literature by Latina/os. The course begins a genealogical survey of Latino writing and cultural production from the 19th century to the present in order to contextualize the eventual rise of Latino ethnic particularisms from the ' 60 s . We will analyze how Latina/os, often living inside two languages and cultures, inflect the national landscape by erasing both literal and linguistic "American" borders in a country made up largely of immigrants. We will analyze how the mass media constructs "insiders" and "outsiders" by delimiting access to cultural capital with demands for assimilation. (Lima, Division III) Not offered in 2005-06.

## SPAN B230 Poetics of Desire in the Lyric Poetry of Renaissance Italy and Spain

A study of the evolution of the love lyric in Italy and Spain during the Renaissance and the Baroque periods. Topics include the representation of women as objects of desire and pretexts for writing; the selffashioning and subjectivity of the lyric voice; the conflation and conflict of eroticism and idealism; theories of imitation; parody; and the feminine appropriation of the Petrarchan tradition. Although concentrating on the poetry of Italy and Spain, readings include texts from France, England and Mexico. Students seeking major credit in Spanish must do appropriate assignments in Spanish. (Quintero, Division III; cross-listed as COML B230 and ITAL B230) Not offered in 2005-06.

## SPAN B231 El cuento y novela corta en España

Traces the development of the novella and short story in Spain, from its origins in the Middle Ages to our time. The writers will include Don Juan Manuel, Cervantes, Zayas, Clarin, Pardo Bazán and a number of contemporary writers. Our approach will include formal and thematic considerations, and attention will be given to social and historical contexts. Prerequisite: Spanish 120 or placement. (Quintero, Division III)

## SPAN B240 Hispanic Culture and Civilization

A brief survey of the political, social and cultural history of Spain and Spanish America. Topics include Spanish nation/ state/empire, indigenous cultures, polem-
ics about the "Indians" in the new world, Spanish-American independence, current social and economic issues, Latin America's multiculturalism and Latinos in the United States. Prerequisite: permission of instructor. (Sacerio-Garí, Division III) Not offered in 2005-06.

SPAN B260 Ariel/Calibán y el discurso americano
A study of the transformations of Ariel/ Calibán as images of Latin American culture. Prerequisite: Spanish 110 or 120, or placement. (Sacerio-Garí, Division III; cross-listed as COML B260) Not offered in 2005-06.

SPAN B265 Escritoras españolas: entre tradición y renovación
Fiction by Spanish women in the 20th century. Breaking the traditional female stereotypes during and after Franco's dictatorship, the authors explore sociopolitical and cultural issues through their creative writing. Topics of discussion include gender marginality, feminist literary theory and the portrayal and role of women in modern society. (Song, Division III)

SPAN B270 Literatura y delincuencia: explorando la novela picaresca
A study of the origins, development and transformation of the picaresque genre from its origins in 16th- and 17th-century Spain through the 21 st century. Using texts from Spain and Latin America as well as England, Germany and the United States, we will explore topics such as the construction of the (fictional) self, the poetics and politics of criminality, transgression in gender and class, and the feminine (and
feminist) variations of the picaresque. (Quintero, Division III; cross-listed as COML B271) Not offered in 2005-06.

The prerequisite for 300 -level courses is one 200-level course in Spanish or permission of instructor.

## SPAN B307 Cervantes

A study of themes, structure and style of Cervantes' masterpiece Don Quijote and its impact on world literature. In addition to a close reading of the text and a consideration of narrative theory, the course examines the impact of Don Quijote on the visual arts, music, film and popular culture. (Quintero, Division III) Not offered in 2005-06.

## SPAN B308 El teatro del Siglo de Oro

A study of the dramatic theory and practice of 16 th- and 17 th-century Spain. Topics include the treatment of honor, historical self-fashioning and the politics of the corrales and palace theater. (Quintero, Division III; cross-listed as COML B308)

SPAN B309 La representación de la mujer en la literatura española del Siglo de Oro
A study of the depiction of women in the fiction, drama and poetry of 16th- and 17 th-century Spain. Topics include the construction of gender; the idealization and codification of women's bodies; the politics of feminine enclosure (convent, home, brothel, palace); and the performance of honor. The first half of the course will deal with representations of women by male authors (Lope, Calderón, Cervantes, Quevedo) and the second will be dedicated
to women writers such as Teresa de Ávila, Ana Caro, María de Zayas and Juana Inés de la Cruz. (Quintero, Division III)

SPAN B310 La condición post mortem: Pos/Modernidad periférica en la narrativa y la producción cultural mexicana
A study of the figuration of "death" in Mexican literature and culture as a critique of Modernity and as one of Mexico's principle symbols of cultural identity. Analysis of the counterrevolutionary movements of the 1960 s, and the rise of the post mortem aesthetic as a response to the globalization of Mexican cultural identity. (Lima, Division III) Not offered in 2005-06.

## SPAN B311 Crimen y detectives en la

 narrativa hispánica contemporáneaAn analysis of the rise of the hardboiled genre in contemporary Hispanic narrative and its contrast to classic detective fiction, as a context for understanding contemporary Spanish and Latin American culture. Discussion of pertinent theoretical implications and the social and political factors that contributed to the genre's evolution and popularity. (Song, Division III) Not offered in 2005-06.

SPAN B318 Adaptaciones literarias en el cine español
Film adaptations of literary works have been popular since the early years of cinema in Spain. This course examines the relationship between films and literature, focusing on the theory and practice of film adaptation. Attention will be paid to the political and cultural context in which these texts are being published and made
into films. Prerequisite: A 200-level course in Spanish, Spanish 208. (Song, Division III)

SPAN B320 Surrealismo español: poesía, arte y cine
A multimedia study of the development of a surrealistic ethic in Spain in the 20th century as represented chiefly in the works of Federico García Lorca, Luis Buñuel and Salvador Dalí, among others. The scope and validity of the Spanish surrealistic movement will be examined in relation to its originating principles: Freud's psychoanalytic theory, and the artistic and political manifestos of the avant-garde. Through the study of works of poetry, art and film, we will also discuss the relationship between the theoretical and historical background of this artistic movement as we contrast art and politics, artistic freedom and political commitment. (Song, Division III) Not offered in 2005-06.

## SPAN B329 Brown Affect: Narrating Latina and Latino Lives

This course studies the construction of Latino lives in and through autobiographies and autobiographical fiction in the context of the civil rights movement and the rise of Latino nationalism. The course will focus on the Latino subversion of genre from the bildungsroman to its more recent (post)modernist traditions to its more culturally specific grounding in the Latin American crónica. We will study how "feeling brown" has made Latino life-writing a political and literary act of self-creation. Course is taught in English. Students seeking major credit in Spanish must do appropriate assignments in Span-
ish. Prerequisite: Spanish 220, English 250 or equivalent. (Lima, Division III)

## SPAN B350 El cuento

 hispanoamericanoSpecial attention to the double, the fantastic and the sociopolitical thematics of short fiction in Spanish America. Authors include Quiroga, Borges, Carpentier, Rulfo, Cortázar and Valenzuela. (Sacerio-Garí, Division III) Not offered in 2005-06.

## SPAN B351 Tradición y revolución:

## Cuba y su literatura

An examination of Cuba, its history and its literature with emphasis on the analysis of the changing cultural policies since 1959. Major topics include slavery and resistance; Cuba's struggles for freedom; the literature and film of the Revolution; and literature in exile. (Sacerio-Garí, Division III) Not offered in 2005-06.

## SPAN B398 Senior Seminar

The study of special topics, critical theory and approaches with primary emphasis on Hispanic literatures. Topics will be prepared jointly with the students. (Sace-rio-Garí)

## SPAN B399 Senior Essay

Available to students whose proposals are approved by the department.

## SPAN B403 Supervised Work

Independent reading, conferences and a long paper; offered to senior students recommended by the department. (staff)

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$\sim$ an intense intellectual commitment
~ a self-directed and purposeful vision of her life
$\sim$ a desire to make a meaningful contribution to the world.

